

Psychological Wellbeing and Grit among Management Graduates in India: Understanding the Moderating Role of Knowledge of Strengths

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ABSTRACT--Psychological grit predicts success in a range of circumstances, such as greater probability of having lifelong academic achievement and success at jobs. In the interests of including the fullest picture of how grit relates to well-being, knowledge on an individual's strength has been considered to be a possible mediator. The present study aims to understand the nature of psychological wellbeing and grit among young managers who have just been placed at various companies after completing management education, and how their knowledge strength have moderated their sense of psychological wellbeing and grit. For the purpose, 450 students of VI Trimester of their management course were employed as respondents who have already been placed in various companies and are ready to join their jobs within two months from the date of data collection. The study has found that, psychological wellbeing impacts grit and knowledge of own strengths and use of those have moderating effect on psychological wellbeing and grit. Grit entails working strenuously in difficult situations, maintaining effort and concentration over years despite being unsuccessful sometime.

Keywords-- Grit, Psychological Wellbeing, Knowledge of Strengths, Management Students

I. INTRODUCTION

In classroom and workplace, equally, individuals are found to be successful at different levels. In this context Rego et al. (2020) asserted that grit also provisions prosperous work culture. The psychological concept of achievement motivation is one of the most discussed factors to this effect. Dating back to Galton's (1869) concept of zeal and capability of doing hard work is similar to the term called grit. Grit corresponds to the passion and perseverance that an individual possesses (Duckworth et.al, 2007). In the classroom as well as at the workplace, the expectations about an individual and the demands from them are changing gradually, with augmented expectations for deep thinking and analytical reasoning. Job roles are changing so are the skill sets required of individuals. Grit as a characteristic is highly relevant for the self-actualization view of well-being, but so far the research scenario on grit and well-being doesn't look too good. According to Duckworth & Yeager (2015)

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perseverance and passion for long-term goals – is a robust indicator of an individual's capacity to comprehend and conquer challenges (Duckworth & Yeager, 2015).

A gritty individual approaches achievement as a marathon; his or her advantage is stamina. If the individual has higher knowledge of self and his/her own strengths and believes in them, the level of grit increases and psychological wellbeing also remains higher, eventually they will be better risk takers in life. Grit has a positive effect on human psychological well-being and at the same time it is a potential factor to reduce depression (Salles et al., 2017). Moen and Olsen (2020) in their research asserted that grit distinctively influence positive well-being. Isenberg et al. (2020) also found strong association between grit and higher level of self-esteem, empathy and action among medicinal scholars. Duckworth et. al (2007), pointed out in their study that, grit is an important indicator for individuals engaging in higher education and successfully completing it, and that it is more impactful when compared to intelligence quotient. Duckworth & Quinn (2009) have posited that grit is a component of personality traits and forms an individual's character. Grit is not the same as need for achievement is, McClelland (1961) has argued that achievement is the drive to accomplish manageable goals that is marked with the feature of immediate opinion about a performance. Loftus et al. (2020) in their study described that both grit and optimism potentially readdresses an individual's attitude in the direction of development, helps to take a stronger approach, and enhances performance.

In the field of *coaching psychology*, the most important concern is the concept of strengths, in the form of character strengths (Peterson & Seligman, 2004) and in the form of strengths in workplace (Buckingham & Clifton, 2001). Previous studies have focused on how strengths use and strengths knowledge correlates with an individual's vitality and his general well-being, besides, studies have found a link between self-concordance and strengths coaching (Burke & Linley, 2007; Linley & Harrington, 2006b).

Strengths are jobs or activities that a person can do well. These include knowledge, individual proficiencies, their skills, and capacities. Individuals make use of their traits and capabilities to accomplish their tasks, have interpersonal relationships with others and reach their goals.

Rogers (1961) stated in a nutshell, the view of the good life, or of well-being as “a *process*, not a state of being; a direction, not a destination”. According to him, a fully-functioning human being is someone who is growing to be able “to be that self that one truly is” (Rogers, 1961) away from thoughts, facades and inauthenticity. A person who is capable of doing this may be able to fulfill their highest potential and approach self-actualization.

In the above background, the present study aims to explore the role of self-knowledge and strength is towards positive psychological well-being and enhanced grit, which are predictors of success. Thus the study asserts that self-knowledge and strength is a vital requirement for positive psychological wellbeing and enhanced grit, which are predictors of success.

