
Grit & Mental Wellbeing among Emerging Adults

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Abstract

Grit can be defined as perseverance & passion for long-term goals which is directly proportional to achieve success in work & life whereas Mental Well-being is a complex construct that covers both psychological & affect functioning. The objective of research was to examine the relationship between grit and mental wellbeing among emerging adults and whether there are gender differences in the levels of grit & mental well being among them. The quantitative correlational research design was utilized in this study to understand the relationship between the variables, grit, mental wellbeing & gender. The number of participants comprised of 178 college students (males=102, females=76) whose age ranged from 18 to 22 years. The Short Grit Scale (2009) & Edinburg's Mental Well Being Scale (2007) were administered for collecting data. The obtained data was analyzed by SPSS software using Correlation and Independent sample t-test. The results of study reveal that significant difference was found between males & females based on levels of grit where males scored higher on grit in the Indian context whereas no gender differences were found in mental wellbeing. While there was no relationship found between grit & mental well being among emerging adults.

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1. Introduction

Emerging adulthood is a phase of life span development from the late teens or adolescence through the twenties, with a focus on ages 18-25 years. It is a distinct period in terms of demographics, subjectivity and identity explorations. It can be culture specific (Arnett, 2000). Erick Erickson (1950's) has talked about prolonged adolescence and young adulthood but not clearly distinguished between them. But Daniel Levinson (1978) has clearly conceptualized it as a novice period of development where work, love & worldview is developed in life structure between ages 17 to 33 years. But both (Erickson & Levinson) conclude that emerging adulthood is a period of experimentation and identity formation. In this phase change and exploration are common. Further the characteristics of emerging adults include transition from taking one's own responsibility, independent decisions and financial autonomy (Greene et. al, 1992; Arnett, 1997).

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While grit is a concept that has replaced the earlier conceptions of perseverance, hardiness, conscientiousness et cetera. As in words of Duckworth, grit is the characteristic that those achieving people commonly have, conceptualizing it as perseverance and passion for long-term goals. It is seen mostly in the individuals that are striving for something, trying to achieve the goals over a long period of time. The most suitable group for studying the grit is mostly emerging adults as they are in the transition phase of achieving their goals with respect to their life and career. As such, Duckworth and colleagues have demonstrated grit's predictability for personal success in many professional areas. Its importance in individuals' achievements in the objective terms is significant but what about the mental well-being of the individual. Grit is strongly related to both the autonomy and competence needs, and these needs mediated the effect of grit on subjectivewellbeing (Jin & Kim, 2017). Grit affects the progression levels of students' throughout the colleges (McFadden, 2016). Understanding about mental wellbeing (World Health Organization) which is a complex construct that covers both psychological and affect functioning with two distinct perspectives i.e. hedonistic which is subjective experience of happiness, and eudemonic which is self realization & psychological functioning.

So the question can be asked that, 'Why only these Variables were taken?' As already been established that grit is a predictor of success (Duckworth, 2007) but while working for goals, individuals tend to undermine their health & wellbeing. Emerging adults were taken as they are in phase of transition of achieving their goals with respect to their life and career, accessibility of sample & studies have shown that grit influences emerging adults' well-being (Machell, 2016), that highlights the beneficial effects of grit, and provides new insights into the processes that influence positive youth. The life of emerging adults is hard due to changes in body and environment. As seen emerging adulthood is a period of change in identity, bodily changes and other environment changes, the researchers study both environmental (life events) and personal level (grit) over the period of 1 year.

Grit influences the trajectory of emerging adults' well-being, highlighting the beneficial effects of grit, and provides new insights into the processes that influence positive youth (Machell, 2016). Emerging adults is a period of immense change. Relationships with peers and family members evolve, new educational and occupational demands and responsibilities are introduced, and emerging adults are faced with the challenging developmental task of establishing a sense of identity (Erikson, 1968). Importantly, psychological health and functioning during the teenage years can play a major role in influencing trajectories into adulthood (Lewinsohn, Rohde, Seeley, Klein & Gotlib, 2003). When an individual is in the face of transition and striving for meaningful goals, to achieve success, then the wellness or mental well-being or health is generally undermined. As World Health Organization considers well-being to be a holistic concept where it is not merely an absence of disease, but allows individuals to realize their abilities, cope with normal stresses of life, work productively and fruitfully and make a contribution to community. Mental Wellness can be seen as a positive characteristic condition which portrays emotional wellness, creative and vivid life experiences and ability to deal with life challenges. The difference between wellness and well being is that wellness gets firmly associated with health and prevention, and well-being becomes more associated with happiness (Ellis, 2016). Mental well-being levels in the males and females could be different based on to the physiologically and psychologically. This study even wants to know whether such differences exist among emerging adults in terms of gender as well.

