



A Study on Grit and Self-Esteem among Female Young Adults with Creative Cognition

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Abstract

Grit and Self-esteem are two constructs that have always proved to be of use & importance in helping achieve success in various domains, be it personal, social, academics, creativity or any other. The current paper focuses on studying how grit & self-esteem are related to cognitive processes used in creative endeavours. The purpose of the study was to explore the relationship between grit and self-esteem among female young adults with creative cognition. For this, data was collected from 56 female young adults studying/working in the fields of fashion, art, dance and music. Standardized measures of all the three variables were used, including the Short Grit Scale (Duckworth), Rosenberg Self-Esteem Scale and Use of Creative Cognition Scale (Rogaten & Moneta). The results showed a significant positive correlation between grit, self-esteem and creative cognition. The findings suggests that individuals with higher levels of grit and self-esteem are more likely to have higher and enhanced levels creative cognitive abilities, therefore, generating more creative products and ideas.

Keywords: *Grit, Self-Esteem, Creative Cognition, Creativity, Female Young Adults*

INTRODUCTION

“Creativity requires the courage to let go of certainties.”

- Erich Fromm

The quote mentioned above by Erich Fromm, points out to how the process of creativity requires letting go of the certainties and embracing the uncertainties of its process. Creativity can be understood as a process that requires modification of something that already exists into a new concept or an original idea (Carter, 2014). Consequently, when reforming or modifying something that already exists, requires faith in one's abilities and perseverance to move forward in spite of any challenges. This is what grit is essentially is, to move through the task at hand with consistent interest and perseverance.

Apart from grit, self-esteem, i.e. how we perceive ourselves, is another psychological construct that is considered as an important doorway to creativity as well. Creativity requires spontaneity and being able to express oneself. Without genuine acceptance of oneself and valuing oneself, we won't be able express ourselves freely, which is something that creativity requires. Therefore, self-esteem is another construct that is a catalyst to expression of creativity, enabling the person to show their creative self as much as they can.

Creativity and Creative Cognition

Creativity is “a process that leads to the production of a novel, useful idea or product” (Runco & Jaeger, 2012). It is generally conceptualized as the ability to create products that are original and adaptive (Simonton, 2001). One point that all researches on creativity agree on is that a creative person is someone who creates outputs or idea that are applicable and useful to the problems at hand. To create creative outputs or products one doesn't always has to be an artist or inventor, people from different professions and different walks of life for e.g. entrepreneurs, can be creative in their own ways as well (entrepreneurs have high levels of

communication and business & marketing skills). This view towards creativity, that people from different professions are creative as well, finds its roots in the “little c” approach on creativity (Kaufman & Beghetto, 2009). This approach argues that creativity is a universal human characteristic and that this trait is found not only in artists, scientists or inventors but people from other professions as well. This further points out that creativity is not just a mere trait but also has roots in psychological and cognitive processes as well. This approach to creativity is called as “Creative Cognition” approach. This approach views creativity as a product of application of basic cognitive processes.

Another perspective on the creative cognition approach was given by Runco and Chand (1995). While studying the creative cognition approach, the researchers asserted that the ability to think creatively requires more than just mere factual knowledge (declarative knowledge) but also the knowledge regarding how creative thinking takes place & how to engage in it (procedural knowledge). Knowledge, thus, both declarative and procedural, is a fundamental asset for creativity, and as the processing of knowledge and thinking related to creative endeavours happens in the mind, creativity is considered a cognitive process (Crompton & Crompton, 2008; Mensel, 2004; Runco & Chand, 1995).

Therefore, Creative Cognition can be understood as a set of mental processes that helps in generation of creative, novel and useful ideas. Creativity is a result of the creative cognition.

Relationship of Grit & Self-Esteem with Creative Cognition

Grit can be understood as a trait that inspires the individual to put consistent efforts and something that keeps them motivated to accomplish their long term goals, making them stick to their objectives and ambition. Grit helps an individual to work through tough challenges

and maintain consistent effort. Self-Esteem is the evaluation of an individual's beliefs and attitudes towards his or her abilities and values (Rosenberg, 1965).

Grit and Self-Esteem are two psychological constructs that play an important role in determining individual success and well-being. While talking about these two in relation to creative cognition, the two psychological constructs are of great importance, as generating novel solutions requires not just creative knowledge and thinking but also a positive opinion of oneself and it also requires ability to endure the uncertain process and perseverance to keep moving forward despite any failure or challenges.

Grit facilitates sustained effort and resilience in creative tasks, while self-esteem provides a stable sense of self-worth that helps individual navigate the emotional ups and downs associated with creative process. Self-esteem is also associated with positive outcomes in creative fields, academics, relationships and any behaviour that act as a barrier to achievement of goals (Alhadabi & Karpinski, 2019).