II. THEORETICAL BACKGROUND

Organismic Valuing Theory of Growth

According to the Organismic Valuing Theory of Growth (Rogers, 1961, 1964), individuals who are able to be fully-functioning move further towards their true self, are capable of being in touch with their own emotions, direct themselves towards meaningful goals and pursuits and gear towards prosocial values that enable the harmonious

existence within themselves and various other beings around (Rogers, 1961; 1964). Thus, the main concept of growth and movement is the natural motivation that an organism has towards positive growth. Sheldon, Arndt and Houser-Marko (2003) discussed this motivation as an inclination to search and gear towards more intrinsic goals over time, and searching for activities that make individuals happier. Their study showed that people tend to enhance intrinsic motivation and well-being which enhances goal endeavors over time. This view is very similar to the more recent Self-Determination Theory (Deci & Ryan, 2000), which proposes that when three basic human needs of autonomy, relatedness and competence are met, a person can pursue valued goals with intrinsic motivation, attain greater authenticity and well-being.

Grit Theory

The drive to succeed in the pursuit of goals has recently been conceptualized as the characteristic of “grit” (Duckworth et. al, 2007). Grit is defined as a motivational orientation of “*passion and perseverance* to long-term goals” (Duckworth et al., 2007). Grit predicts high achievement in various domains. Grit acts as a motivator of perseverance and helps an individual to give higher efforts to task, even in dire external circumstances (Duckworth et al., 2007). It predicts many aspects of success, by containing a determination and sustenance to stay on one’s course towards goals even if there are no clear signs of positive feedback on the way, or one is faced with various set-backs (Duckworth et al., 2007; Maddi et. al, 2013). Grit is a positive, non-cognitive trait based on an individual’s passion for a particular long-term goal or end state, coupled with a powerful motivation to achieve their respective objective. This perseverance of effort promotes the overcoming of obstacles or challenges that lie within a gritty individual’s path to accomplishment, and serves as a driving force in achievement realization. Singh & Jha (2008), in their study show that grit is positively correlated with life satisfaction and positive affect. Rather than being conscientious only in current and short-term endeavors, grit is a future-oriented motivation, pursuing goals in the long-term (Duckworth et al., 2007). Grit is long term and this long-term aspect separates grit from self-control (Duckworth, 2006). Likewise, grit and need for achievement are related concepts, but grit differs in the sense that a gritty individual does not require feedback to keep persevering, but can continue even in the absence of clear indicators that the effort is paying off, or even if the pursuit is not itself very pleasurable (Duckworth et al., 2007, Duckworth et. al, 2010). Grit is also an important dimension which helps one to effectively deal with life situations without losing focus for what may ultimately be important and meaningful (Kleiman et. al, 2013) even if success is not immediately achieved.

Theory of Human Wellbeing

Well-being is a broad construct that is defined in different ways by different disciplines (Haybron, 2008). In psychology, a strong focus on well-being began with the development of the positive psychology movement in the 1990s (Hefferon & Boniwell, 2011; Peterson, 2006), with many studies of subjective well-being (for instance, happiness) and character strengths (Peterson & Seligman, 2004) appearing in the literature. Psychological well-being refers to how people evaluate their lives. According to Diener (1994), these evaluations may be in the form of cognitions or in the form of affect. The cognitive part is an information based appraisal of one’s life, that is, when a person gives conscious evaluative judgments about one’s satisfaction with life as a whole. The affective part is a hedonic evaluation guided by emotions and feelings such as frequency with which people experience

pleasant/unpleasant moods in reaction to their lives. The assumption behind this is that most people evaluate their life as either good or bad, so they are normally able to offer judgments. Further, people invariably experience moods and emotions, which have a positive or a negative effect. Thus, people have a level of subjective well-being even if they do not often consciously think about it, and the psychological system offers virtually a constant evaluation of what is happening to the person. Psychological well-being is usually conceptualized as some combination of positive affective states such as happiness (the hedonic perspective) and functioning with optimal effectiveness in individual and social life (the eudemonic perspective) (Deci & Ryan, 2008). Ryan and Deci (2001) defined well-being as “optimal psychological functioning and experience”. Subjective well-being (SWB) is a key approach within the hedonic paradigm and refers to a cognitive and affective evaluation of a person’s life (Diener, 1994).