The most fundamental question in grit studies is "Are there gender differences in the levels of grit?" Many studies have been done all over the world that has mixed results. Some studies conclude there are differences and others didn't predict any. Not many studies have been done in the Indian context as well on the same topic. The studies done in the past reveal that there are mixed results as the gender differences in the levels of grit among individuals exist or not. The recent studies aims to see the concerned literature on the studies that predicts there are no gender differences in levels of grit and even see gender differences in the levels of grit.

The studies that show gender differences do not exist in levels of grit includes pioneer study conducted by Duckworth et al. in 2007 on grit shows that grit has predictive validity of success

over IQ and conscientiousness and found no significant differences by gender in levels of grit. Further study conducted in India by Ali & Rahaman, 2012 in Manipur region who wants to see grit levels of males and females sports persons i.e. fencers of national stature. It was found that no significant differences exist among males and females fencers with respect to grit levels and their achieving long term goals. Similarly McFadden, 2016 revealed through study that success in academics, especially higher education was dependent on non-cognitive traits like grit, tenacity and perseverance and not cognitive traits. Further it was found that grit magnifies with age. Even no significance was found of gender and grit.

As opposite to it, there are studies that found gender differences exist with respect to grit. Christensen & Knezek in 2014 carried study on grit, tenacity and perseverance found motivation to learn is crucial for school and career success. Further females revealed higher grit than their male counterparts. Similarly undergraduate females scored marginally higher than males for both conscientiousness and grit and gender differences would also tell about the success rates among genders in their respective lives (Flaming & Granato, 2017). So this study wants to understand whether differences exist among young males and females.

Problem Statement. The problem can be defined as grit being the predictor of success (Duckworth et al., 2007; Eskreis, Shulman & Duckworth, 2014), but emerging adults while working for their goals may undermine their health and mental wellbeing. As seen emerging adult stage, which is a period of turmoil and changes, let it be body or identity formation or changes in their environment (Machell, 2016). Keeping the current scenario in mind, the increasing levels of stress, competition, hazards et cetera into a person's life may have a negative impact on an emerging adult's well-being (Chang, 2104). There are only few studies substantiating significant relationship between grit and well-being (Tiittanen, 2014) due to novelty of the concept & mostly that are there, see relation between grit & subjective wellbeing mostly. Grit is positively related to all well-being factors. This indicates that having grit in goals may need authenticity and coherence to benefit full well being. It is not only seen in the normal settings but also in the clinical settings, that connection between grit and resident well-being is there (Vainio & Daukantaitė, 2015; Salles et. al., 2014). Grit and resident well-being found grit is a predictor of psychological well-being (Salles et. al., 2014). This in turn can help counselors and doctors in predicting the level of grit to see the level of psychological well-being in the individuals. Later few studies also predict mediators that help relate grit and subjective well-being of individuals (Jin & Kim, 2017). Thus this study would help to check the level of grit and mental well-being among emerging adults & even generate awareness, further exploring the gender differences in grit among emerging adults between ages 18 to 22 years. Further no relevant studies exist on grit & mental wellbeing in the Indian context, so this may pave the way for future exploration by others.

Rationale of the Study. The rationale behind the current study is that it aims to predict the relationship between grit and mental wellbeing (MWB) as mostly studies discuss the role of grit and subjective wellbeing (SWB). The difference between subjective well being & mental well being is that SWB includes happiness, life satisfaction, and positive affect whereas MWB includes both psychological and affect functioning with two distinct perspectives i.e. hedonistic which is subjective experience of happiness, and eudemonic which is self realization & psychological functioning.

So, this study would try to fill the gap in the literature by studying the concept of well being more holistically, also the need of the study is that it has not been established firmly yet that the gender differences exist in the levels of grit among emerging adults. The present study would like to establish whether gender differences exist in the levels of grit among emerging adults as there have been mixed results in the studies reviewed. Further it would explore how the results are going to be different in the Indian context seeing the cultural differences and diversity of the nation. The majority of researches done on grit and well-being have taken into consideration, whether significant relationship exist between grit and psychological well-being. Yet not many researches' have been done on exploring the relationship between grit and mental well-being, which is a more holistic concept as it includes hedonistic and eudemonic parts of well-being. So the aim of study is to establish a relationship between grit and mental well-being, and not only subjective well-being.

