Grit, happiness and life satisfaction among professionals: a correlational study.

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Abstract

It is commonly observed that people who are consistent towards their goals and wants to achieve them are commonly happy and satisfied with their lives because they are academically successful, paving the path for a lucrative future. We also observed that these individuals tend to be happier and satisfied with their life as a whole. Therefore this research is co-relating the level of grit with higher level of happiness and life satisfaction among 100 professionals; like doctors, teachers, lawyers, engineers and bankers. This research incorporates grit scale by Angela Duckworth, subjective happiness scale by Lyubomirsky and satisfaction with life scale by Diener. Our study concluded that the level of grit, happiness and life satisfaction are positively correlated. Data was analyzed by applying SPSS Pearson's correlation test. This research will benefit people and give them motivation that one doesn't need to be academically strong throughout to become successful, since consistency and effort also play a major part in success. This can be applied to individuals in schools and organizations. In schools and academic institutions teachers can help students to build grit and organizations can apply this on their employees. It will also motivate students, since success can increase the chances of being happy and satisfied from life.

Keywords: Grit, Happiness, Life satisfaction.

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Introduction

The country where we live in, it is often heard that a person who receives an A grade in school or is at top of their class is smart and will surely be successful in their career. Even in our families only those siblings and cousins are appreciated and given immense amount of respect who excel academically, and score higher than their peers or he/she receives all As in O and A levels. It is also observed that a child who receives low grades or doesn't perform well, as compare to their peers, is commonly degraded and compared with his classmates, siblings or cousins who do well academically. That individual is described with demoralizing words like slow, dumb, mentally challenged and many more [1].

Criterion to rate success and strong career of a person with an individual's academics is very common. It is often ignored that traits like hard working, consistency, stable personality also counts in the success of a person. There are many examples where students became very successful and well known professionally even though they were not very sound academically, people like Steve Jobs, Albert Einstein and a lot more [2].

It is also seen that some people achieve more than others in career even though they have same IQ level. This is a debatable topic thus a lot of research has been done on it. In 2008 Angela Duckworth came with a term Grit, she said the reason why some people achieve more is because of high-level

123

grit. Duckworth describes grit as "effort and perseverance towards a long term goal" [1].

Duckworth said all successful people have this trait in common. According to her, some people show a lot of patience and work energetically towards a long-term goal without getting dissatisfied, and eventually they succeed. Howe after analyzing the life of Einstein, Darwin and other genius people concluded, "Perseverance is at least as crucial as intelligence."

Therefore this research will throw a light on the topic of grit among individuals in professions such as doctors, teachers, engineers, lawyers and bankers [3].

It's been observed that if a person is happy and satisfied from their life, they achieve more and becomes successful. It is said that people who are constantly working towards their goals for longer period of time stay motivated, satisfied and happy, because if they won't were satisfied or happy, they won't be working consistently to achieve their long-term goal. Duckworth and Quinn observed that subjects recording higher level of well being (happiness) were more likely to have grit and achieved higher grades by keeping other variables constant such as IQ and age [4]. They said that it was also observed from their research that students who had had good grades, possessed higher level of grit and wellbeing (happiness) thus academic and professional success have been consistently found in relationship with grit and happiness [5].

Thus, this research will shed light on grit and whether grit is highly correlated with happiness and satisfaction.

Following are the objectives of this research:

- To check whether grit is correlated with happiness; that whether doctors, teachers and engineers, lawyers and bankers are happy because they have high level of grit
- To check doctors, engineers, lawyers, bankers and teachers have high level of satisfaction because they have high level of grit.

Hypotheses

- i. The higher the level of grit, higher will be the level of happiness among professionals.
- ii. The higher the level of grit, higher will be the life satisfaction among professionals

Literature Review

Grit

Duckworth coined the term Grit in 2007. It refers to perseverance and effort to achieve to long-term goals. Grit refers to energetically working towards a goal with constant aspiration and enthusiasm over a long period of time. It refers to keeping an interest and motivation despite failing and facing catastrophes during your effort. Gritty people seek for an achievement as a marathon. Their strong characteristic is their stamina. Dissatisfaction or fatigue makes other people drop their goals and plans in the middle where as people with grit follow their goals and also achieve them [1].

Angela and Christopher recapitulate William James proposal statement that "why do some individuals accomplish more than others of equal intelligence?" Along with cognitive and mental capabilities, personality traits were also considered which are usually present in high achievers such as; emotional stability, physical looks, maturity, selfconfidence and many more. At the end they come up with grit. They said that grit is the common personal quality, which is shared by most prominent leaders [1].