III. LITERATURE REVIEW

Grit refers to the character strength of perseverance as described in positive psychology. A motivational orientation of “passion and perseverance to long-term goals” (Duckworth et al., 2007) is what Grit is. In essence “it refers to the determination to accomplish an ambitious, long-term goal despite the inevitable obstacles (Doskotch & Flora, 2005). Grit is a characteristic, particularly relevant for predicting high achievement in various domains due to being a motivation of persevering and giving a high effort to task even in dire external circumstances (Duckworth et al., 2007).

There is a relation between grit and psychological well-being. Disabato et al. (2019) in their research reported that grit is associated with well-being and strength of an individual. Grit was found to impact wellbeing of residents in a medical set up (Salles, Cohen, & Mueller, 2014; Salles et. al, 2017). In another study, authors found that psychological well-being of nursing students to be impacted by grit and resilience (Jin & Kim, 2017). As it has been seen that grit and wellbeing are interrelated, so is daily grit found to improve happiness level among 2,963 adolescents in a study. Ma et al. (2020) through their research on Chinese students reported that grit can have great effect on happiness orientation as well as societal capability. Kevin et al. (2020) also expressed grit as a potential factor in pursuit of individual victory, accomplishment and well-being. Grit also contributes to enhance happiness quotient by diminishing undesirable memories of human life (Walker et al., 2020); at the same time it decreases burn-out level (Cortez et al., 2020). It highly seems that a gritty individual would show high levels of psychological well-being, because grit is both a future-oriented motivation, and a gritty individual will accumulate a sense of meaning with the goals they pursue in life (Kleiman et al., 2013). Similarly, when one’s needs are satisfied by achieving meaningful goals, one may feel particularly satisfied with their lives, as it was also shown by Singh and Jha (2008), who found a positive correlation between life satisfaction and grit. Schmidt et al. (2020) have pointed out positive association between grit, life satisfaction, conscientiousness etc. In this context Atkinson & Martin (2020) in their research discovered that sports personnel who have more grit, resilience, stamina and societal backing were more involved in sports, and had more positive energy.

Grit has been shown to be related to the subcomponents of subjective well-being (Singh & Jha, 2008). As discussed by Huta and Waterman (2013), the eudemonic view of well-being identifies well-being most centrally in terms of excellence, growth, meaning and authenticity, and therefore, the connection to the perspective of

humanistic organismic valuing theory is apparent. Psychological well-being is a key approach within the eudemonic paradigm (Ryff & Singer, 2008). It suggests that high psychological well-being is attained when one has the inner resources for maintaining a state of well-being. Such individuals have a sense of acceptance of the self, positive relationships with others; have feeling of mastering the environment. They possess sense of autonomy to follow along one's own direction; they have a sense of personal growth and purpose in life. This refers to a feeling of connection to something greater than the self (Ryff, 1989; Ryff & Singer, 2008).

According to Maddi et. al (2013) it is possible that grit is less related to harmony in life, due to its rigid nature. However, so far no clear indication that grit would reflect a rigidity factor can be found in the literature. Instead, having high levels of perseverance and consistency of interest (i.e., grit) may reflect a form of consistency with the self (i.e., identity consistency), which Daukantaitė and Soto Thompson (2014) recently showed to be highly related to different aspects of well-being. In an attempt to link association of hardiness to mental and physical health, Taylor et. al (2013) found that hardiness is associated to mental and physical health and further suggest that mental health connotes a pathway through which hardiness influences physical health.

In the area of strength knowledge, in a study by Duan & Mu (2018), it was found, there is a good relation between knowledge strength and knowledge use. Park, Peterson & Seligman, (2004) in their study found strengths are linked with well-being of an individual. In another study Proctor, Maltby, & Linley (2011) found that that is an association between generic strengths use and specific values in action of individuals and that the strengths of individuals have an impact on their subjective well-being.

The literature links psychological wellbeing and grit and also asserts knowledge strength can impact well-being. There is a gap in literature as to how an individual's knowledge strength can influence grit. The present study attempts to explore the role of knowledge strength in moderating the relation between well-being and grit, among management graduates who are entering work.