There has been a dearth in the literature where studies show contradictory literature on whether gender differences exist in grit among individuals. Further it is also seen that the sample sizes taken were either unbalanced or skewed between males and females. The present study aims to fill the gap in the literature, where not many researchers' have been done on the concept of grit and well-being and comparison between the genders, as the concept is novel.

Objectives of the Study. The present study focused on examining the relationship between grit and mental wellbeing among emerging adults and to investigate whether there are gender differences in the levels of grit and mental wellbeing.

2. Research Method

The research design would be correlational in nature, mostly employing quantitative measures to understand the relationship between the variables, grit, mental wellbeing & gender using the questionnaires.

Participants. The sample consists of total 178 emerging adults in a proportion of 102 males and 76 females within 18 to 22 years of age in the area of Bangalore region of India. The convenience sampling technique is used to collect the samples for the study. The method with which the data is collected is through questionnaires would be direct i.e. collecting physically by researcher.

Research Tools.

Short Grit Questionnaire (Duckworth & Quinn, 2009). The Grit scale is having eight items that checks the levels of grit in the participants'. This scale has two areas i.e. perseverance of effort and consistency of interest which is reverse coded. Li and colleagues (2016) have validated the reliability and validity of this scale for Chinese participants. The Cronbach's alpha coefficient for Study 1 and Study 2 were 0.76 and 0.82, respectively. Even Grit scale retains the 2-factor structure of the original Grit Scale that had 12 items (Duckworth, Peterson, Matthews, & Kelly, 2007) and improved psychometric properties. Evidence has been seen Grit-S's internal consistency, test-retest stability, consensual validity with informant-report versions, and predictive validity.

The Warwick-Edinburgh Mental Well-being Scale (Brown & Janmohamed, 2006). WEMWBS was developed to enable the monitoring of mental wellbeing in the general population i.e. validated in a number of populations, including student, general and adolescent samples. It comprises of 14 items possessing 5 response categories as it is a Likert scale. The score range is from 14 to 70. The evaluation showed good content validity; confirmatory factor analysis supported a single factor hypothesis (GFI =0.93, AGFI=0.8, RMSEA=0.055); showed high correlations with other mental health and well-being scales and lower correlations with scales measuring overall health Cronbach's alpha for 2 focus groups was 0.92 & 0.91; Spearman's correlation with GHQ-12 was - 0.63 and -0.55 . The distribution was near normal; there were no floor or ceiling effects. The test-retest reliability was seemingly high (0.83).

Variables and Operational Definitions

Grit .According to Merriam-Webster thesaurus grit means firmness of mind or spirit or unyielding courage in the face of hardship or danger. As defined by Duckworth grit refers to passion and perseverance for long-term goals. It is essential as talent to high accomplishment.

Mental wellbeing. According to WHO, it is a complex construct that measures that covers both psychological and affect functioning with two distinct perspectives i.e. hedonistic which is subjective experience of happiness, and eudemonic which is self realization & psychological functioning.

Gender. The literal meaning of word gender in the Merriam-Webster thesaurus is the behavioral, cultural, or psychological traits typically associated with one sex. According to WHO (World Health Organization) gender means socially constructed characteristics among males and females which may include roles, norms and their relationships. It is a learnt behavior.

Inclusion Criteria. The students' in the above mentioned age group and doing professional degree courses in the colleges. It also includes students in co-educational schools.

Exclusion Criteria. The Students who has a history of mental illness, or has family history of mental illness, would be considered by informed consent form.

Data collection procedure. Permission from Institutional Review Board (IRB) will be taken to get ethical clearance for the study. Then, the sample will be met. The data will be collected directly by the researcher. Consent forms are presented to the participants to get their permission and willingness to participate voluntarily in the study. Along with the consent form, a demographic form is also presented. The questionnaires will be given in the form of hard copies. Then the participants are instructed to rate themselves on the statements given as honestly as they can, after which the scales are administered. The administration of the questionnaires will take between 25 to 30 minutes. After completion, the questionnaires will check to see whether the participants have answered all the items. The questionnaires will be stored in a locker and the online data will be stored in password protected laptop.

Data Analysis. Descriptive statistics and normality will be checked using Shapiro Wilk test (to see whether parametric or non-parametric test would be used). Data will be collected from the participants and will be entered into excel sheet. In the present research, relationship between the variables grit and mental wellbeing will be studied using Correlation. Comparison between groups i.e. males & females will be done using Independent sample t-test and Man-Whitney test. The data collected can be analyzed using the IBM SPSS (2015) software. Analyzed data will be presented in tabular format and discussed.