Angela and Christopher formulated their hypothesis on the basis of the interview that they conducted on high achievers such as investment bankers, lawyers, painters and doctors. They asked them what is the different characteristic that differentiates high achievers in their specified professions. Most of the professionals stated grit and words referring to grit such as creativity or talent. A lot of them stated that they were surprised by the performance of some people who were not gifted or smart initially but they succeeded due to their commitment and hard work to achieve their end goal. And they further stated that individuals who were smart initially and were gifted didn't end up achieving high in their respective professions [1].

Angela quotes Galton in her study mentioning that Galton collected information on different professions such

as states men, scientist, poets and a lot of other professions and he concluded that solely ability cannot help a person to succeed in his/her life. Where as he believed that successful professionals are gifted by "ability combined with zeal and with capacity of hard labor" .She further quoted Cox and he analyzed from his study by keeping IQ constant that "persistence of motive and effort, confidence in their abilities, and great strength or force of character" [1].

Angela quoted Terman and Oden longitudinal study of mentally gifted children. They analyzed through the study that the most successful people were only 5 points ahead in IQ than unsuccessful people. It was further observed that from Terman's sample people who grew up to be professionals such as lawyers, doctors, and professors possessed noncognitive characteristics; "perseverance, Self Confidence and Integration toward goals". Howe after analyzing the life of Einstein, Darwin and other genius people concluded, "Perseverance is at least as crucial as intelligence. The most crucial inherent differences may be ones of temperament rather than of intellect as such". Angela further quoted Ericson and Charness. They analyzed that in chess, sports, visual arts and music ten years of "deliberate practice" make them good at it compare to their fellows who didn't practice much. They further said that gifted characteristics of a person are not that important to achieve success [1].

Angela developed a short survey grit scale (Grit-S) in 2007 and later validated it by Angela and Quinn in 2009 using many other samples. At first Angela developed a Grit-O scale, Grit original to measure the level of grit in students. This was a self-report questionnaire and grit was compared with big five conscientiousness and self-control. Grit-O scale consisted of 27 items. The aim of this scale was to track the behavior and attitude characteristics of high achievers, which was explained by the lawyers, doctors, and other professionals during interviews. Items that were constructed were face valid for both children and adults. Items like ("I have overcome setbacks to conquer an important challenge" and "I finish whatever I begin"). Further more two reversescored items were also constructed like "My interests change from year to year" and "I have difficulty maintaining my focus on projects that take more than a few months to complete." Higher scores were given to higher level of grit. The scale statements were rated on 5-point Likert scale ranging from 1 "(not at all like to me) to 5 (most likely me)" [6].

10 items from the Grit-original (Grit-O) scale were eliminated after considering total-item correlation, internal reliability coefficients, redundancy and simplicity of vocabulary, which was done on half of the chosen sample. Then exploratory factor analysis was performed on remaining 17 items. It showed the second order factor structure of Grit Original (Grit-O) scale. It was assumed that due to positive and negative scored items, the factor structured showed two entirely different concepts. The first factor was consisted on 6 items, which showed the consistency of interest, and the second one showed perseverance of effort [1]. Since consistency of interest was explained as keeping an interest towards a goal for long time, and perseverance of effort was explained as working hard towards the goal. Five items with the factor holding of less than 0.40 were dropped from the scale on the basis of Explanatory factor analysis (EFA) results [1].

Rest of the 12-items of Grit Original scale (Grit-O) showed acceptable internal consistency (α =0.85). Grit-O scale reflected signs of psychometric awareness, face validity of children and adults to pursue to their goals and construct validity proving Grit as a variable [6].

Furthermore Duckworth conducted a study to check the validity of Grit survey. The sample was categorized into four which included; class of 2008 of West point cadets (number of sample=1,218) from United States Military academy, Batch of 2010 of United States Military academy, West Point (number of sample=1,308), Finalist of National Spelling Bee (number of sample=175) and Under Graduates from IVY League (number of sample=139). Four items from Grit Original (Grit-O) scale was eliminated out of twelve items after conducting item level correlation with outcome. The resulting eight items were known as Grit-S. It showed an internal consistency of samples such as; 0.73 for West Point Cadets batch of 2008, 0.76 for West Point Cadets batch of 2010, 0.80 for National Spelling Bee and 0.83 for Under Graduates of Ivy League [1].