IV. METHOD

Research Questions:

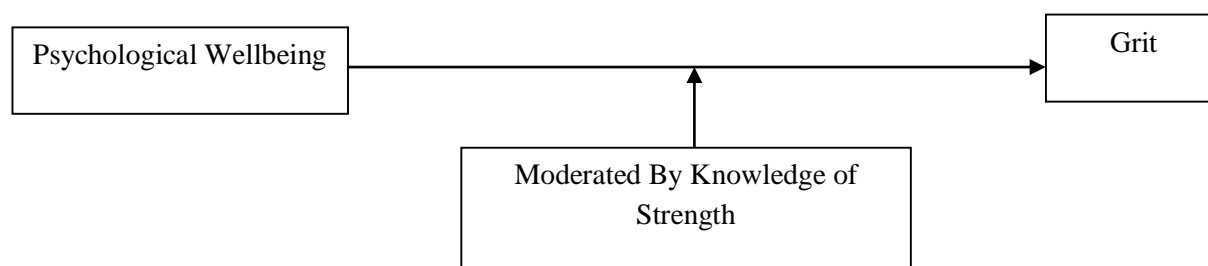
Based on the above literature, the following research questions have been formulated.

RQ 1- What is the relation between psychological wellbeing and grit?

RQ 2- What is the relation between and grit and knowledge of strength?

RQ 3- Does knowledge of strength moderate the relationship between psychological wellbeing and grit?

Table 1: The Conceptual Model



Participants and Process

A cross-sectional survey design was administered and the survey was collected through online Google forms. A total of 650 impressions were circulated through online and we received a filled-in response from 450 management students. During circulation of the impression, we clearly mentioned to fill the survey based on what they feel. We used overall probabilistic sampling technique to collect the samples. Management students of VI Trimester already placed in the job were included in the sample. The impressions of Google forms were circulated in different social media channels using a snowball sampling technique. The age group of the participants ranged between 22-26 years. The study was conducted in India. As management graduates were entering the job field, they were chosen as samples, as they would be facing a challenging work life and those individuals need to exhibit grit.

V. MEASUREMENT

1. **Psychological Wellbeing-** The 42 item scale (RPWB) developed by Ryff (1989) used to measure the psychological wellbeing of a person by taking the following factors into account: Autonomy, Environmental mastery, Personal growth, Positive relationship with others, Purpose in life and Self-acceptance.

2. **Grit-** The scale for perceived grit was developed by Duckworth et al (2007). For understanding the perceived grit of the respondents, the grit scale was used which consisted of 17 items.

3. **Knowledge of Strength-** For measuring Knowledge of Strength - 'The Strengths Use and Current Knowledge Scale' by Govindji and Linley (2007) was used.

VI. ANALYSIS

Hierarchical regression was administered to examine the research questions RQ1, RQ2 & RQ3 and the respective hypotheses of the study. The data were mean centered by creating new centered independent and moderate variable after deducting the mean values of respective independent and moderate variable terms. In order to examine the research questions and the respective hypothesis, multiple hierarchical regressions were administered. Correlation table was used to study the relationship between the variables. IBM SPSS Statistics 20 was used to perform the statistical tests.

VII. RESULTS AND DISCUSSION

The present study has been conducted to understand the relation between psychological wellbeing, grit and knowledge of strength. The indicators of the different constructs of psychological well being have been studied.

The validity of the measurement model can be assessed through convergent and discriminate validity. Convergent validity means that each measurement item has high correlations with other items which measure the same hypothetical construct. In other words, convergent validity actually evaluates the degree that items of theoretical construct relate to each other whereas discriminate validity means that the items forming up a construct can be distinguished from items of another construct.

In order to investigate the convergent and discriminate validity of our instrument, Confirmatory Factor Analysis were conducted then Factor Loadings, Composite Reliability and Average variance Extracted (AVE) values were examined in our study.

The convergent validity can be proved true and significant when all the factor loading values of the same construct is higher than 0.7. In our case, the first construct is knowledge of strength where we can find there is a huge convergent validity among the variables which indicates the factor loading values greater than 0.7. Likewise, the other constructs such as autonomy, environmental mastery, personal growth, positive relations, purpose in life and self acceptance have received high convergent validity among the variables.

Additionally, average variance extracted (AVE) should be higher than 0.5 and Composite reliability should be higher than 0.7 for all constructs of a measurement model. In this case, all are significant and clearly depicting the results of a confirmatory factor analysis levels.

We can confirm that the items measure the constructs significantly and the convergent validity of the model is satisfied.