Ethical Considerations. The present study follows ethical principles strictly. The consent forms would be provided which would comprise of further details regarding the study. The participation would be purely voluntary participation. The participants may be explained perceived benefits or risks of the study. The participants will be ensured about the confidentiality of their responses which will be kept in a password protected laptop, and that their anonymity will be maintained as no identifiers will be revealed. This study involves minimal risks and participants can withdraw anytime they feel uncomfortable from the study. The research will be subject to the approval of the Institutional Review Board (American Psychological Association, 2016).

3. Results and Analysis

The purpose of this study was to determine whether a correlation exists between level of grit and mental well being among emerging adults and to know whether gender differences exist as well. The researcher conducted the quantitative study and collected data from emerging adults (N=178) going to college which consists of 102 males and 76 females.

Table 1

Descriptive Statistics of grit & mental wellbeing

Descriptive Statistics N=178	Grit	Mental Wellbeing (MWB)
Total Mean(M)	3.08	47.4
Median	3.1	48
Variance	0.34	65.9
Standard Deviation (SD)	0.58	8.1
Shapiro Wilk Test of Normality (Sig.)	0.27 (p=0.05)	0.00 (p<0.001)

Table 1 shows mean of grit, M=3.08; median = 3.1 & standard deviation, SD=0.58 respectively. In mental wellbeing, M=47.4; median = 48 & standard deviation, SD = 8.1.

The Shapiro Wilk test was done to assess the normality of data. In grit, $p=0.27$ which shows data is normally distributed, while in mental well being, $p=0.00$ ($p<0.001$) which indicates data is not normally distributed.

Table 2
Assessing Correlation between grit & mental well being (MWB)

		Grit	MWB
Grit	Pearson Correlation	1	0.09
	Sig. (2-tailed)		0.19
	N	178	178
MWB	Pearson Correlation	0.09	1
	Sig. (2-tailed)	0.19	
	N	178	178

In Table 2, Pearson product-moment correlation coefficient was computed to assess the relationship between the grit and mental well (MWB) being among emerging adults. There was no correlation found between the two variables as $r = 0.09$, $n = 178$, $p = 0.19$.

Table 3
Independent Sample test for assessing gender differences with respect to grit & mental wellbeing (MWB)

Variables	Gender	N	Mean	Standard Deviation	Standard Error Mean	t-test	p value (Sig.) Equal Variances Assumed
Grit	Males	102	3.28	0.50	0.04	5.82	0.00
	Females	76	2.81	0.57	0.06		
Mental Well Being (MWB)	Males	102	47.49	6.43	0.63	0.13	0.89
	Females	76	47.33	9.98	1.14		

In Table 3, Independent sample t-test was conducted between males & females group. In terms of grit males scored higher than females, $t(176) = 5.82$, $p = 0.00$. In terms of mental wellbeing, there was no difference among the groups of males & females, $t(176) = 0.13$, $p = 0.89$.

Discussion

The purpose of the present study was to investigate any correlation between grit and mental wellbeing among emerging adults and to examine any gender differences in the levels of grit among emerging adults. The sample size consists of 178 (=N) participants in which 102 were males and 76 were females. The two questionnaires were used to collect data i.e. Short Grit Questionnaire by Duckworth & Quinn, 2009 and Warwick-Edinburgh Mental Well-being Scale by Brown & Janmohamed, 2006. After data analysis, results indicate no correlation between grit and mental well being which means there is no relationship between the two variables. But the major finding of the study was getting considerable gender differences in grit among emerging adults. The males were seen higher in terms of grit levels as compared to females. It is a novel finding in Indian context, as never been reported with such considerable differences. Whereas in terms of mental well being, no such gender differences were found.

Among 178 participants, mean scores of grit were 3.08 which indicate low grit among emerging adults in general. While in mental well-being (MWB) score was 47.42 which indicate moderate level of MWB among emerging adults respectively. The standard deviation of grit and mental well-being are seen to be 0.58 and 8.12. Shapiro Wilk test was conducted for Normality testing. In grit, $p=0.27$ which shows data is normally distributed, while in mental well being, $p=0.00$ which indicates data is not normally distributed. This is an indicator by which further parametric or non-parametric tests are used to analyze the data.