Confirmatory Factor Analysis (CFA) was conducted on Grit-S to check its validity. Conducting online survey did it. First order latent factors were 'consistency of interest and perseverance of effort'. They were loaded on grit, which was a second order latent factor [1].

In other studies, the effect of grit was observed on long term achievements in different professions such as salesmen were able to sell more and sustain their jobs, army officers were able to complete their rigorous training and married men maintain their marriages if they were grittier [7].

In all likelihood, this seems reasonable; people with higher-level of stamina towards all the catastrophes are able to achieve more in life than the people with low level of stamina [7].

It was observed in the research by Claire and Angela that teachers who presented higher level of grit in their interviews before teaching tend to stay for more years and did not leave the school in the middle of the year and it was also observed that teachers who left the school early and in middle of the year demonstrated lower level of grit. This shows that teachers, who demonstrated long-term perseverance towards their teaching career, stayed more than a year and their students presented good academic results [8].

It was noted in the research of Grit and association of satisfaction among rural and non-rural doctors by Alex J Reed that the level of grit is high in doctors; be it rural doctors or urban doctors. In that research both rural and nonrural physicians demonstrated equal level of grit (mean 3.30). Primary care and specialty care doctors also showed equal level of grit (mean 3.7). This proves that on general level doctors are committed and hard working to achieve their goals therefore they present higher level of grit [9].

Milan Hogan wanted to find out in her research the association between grit and success among female lawyers that are currently in big law firms. She further wanted to research that do successful female lawyers have higher level of grit than less successful female lawyers [10]. The results showed very prominent association between grit and success in Big Law among women. In further findings it was also observed that the level of grit is also based on the compliments these women received at work like "(your performance was outstanding or your performance was not up to the mark)" and the amount of hours they used to work and their reviews regarding their work. These findings proved that the level of grit is also based on several other factors. The results of Hogan research recommended "Grit is the precursor of Big Law success rather than an outcome for it" [11].

In the research, "Successful Students; smart or tough?" by Jsegar. It was observed by the results that Engineering students of Northwestern University were grittier than the others in their first year. They were 3.50 on grit scale and they were marginally grittier than the IVY league students. Jsegar in her research stated that North western engineering students owns a certain level of commitment in them and she further stated that some amount of grit is present into students who get their admissions in engineering colleges. In Jsegar research it was further observed that chemical and mechanical engineers had higher level of grit than computer engineers [12].

Duckworth [1] interviewed bankers initially. And she concluded that bankers have high level of grit. On the basis of results she formulated the grit scale.

In the article, "failure makes you a winner" the writer states that its not the magic or any spark which made Buddha, Luke Skywalker and Jon of Arc to be successful at achieving their aim. Writer said it was Struggle. He said that the only thing which all the champions share is Grit. Writer in this article explains Grit by a story of Joseph Campbell, "Hero's Journey". He said that in this story when a hero decided to leave home, he faces all kind of challenges and adversities and later Campbell states in his story "Dragons have now to be slain and surprising barriers passed – again, again and again. Meanwhile there will be a multitude of preliminary victories, unretainable ecstasies and momentary glimpses of the wonderful land" [13].

Carter in his article says that it's the grit that makes his hero focused and pushes them to face all the difficulties, failures and problems. He said that these heroes fail miserably, fall down again and again to achieve their goal. There are a lot of times when they loose hope but what makes them hero is their stamina and a power of rising up again and they start trying over instead of giving up [13].

Carter said that fictional heroes aren't just the only one to posses the quality of grit. It is humans who also posses grit to rise on top. A lot of above mentioned studies showed that grit is the best predictor of elite performance and success. Grit gives us power to rise up again after failure and to start working hard again to achieve that goal [13].

The power to over come our all challenges makes humans powerful and strong and makes us the master of the skill. It is said that we aren't born with Grit. Humans develop grit by facing challenges and set backs in their lives. Grit is the quality that makes people achieve their dreams as its defined by the researchers, "perseverance and passion for long term goals" [14].

Happiness

Results of many researches have proved that there is no definite meaning of happiness. It changes its course over the span of one's lifetime. The criterion of older people to be happy is quite different from the youth. Such as youth link happiness with adventure, buzz and excitement and older people link happiness with serenity, peace and calmness [15].