Table 2: Results of Confirmatory Factor Analysis - Measurement model

Construct	Predictors of Grit	Factor Loading	Composite Reliability	AVE (Average Variance Extracted)
Knowledge of Strength	KS 1	0.731***	0.947	0.720
	KS 2	0.786***		
	KS 3	0.930***		
	KS 4	0.832***		
	KS 5	0.939***		
	KS 6	0.741***		
	KS 7	0.928***		
	KS 8	0.832***		
	KS 9	0.939***		
	KS 10	0.741***		
Autonomy	A 1	0.660***	0.956	0.711
	A 7	0.719***		
	A 13	0.805***		
	A 19	0.831***		
	A 25	0.837***		
	A 31	0.847***		
	A 37	0.767***		
Environmental Mastery	EM 2	0.910***	0.820	0.607
	EM8	0.820***		
	EM 14	0.923***		
	EM 20	0.935***		
	EM 26	0.916***		

	EM 32	0.692***		
	EM 38	0.757***		
Personal Growth	PG 3	0.739***	0.931	0.580
	PG 9	0.858***		
	PG 15	0.714***		
	PG 21	0.908***		
	PG 27	0.700***		
	PG 33	0.830***		
	PG 39	0.845***		
Positive Relations	PR 4	0.885***		
	PR 10	0.871***		
	PR 16	0.844***		
	PR 22	0.648***		
	PR 28	0.688***		
	PR 34	0.666***		
	PR 40	0.651***		
Purpose in Life	PIL 5	0.613***	0.958	0.742
	PIL 11	0.896***		
	PIL 17	0.921***		
	PIL 23	0.899***		
	PIL 29	0.882***		
	PIL 35	0.880***		
	PIL 41	0.794***		
Self Acceptance	SA 6	0.808***	0.907	0.662
	SA 12	0.802***		
	SA 18	0.773***		
	SA24	0.841***		
	SA 30	0.899***		
	SA 36	0.806***		
	SA 42	0.670***		
<p>Measurement model= model Fit Indices: χ^2/df = 2.309 (Good fit <5); GFI = 0.912, CFI = 0.928, (Good fit>0.9); RMSEA=0.068 (Good fit <0.06); N=720.</p> <p>Note: ***denotes p<0.001; Note: AVE =Average Variance Extracted</p>				

Table 3: Correlation Matrix and $\sqrt{\text{AVE}}$ for the first order factor model

Variables	V1	V2	V3	V4	V5	V6	V7
Autonomy	0.793 *						
Environmental Mastery	0.124	0.823*					
Personal Growth	0.442 *	0.054	0.749*				
Positive Relations	0.414 *	0.055	0.258*	0.751 *			
Purpose in Life	0.247 *	0.157	0.163*	0.656 *	0.842 *		
Self Acceptance	0.414 *	0.127	0.240*	0.557 *	0.423 *	0.838 *	
Knowledge of Strength	0.453 *	0.187*	0.284*	0.557 *	0.430 *	0.740 *	0.834 *
Diagonal figures represent $\sqrt{\text{AVE}}$, *denotes values significant with $p < 0.001$							

On the other hand, discriminate validity should be investigated by comparing the square root of the AVE of each construct to the correlations of the construct to all the other constructs. According to our analysis, the square root of AVE is much larger than the correlation value so we can say that discriminant validity also exists in our CFA model. Table 2 demonstrates the correlation among each construct and the diagonal shows the square root of AVE values of each construct. In our data, all AVEs are larger than correlation values, so discriminant validity is prevalent.

Table 4: Hierarchical structural equation estimates

Predictors of Perceived Grit	Model 1	Model 2	Model 3
Autonomy	0.053 ^{ns}		
Environmental Mastery	0.071 ^{**}		
Personal Growth	0.060 ^{ns}		
Positive Relations	0.161 ^{***}		
Purpose in Life	0.072 ^{**}		
Self Acceptance	0.589 ^{***}		
R^2	0.61		
Psychological Wellbeing		0.730 ^{***}	
R^2		0.69	
Knowledge of strength X Psychological Wellbeing			
R^2			0.72

ΔR^2			0.03
Model 1 fit: $cmin/df = 4.435$ (met the condition); CFI = 906 (Good fit), RMSEA = 0.069 (Good fit)			
Model 2 fit: $cmin/df = 4.435$ (met the condition); CFI = 906 (Good fit), RMSEA = 0.069 (Good fit)			
<p>Note:</p> <p>*** denotes significance at 0.001 level</p> <p>** denotes significance at 0.05 level</p> <p>^{ns} denotes estimates not significant at 0.05 level</p>			

Confirmatory factor analysis for first order and Knowledge of strength met the conditions for convergent and discriminatory validity (AVE>0.50, all loadings above 0.60).

RQ 1 represents model 1: In which 4 out of 6 variables established a significant relationship with the data.