Pearson product-moment correlation coefficient was computed to assess the relationship between the grit and mental well (MWB) being among emerging adults. There was no correlation found between the two variables as $r = 0.09$, $n = 178$, $p = 0.19$. This means that there exists no relationship between the two variables i.e. grit and mental well-being. The present variables were taken as it was substantiated by many research studies. Grit influences the trajectory of emerging adults' well-being, highlighting the beneficial effects of grit, and provides new insights into the processes that influence positive youth (Machell, 2016). Further it was seen grit to be positively correlated to well being factors which indicates that grittier goals may need authenticity and coherence to affect well being (Vainio & Daukantaitė, 2015). It is not only seen in the normal settings but also in the clinical settings that connection between grit and resident well-being is there. Grit is a predictor of psychological well-being. This in turn can help counselors and doctors in predicting the level of grit to see the level of psychological well-being in the individuals (Salles et. al., 2014). Later few studies also predict mediators that help relate grit and subjective well-being of individuals (Jin & Kim, 2017). But in the Indian context, there may be many underlying factors which may or may not have contributed to this correlation. Much more research, including studies of an experimental design or change of sampling method are required to further investigate the relationship. To add further, mental well-being is a complex construct having multiple dimensions than subjective well-being which only measures in one dimension. Though subjective well-being is positively correlated to grit but the present study failed to connect mental well-being with grit.

The Independent sample t-test was conducted between males & females group. In terms of grit males scored higher than females, $t(176) = 5.82$, $p = 0.00$. In terms of mental wellbeing, there was no difference among the groups of males & females, $t(176) = 0.13$, $p = 0.89$. The studies done in the past reveal that there are mixed results as the gender differences in the levels of grit among individuals exist or not. Grit has predictive validity of success over IQ and conscientiousness and found no significant differences by gender in levels of grit (Duckworth et al., 2007). In Manipur study it was found in a study that crucial differences were not seen among females and males sports persons i.e. fencers of national stature in grit levels (Ali & Rahaman, 2012). As opposite to it, few studies in the literature found out that gender differences do exist in terms of grit. Generally in most studies, females scored higher on grit as compared to male participants (Christensen & Knezek, 2014; Flaming & Granato, 2017). But the present study found out that in the Indian context males have higher grit as compared to females which may be because of many factors. As India have a patriarchal system, so there are more opportunities, occupations and support systems available to males. They may have been given more chances to reach success as males are mostly breadwinners in the long run. So they have no choice but to work hard, go through failures and develop better grit that their female counterparts. Due to cultural differences, it may have been possible for the males to score better on the levels of grit. The Man-Whitney non-parametric test was done to check any gender differences with respect to mental well-being. It was found that mental well-being scores were insignificant, which means there are no gender differences with respect to mental well-being. In mental well-being, the data was not normally distributed and consisted of outliers. The range of scores was from 24 to 65 which are quite diverse in it.

Implications & Recommendations

Implications. Grit is a predictor of success (Duckworth, 2007), but not of Mental Wellbeing (MWB) & achieving long term goals might not harm wellbeing of an individual. Gender differences in grit, males being higher on it, might indicate inequalities between both genders in terms of opportunities & access to resources which might breed from cultural practices.

Limitations. The participants of the study were from Bangalore region of India and results do not represent the entire country. The sample consists only of middle class socio-economic status and do not cover other classes (poor & rich).

Recommendations. Further research is needed in the area of wellbeing & grit, especially in Indian context as topic is novel. The concept of grit can be used in educational settings for career success, in counseling settings to bring about change in grittier individuals in therapy sessions

4. Conclusion

The present study aims to fill the gap in the literature, where not many researches' have worked on the concept of grit and mental well-being in India and comparison between the genders in terms of grit & mental well being, as the concept is novel. This study was crucial because it will help to understand how grit predicts the success in an emerging adults' life and later enhances the life satisfaction of an individual (Prasoon et. al, 2016). It can be applied to education system as seeing the other implications like why dropout rates are increasing (McFadden, 2016) as less gritty individuals tend to leave the task midway (Chang, 2014). The current research has certainly been able to fill the gaps in the literature i.e. whether gender differences exist in grit in the Indian context and has added to the existing knowledge of the concept of grit. The present study would be useful to the counselors and tutors, especially in the school and college settings. Awareness about grit in an individual's life can really help one climb the social economic status ladder and change one's life circumstances, so understanding the need of the concept is quite important & even opening arrears for further exploration in health settings, especially in the Indian context.

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