Originating from Greeks to Buddhist, to the era of new philosophy thinkers and to the democrats, all have made an enormous amount of efforts to find out the essence of happiness. Also many researchers have cross-examined behavioral co-relations, criteria and reasons behind happiness but very less have scientifically been done to find out what happiness is? Or what is the definition of happiness considering every individual makes an effort to be happy and perform actions that can make him happy [15].

Gautama Buddha said that the path to happiness initiates by analyzing the cause of suffering. Buddha further stated that happiness is only persuaded by applying one's knowledge and wisdom to attain mental peace. And that mental peace is only achieved by avoiding the vicious circle of things that brings 'dukkha' in a person. Thus, when one attains mental peace, he detaches himself from all worldly needs, wants and desires of life and becomes a free person and that is when one attains wellbeing and happiness. Buddha quoted, "If by leaving a small pleasure one sees a great pleasure, let a wise person leave the small pleasure and look to the great" [16].

Thus, Buddha quoted that the path to achieve greater happiness demands to consider and understand the reality of life when life is considered as mentally dysfunctional. Therefore the only way to achieve happiness is to have a peace of mind [17].

Socrates is a very famous Ancient Greek philosopher whose theories are still widely studied and applied in 21st century. He is considered to be the first person in the region of West to claim that happiness is only achieved by human effort. Like Buddha, Socrates said that the path to achieve happiness is detaching oneself from body and to be pushed towards soul [16]. He said that by detaching one's self from worldly desires, humans move towards peace of mind and tranquility since desires and wants of a person brings unrest and leaves him with trouble mind. Socrates claimed that living a moral full life is always preferred over living an immoral life since morality brings happiness and peace of mind in a person and makes one happier [18].

Seligman is a well renowned positive psychologist who pioneered this branch. According to him, a person combats through three kinds of happiness; a) gratification and pleasure, b) epitome of virtue and strengths, c) aim and meaning. He said that each of its kind is associated with positive feeling. Seligman proposed a path to live a happy life, he said that, always let people think effectively about their past experiences because when they consider their past constructive, people think positively and become optimist and that leads them to have a hope for better future and that makes them happy in present [19].

Batres is a professor and a very capable researcher of positive psychology. She has devoted her life in studying happiness. She has also written books on happiness, which are widely read and appreciated. Many of the individuals in the world don't need to define happiness; they believe that it is the feeling, which they feel when they experience any pleasant situation where as Batres thinks that researchers and social scientist needs to define happiness to study its cause and effect relations ship. She said that many people co relate happiness with words like joy, enthusiasm, pleasant and many others. Therefore in her book, The How of Happiness, Batres defines happiness as, "the experience of joy, contentment, or positive well-being, combined with a sense that one's life is good, meaningful and worthwhile" [20].

This definition shows that happiness is any positive emotion in life and its co related with understanding the meaning of life. This shows that happiness and meaning reinforces each other and makes a person experience happiness [21].

Diener is another positive psychologist. He has worked profoundly on the topic of happiness that now he is also knows as "Dr. Happiness." Diener introduced the term "subjective well being" as demeanor of happiness. Diner claims that happiness is strongly based on genetics therefore external conditions of a person play a very minimal role to affect some one's happiness [18].

Diner claimed that if an individual considers himself to be a happy person, then he is delighted in his life. He said that every single individual in this world is a better analyst of him/herself. He labeled as "subjective well-being [18].

Abraham Maslow is considered to be a very prominent figure in the field of behavior psychology. He is known to be the few of early psychologist to just study happy people. Maslow said achieving self-actualization is the basic instinct of every person; it's just that they first need to fulfill their basic requirements and needs. Maslow stated that as soon as the basic requirements of a person is achieved such as food, love, clothing, security and self esteem, that person starts to seek creativity and self actualization (realization of one's talent, creativity and potential which is present is a person). Maslow said that humans get happy once they have fulfilled the pyramid of "hierarchy of needs". He said that hierarchy of need is referred as a pyramid because as person achieves once step, he seeks for another one and without achieving step one, he cannot achieve step two. He said that at first an individual tries to fulfill his physiological needs such as food, sex, clothing, sleep and breathing [22]. As soon as person achieves this, he starts seeking for safety needs. He said that once the physiological needs are met, an individual starts to feel protected and if they aren't met, then he becomes unprotected and feels insecure. Maslow said, after meeting the need of physiological and safety, an individual starts to seek for belongingness and love that is socialization, interacting with people and maintaining love relationships. Getting connected with people and family makes a person happy and fulfill his needs of belongingness and love. After that person reaches to the need to self-esteem. Maslow claimed that person reaches to self-esteem when he is loved and respected by people around him. He feels confident and gets a feeling of fulfillment, and then an individual becomes moral and ethical [23].