Out of the six variables, environmental mastery, positive relations, purpose in life and self acceptance depicts a positive and significant relation. They are considered as true and positive predictor variables of perceived grit.

RQ 2 represents model 2: In which the second order construct established a high significant relationship with perceived grit.

In the second order model, psychological wellbeing have received a significant value at 0.001 level of significance in which the introduction of this variable has increased the R^2 value from 0.61 to 0.69. The most important predictor of perceived grit was found to be psychological wellbeing which uniquely explained a higher R^2 value in the second order construct and further improved the model.

RQ 3 represents the second order relationship moderated by, Knowledge of strength of which the factors - environmental mastery, positive relations, purpose in life, and self-acceptance moderate the hypothesized path of psychological wellbeing (second order) with perceived grit.

In the third model, there is a significant correlation between knowledge of strength and psychological wellbeing but, the R^2 value only explains 30% variance in the model.

Thus it can be said that psychological wellbeing predicts grit and the knowledge of strength of an individual moderates this relationship. So it is very important, that feedback of a person's performance be provided to the individual from time to time, so that the person can make positive moves towards modifying behaviours which in turn help to boost grit. It has been established by researches that passion and perseverance in attaining long-term goals are essential elements of grit (Duckworth et al., 2007; Duckworth and Quinn, 2009; Robertson-Kraft and Duckworth, 2014). With a higher grit, and added self knowledge individuals can observe enhanced performance at work. For success in any field, and achieving high, an extra push always works, that passion and flow help in improving performance, no matter what type of work they are going. In a study Belschak et. al (2006) found that for sales people, coping strategies for difficult circumstances include sale perseverance, task concentration and adaptive selling with a problem-solving approach. His suggestions include, greater practice, greater knowledge, and developing greater social skills to increase one's sense of control over tough situations and increases self-confidence thus reducing anxiety and its physiological manifestations. Towards a long term goal, it is very important to have a higher psychological wellbeing and understanding of what strengths the individual possesses. So not only having strengths is important but knowing ones strength is also important towards reaching a persistent

goal. Psychological wellbeing includes six aspects, autonomy, environmental mastery, personal growth, positive inter personal relation, goal in life and self acceptance (Ryff 1989) . Strength is defined as an inborn characteristics that when used makes us feel good. Knowledge of specific strengths can reduce stress and have been seen to correlate with wellbeing (Park, Peterson and Seligman 2004). Extensive empirical evidence has identified autonomy, competence and relatedness as three psychological needs inherent in all individuals (Adams & Khojasteh, 2018; Deci and Ryan, 2000; 2008). For students, autonomy is a psychological state characterized by perceived agency and internal control over learning goals and outcomes. Competence is an inner belief that one can meet the challenges of academic work and have high performance. Relatedness reflects feelings of security attachment and belongingness to the purpose, be it academics or job. Support for psychological needs is the social dimension of motivation, purposeful behavior and personality. (Adams & Khojasteh, 2018) and this happens when one is confident and aware about strengths. Management education programs these days assess the level of the learner and customize the curriculum to correspond to the learner's level. Hence the knowledge of strength is important for a management graduate. Igniting students' inner determination is the role of knowledge of strengths and the theory of human capital (Becker 1965) which associates competencies acquired by individuals with their impact on career and career attitudes, for their power to explain work related outcomes (Arthur et al 1989) is all a function of psychological wellbeing. Business and management schools facilitate learning for future leaders through the KSA model, i.e. knowledge, skill and attitude. In the new knowledge era, academic institutions and business organizations are looking for the most effective ways of learning, beginning with concepts like self assessment, MBTI, FIRO-B, assessment labs, SWOT analysis and then selection of electives. These exercises and options are nothing but knowing one's strength or forte. Management competencies gained via business management education would lead to stronger occupational identity and successful career. It is often found that, high scorers on strengths-use show lower levels of perceived stress and high scorers on psychological well being also show lower levels of perceived stress. The happy productive worker hypothesis has been examined in a study by Wright, & Cropanzano. (2000). The authors report 2 field studies that examine the relative contribution of psychological wellbeing, job performance and job satisfaction, which is again a function of knowledge of strength.

VIII. CONCLUSION-

Thus the study implies that the perceived grit of a person is highly influenced by the psychological wellbeing of a person. An index of grit may identify those who are at greatest risk for low psychological well-being in the future. Knowledge of strength of an individual moderates the relation between psychological wellbeing and grit.

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