The peak of Maslow's hierarchy of need is selfactualization. Maslow said, "What a man can be, he must be. This need we may call self-actualization...it refers to the desire for self-fulfillment, namely, to the tendency for him 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" [24].

He researched on happy people, just to find out for what constitutes in self-actualization. He said that self-actualized individuals are happy and gain life satisfaction then un-selfactualized individuals [23].

Subjective well-being is a subject, which was given a lot of weightage upon the introduction of positive psychology. As stated by Diener, It also referred as happiness. A lot of emphasis is being given on positive psychology subjects, and now it has been applied onto different professions, careers and academic settings. Major connections have been observed into grit, well being and academic success. Catherine Ross mentioned Duckworth research in her paper. Duckworth observed that subjects recording higher level of well being (happiness) were more likely to have grit and achieved higher grades by keeping other variables constant such as IQ and age. They said that it was also observed from their research that students who had had good grades, possessed higher level of grit and well-being (happiness) thus academic and professional success have been consistently found in relationship with grit and happiness [5].

Med Scape conducted a survey on the life of doctors. They asked them about their happiness level in their lives. They were asked to fill survey in which 1 was least happy and 5 the happiest. From the group almost one-third doctors rated themselves 5 being the happiest. Therefore it can be said that subjective well-being of doctors is pretty much high and they are happy in their lives [25].

United Kingdom's newspaper, The Telegraph stated that the survey says, "*Teachers are the happiest workers in Britain*". The research was conducted on 2000 employers and it was found that teachers were pretty much happy with their working conditions and atmosphere. 83% of the teachers claimed that they like their job and are quite happy with it [26].

It was also analyzed from the survey that engineering, teaching and law comes under top ten happiest professions [27].

Blaise Pascal said that, "All men seek happiness. This is without exception. Whatever different means they employ, they all tend to this end". Seeking for happiness is like a basic desire for humans be it doctors, teachers, engineers, lawyers or bankers, they all want happiness, and if they have higher level of grit and through that they become successful, that can lead to happiness, therefore it can be said that if there is a higher level of grit to achieve goals, thus a person will be happy if the goals will be achieved [28].

Life satisfaction

Life satisfaction, happiness and subjective well-being are more or less similar in concept and they represent almost similar emotional feeling. Subjective well-being is an extent to which an individual analyze and feel that he is doing fine in his life and life is passing fine. Life satisfaction refers to a cognitive factor of subjective well-being and refers to an individual global analysis of the quality of their life [29].

Diener is a very well known psychologist who said that subjective well being comprised of three parts; positive affect, negative affect and third is cognitive part which is also known as life satisfaction. The first two components are related to emotions and third one cognitive aspect {i.e., life satisfaction} [30].

Analysis of the satisfaction with life scale, Diener said that judgments of satisfaction are based on a comparison of individual's situation and circumstances with what he thought a standard should be for him. He further said that it's very significant to know that the analysis of how individuals are satisfied from their lives is solely dependent on their current circumstances and situation with the standard they have thought for themselves. He said that it is externally imposed or affected [31].

As stated in one of the paper life satisfaction is described as "a global assessment of a person's quality of life according to his chosen criteria" [32].

Diener stated that life is a development of being judgmental. They by being judgmental people critically analyze the quality of their lives according to the standard, which have set for themselves [30].

An examination of one's apparent life conditions with a

deliberate standard or set of gauges is probably made, and to the extent that conditions coordinate these principles, the individual reports high life satisfaction. Hence, life satisfaction is a subjective judgment of one's life in which the criteria for judgment are up to the individual [31].

Diener et al. found that estimations of satisfaction in regards to day-by-day life are exceptionally identified with encountering of positive feelings, yet over the more drawn out term reason in life appeared to be more applicable for fulfillment. Such a reason could be picked up by significant objective interests, hence a gritty individual [33].

Feldman mentioned Tatakiewicz in his work. In relation to life satisfaction, Tatakiewicz said that if an individual is happy, he is not only satisfied with current situation/part of his life but in fact he would be satisfied with his part as well with his future life. While making his point, "Satisfaction with life as a whole must be satisfaction not only with that which is, but also with that which was and that which will be, not only with the present, but also with the past and the future" [34].

Krestoff mentioned Singh's and Jha's in his research. He said that Singh's and Jha's [29] inquired about the relationship of grit and joy and they additionally dinged into the correlation of grit and life satisfaction. In Singh's and Jha's research, grit and life fulfillment demonstrated a critical positive relationship and that grit represents 2% of the variety concerning life satisfaction. Here their review demonstrates that the grit of students represents 2% of distinction in life satisfaction levels between students who have grit and the individuals who don't [35].

Therefore through their research it can be said that individuals who have higher level of grit also have higher level of life satisfaction than those who are less gritty [36].

In a research paper published by BMC Health Services Research, it was observed that most of the Norwegian doctors are satisfied from their lives. This research was compared with the responses took in 1994 and then in 2002. In 1994, 5.21 on average life satisfaction was reported and 5.32 in 2002. Scale varied from 1 (being extremely dissatisfied) to 5 (being extremely satisfied). These doctors assumed that they have very high level of life satisfaction then other professionals [37].

Over the last several years a lot of emphasis is given on abnormal psychology on negative or dysfunctional forces in daily life thus areas like happiness, life satisfaction were ignored but recently psychologist are researching and focusing on positive psychology [36]. Therefore this study is emphasizing on positive psychology areas; grit, happiness and life satisfaction so that people can understand the importance of happiness and life satisfaction. Furthermore, it is commonly observed that people who are good academically or score good in their exams are expected to be successful and to be professional in their lives. On the other hand people who weren't good academically were labeled that they won't be successful and professional. Therefore this study will tell us that to be successful and to be professional a person needs to have higher level of grit in them. And professionals who have higher-level consistency in them to achieve their goals will be happy and satisfied from their lives [38].

Research Methodology

Sample size

The sample size consisted of 100 professionals. There were 20 doctors, 20 lawyers, 20 engineers, 20 bankers, and 20 university teachers. Individuals were recruited from work places in Karachi.

Research design

This research is a primarily quantitative research. Questionnaires were distributed manually to professionals. This research consisted of one independent variable: grit and two dependent variables: happiness and life satisfaction. This is a correlational study in nature in which a relationship and association between variables were examined.

Materials

A form was used as a research instrument for this study. This form consists of five components; the first component has an Inform consent form, the second component consists of demographic form. Professionals (subjects) were asked to read and sign the consent form, if they were to participate in this research. Every individual who filled the form had the right to withdraw from the research at any point. Then third form consisted of grit questionnaire, fourth form was subjective happiness scale, and fifth form was satisfaction with life scale. All three scales are already available and nothing has been changed. The whole questionnaire consisted of 21 questions.

The demographics form includes name, sex, profession and age of the participant.

Satisfaction with life scale (SWLS) (1985)

The SWLS is a 5-item self-report questionnaire that measures one's evaluation of satisfaction with life in general (e.g. "The conditions of my life are excellent"). Individuals respond to each item on 7-point Likert scales ranging from "strongly agree" to "strongly disagree." Responses are summed to yield an overall score of life satisfaction. Research demonstrates acceptable psychometric properties for the SWLS; the Cronbach alpha of the SWLS was found to be 0.76 [30].

General happiness scale (1999)

Happiness in life was measured with Lyubomirsky and Lepper's General (Subjective) Happiness Scale. This 4-item instrument contains items that tap into subjective feelings of global happiness with one's life (e.g. "Compared to most of my peers I consider myself": 1=less happy, 7=more happy). The internal consistency of this scale was á=0.80 [39].

Grit scale (2004)

Grit was measured using the Grit scale developed by Duckworth. The scale is self reporting and consists of 46 items rated on a 5-point scale from 1- not like me at all to 5- very much like me; e.g. "I finish whatever I begin" and "I have overcome setbacks to conquer an important challenge," and reverse-scored statements such as, "My interests change from year to year." The Scale has been reported to be highly reliable and validated containing the value of alpha=0.85 [1].

Procedure

Questionnaire was given to individuals in the respective professionals to collect a theoretical quantitative data. Individuals were handed over the questionnaires manually. Professionals filled the forms in their respective work places. It was a forced questionnaire. After giving basic information that is name, age, profession and gender, respondents they were asked to fill the rest of the questionnaire. There are twelve questions in grit scale, four in subjective happiness scale and five in satisfaction with life scale. It took fifteen to twenty minutes for respondents to complete the questionnaire.

Statistical analysis

The relation between the variables that are under study (grit, happiness and life satisfaction was analyzed using Statistical Package for the Social Sciences (SPSS). Results of the primary data were recorded in this paper to build an argument.

Ethical considerations

From the initial stage of this research, ethical considerations were kept in mind. Participants of this research were explicitly debriefed about the title and aim of this research. Participants were given the option to withdraw from this study at any given point. Participant's consent was also taken at the start of this research; they were not forced to be a part of it. They were given the assurance of their responses privacy and throughout the research privacy of the forms was maintained.

Limitations

There are few limitations in regard to this research; firstly this research cannot be generalized because the age bracket of this research was from 25-35 years old professionals. Moreover this research cannot be applied on other professions besides medicine, engineering, banking, law and teaching. This research is restricted to individuals set in the Pakistani society, mostly based in the city of Karachi.

Results

In chapter three all results are presented in the form of charts and tables and so their description and detailed analyses is also mentioned.

Table 1 was tested by applying Pearson's correlation, to check whether grit is correlated with happiness among professionals because they have high level of grit. Result

Correlations		Grit	Happiness
Grit	Pearson Correlation	1	0.477**
	Sig. (2-tailed)		0.000
	N 100	100	100
Happiness	Pearson Correlation	0.477**	1
	Sig. (2-tailed)	0.000	
	N	100	100

Table 1. The higher the level of grit, higher will be the level of

happiness among professionals.

Table 2. The higher the level of grit, higher will be the life satisfactionamong professionals.

Correlations		Grit	Satisfaction
Grit	Pearson Correlation	1	0.554**
	Sig. (2-tailed)		0.000
	Ν	100	100
Satisfaction	Pearson Correlation	0.554**	1
	Sig. (2-tailed)	0.000	
	Ν	100	100

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

shows that the value of correlation coefficient r=0.477 and p<0.01. Thus it is concluded that there is a moderate positive correlation between Grit and Happiness.

Pearson's Correlations was run to check whether professionals have high level of satisfaction because they have high level of grit on second Table 2. The result shows that the correlation coefficient between Grit and Satisfaction is r=0.554 and the p<0.01. From these figures, we can conclude that there is a moderate positive correlation between grit and satisfaction.

Discussion

The Table 1 claims that there is a significant relation between grit and level of happiness among professionals; that is doctors, teachers, engineers, lawyers and bankers. Applying Pearson's co relation Table 1 was tested; this test was run through the SPSS software. Results of Table 1 showed that the value of correlation coefficient is 1 in the cells where SPSS compare two same variables (Grit and Grit and so on). This means that there is a perfect positive correlation between the variables. Thus this hypothesis has been proved correct. In each cell of the correlation matrix, we get Pearson's correlation coefficient, p-value for two-tailed test of significance and the sample size. From the output, it can be seen that the correlation coefficient between Grit and Happiness is 0.477 and the p-value for two-tailed test of significance is less than 0.01. From these figures, we can conclude that there is a moderate positive correlation between Grit and Happiness.

As mentioned above grit refers to "effort and perseverance towards a long goal" proving that people are consistent and are also working hard to achieve their goals in life. The individuals in professionals we surveyed for e.g. doctors, teachers, engineers, lawyers and bankers, are considered to be in tough professions. People who pursue these professions

^{**} Correlation is significant at the 0.01 level (2-tailed)

are considered to be very smart, intelligent, hardworking and consistent in their lives. We concluded from our research that the professionals who were just not professional but also worked hard in life, and were consistent in their goals, also scored high on grit scale and were also found to be happy in their lives. The correlation was found among level of grit and happiness.

As it was also observed in Hall survey that engineering, teaching and law comes under top ten happiest professions [27].

It can also be said that professions like these demand a lot of hard work and compromise, thus when individuals become successful in their respective professions they believe that they deserved to reach at this level, hence the feeling of achievement combined with the praise they get from their family and friends makes them happy.

Seligman said that people should always think effectively about their past experiences because when they consider their past constructive, people think positively and become optimist and that leads them to have a hope for better future and that makes them happy in present [23]. Thus it can further said that individuals in these professions must have always considered any hard ship and failure as a stepping towards a better life, thus having hope made them happy. Therefore, even when they reflect back at their past, they consider it as their learning experience and are content and happy with their present lives.

The study also observed that grittier people are happy because they are courageous in their lives. These people are not scared to make errors and mistakes in their lives. They believe that by making mistakes a person always learn and he doesn't repeat them in future and brings contentment in their lives.

The study by Jha also showed the correlation between grit and happiness. This study was conducted on undergraduate people and the sample size 254. It was found that the correlation Happiness and Grit (0.26, p<0.01) which is considered as positive [40].

Aurelius once said that, "*The happiness of your life depends upon the quality of your thoughts*" therefore people who are successful and grittier mostly think positively in their lives, they are consistent and motivated to achieve their goals because if they won't think positively they will fall back and won't be able to succeed. Thus this research proves that there is a positive correlation between grit and happiness.

The Table 2 was also tested by Pearson's Correlations; this test was run by SPSS software to check whether doctors, engineers, lawyers, bankers and teachers have high level of satisfaction because they have high level of grit. Results of Table 2 showed that the value of correlation coefficient is 1 in the cells where SPSS compares the two same variables. This means that there is a perfect positive correlation between the variables. Thus this hypothesis has been proved correct. Here we can see that the correlation coefficient between Grit and Satisfaction is 0.554 and the p-value for two-tailed test of significance is less than 0.01. From these figures, we can conclude that there is a moderate positive correlation between Grit and Satisfaction.

Subjective well-being is an extent to which an individual analyzes and feels that he is doing fine in his life and life is passing well. Life satisfaction refers to a cognitive factor of subjective well-being and refers to an individual global analysis of the quality of their life [29].

An individual is found to be satisfied in his life when he has achieved and has attained all of his set goals in life. It is found that the professionals like doctors, teachers, engineers, lawyers and bankers set a certain kind of criteria for themselves and to attain that criteria they work hard in their lives, they do face adversities and fall down but they always manage to come up and stay persistent so that they can attain those set goals. Diener, a famous psychologist said that this is how people are satisfied in their lives- by attaining their set goal and standards [30,31].

One Swedish analyst found out the variable of grit is in correlation with well-being involving peace and sense of engagement in engagement in life. Its research suggested that people who rate higher level of grit maintain peace in their lives and always reach up to the standards in their life thus their life satisfaction is high [41].

In the research by Jha, it was observed that correlation between positive affect and grit (0.44, p<0.01), Life Satisfaction (0.38, p<0.01) proving that the relationship is positive [40].

It was observed through this research that professionals like doctors, teachers, engineers, lawyers and bankers put in more effort and also set a higher bar and standard to achieve for themselves. In many cases they do achieve it, thus increasing their life satisfaction.

Conclusion

This research was a great learning and an eye opening experience for us. This research has taught us a few things. Pearson's co relation results also prove the concluding statement. The P value 0.01 and the r value 0.04 shows that indeed there is a moderate positive relationship between the level of grit and happiness among professionals. It was observed through statistical data that professionals who have high level of grit they also had high level of happiness, thus grit does affect happiness in a person in a positive manner

It was also proved from Pearson's co relation result that if a person's grit is high; he/she is also satisfied with life. Indeed Pearson's r value 0.554-showed high level of co relation between level of life satisfaction and grit. Thus supporting the conclusion that professionals who have been consistent to achieve their long-term goals are highly satisfied with life. Since they have worked very hard and have been determined to get to their goals.

First to be successful in life, you do not need to be academically sound and intelligent through out your schooling. This is the biggest misconception in our society. We believe that only individuals who are smart and achieve good grades pursue professions like medicine, engineering, law, professors and bankers. This research has thus proved this concept wrong; this research analyzed that if you have grit, i.e., if you are consistent and hard working, you can easily be successful in life. People like Steve Jobs, Mark Zuckerberg are the biggest examples of this in today's world. This research further proved to us that if you have a desire and a goal to be successful in life, you are happy and content in your life. Another aspect is if you are a in a demanding and stressful career for e.g. a doctor or an engineer or a lawyer, such careers lead to stressful and unhappy lives [42]. This research negated this statement by proving that people who are in such professions actually scored high on subjective happiness scale and life satisfaction scale.

Thus from the results it is assessed that higher the level of grit, higher is the happiness and life satisfaction among professionals.

Recommendations

This research has few limitations thus in future these limitations can be avoided. Firstly the sample size can be increased for example the sample of 100 professionals were used, in future researches it can be more than 100. Moreover the age bracket was 25-35 thus people older than this age can be analyzed. Furthermore this research is only conducted on Pakistani people, thus it can be conducted on people from other nations.

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