Previous research has shown correlation between self-esteem and creativity (Cantero et al., 2016; Deng & Zhang, 2011; Kemple et al., 1996). The reason why self-esteem is beneficial to creativity may lie in the positive functions that it serves. Individuals with high self-esteem tend to believe themselves to be capable and worthy, so they are more likely to express ideas that differ from others. High self-esteem helps in maintaining high internal motivation, which is seen as crucial to production of creative ideas (Amabile & Pillemer, 2012; Eisenberger & Aselage, 2009).

Another research by Barai and Saha (2022) was conducted on science learners at high school and college level to explore the interrelation of various factors from social environment, cognitive and non-cognitive resources affecting their creative potential. The results revealed that supportive peer group and grit predict creative potential of science learners. Similarly in another study where grit was studied as a predictor of creativity among

Chinese English as a foreign language teachers. The results of this study also revealed that grit as well as resilience significantly predict creativity, grit being the better predictor out of the two.

Grit

According to Duckworth et al. (2007), grit is defined as “trait-level perseverance and passion for long term goals”. Additionally grit refers to “a personality attribute defined by an intense drive to do difficult activities” (Duckworth et al., 2007).

In a study by Sigmundsson et al. (2020) associations between passion, grit and mindset in young adults of Iceland were explored. Standardized measures of all the three variables were used. The results showcased significant differences between female and male passion factor only. In addition, the results indicated a significant correlation between all the factors for the group as a whole.

Akbağ and Ümmet (2017) investigated the predictive role grit as a personality trait and basic psychological needs satisfaction on subjective well-being among young adults. For this purpose a sample of 348 participants from final year of graduation in Istanbul as well as graduates who are working was collected. Standardized psychological measures were used. Regression analysis revealed that grit, satisfaction of three basic psychological needs and gender are the meaningful predictors of subjective well-being for young adults.

A study by Dutta and Singh (2017) aimed to study spirituality, grit and resilience in college going young adults. The results revealed a significant positive correlation of spirituality and grit.

Self-Esteem

According to Rosenberg (1965), Self-esteem “is one’s positive or negative attitude towards oneself and one’s evaluation of one’s own thoughts and feeling overall in relation to oneself”.

According to Alesi et al. (2012), Self-esteem is regarded “as a personal psychological characteristic relating to self-judgement based on one’s values about humans.”

In a study by Jaggi et al. (2017), the levels of creativity and self-esteem among young adults were compared. The sample included professional dancers, casual dancers and non-dancers. An attempt was also made to understand the phenomena of creativity and self-esteem as subjective processes among professional dancers and casual dancers. For this purpose, a total of 75 young adults completed standardized measures of creativity and self-esteem. Results indicated significantly higher levels of creativity among professional dancers and casual dancers compared to non-dancers. The scores were higher for casual dancers than non-dancers on 3 out of 4 dimensions of self-esteem. Though, overall pursuit if dance had enhancing effects on self-esteem but this relationship was impacted by whether dance was pursued professionally or as a hobby.

Roghanchi et al. (2013) explored the effect of combined rational emotive behaviour therapy (REBT) and art therapy (engraving method) on improving self-esteem and resilience. Standardized measures were used to assess the effects on a sample of Iranian students. A sample of 24 Iranian university students were randomly placed in experimental and control group. Over a period of 10 weeks, the sessions were given. Post the study data was analysed and the results showed that integration of art therapy and REBT increased self-esteem and resilience of the students.

Gail and Richard (1981) conducted a study to explore the relationship between divergent thinking and self-esteem in age groups across adult life span. A total of 218 subjects ranging

from 18 to 84 years responded to personal data inventory, a self-esteem measure and a taped auditory free-response exercise in divergent thinking. Scores were obtained for fluency, flexibility & originality of thought and scores for self-esteem. The results showed that self-esteem significantly predicts divergent thinking across age groups. Middle-aged adults score highest on measures of divergent thought and self-esteem. Self-esteem is significantly associated with expression of divergent thinking in middle-aged adults and elderly persons.

Creative Cognition

According to Pinkow (2023), Creative Cognition refers to “the cognitive processing of information with the goal to achieve creative outcomes”.

Alternatively, cognitive psychology also offers the concept of creative cognition, which refers to the cognitive processes individuals engage in during creative thought. (Benedek & Fink, 2019; Ward, 2007; Ward et al., 1995).

Kleibeuker et al. (2013) examined developmental trajectories of creative cognition across adolescence. For this purpose, 98 participants were divided into four age groups (12/13 years, 15/16 years, 18/19 years, 25 - 30 years) and were subjected to a battery of tasks gauging creative insight and divergent thinking. The two older groups outperformed the two younger groups on insight tasks and 25 - 30 year old outperformed the two youngest age groups on insight tasks. On divergent thinking in visual - spatial domain, however, only 15/16 year old outperformed 12/13 year old. No age differences were observed for verbal divergent thinking. It was concluded that mid - adolescence is a period of not only immaturities but also creative potentials in the visual - spatial domain.

METHODOLOGY

Purpose

The purpose is to study the relationship between grit, self-esteem and creative cognition among female young adults.

Hypothesis

- There will be a significant relationship between grit and creative cognition among female young adults.
- There will be a significant relationship between self-esteem and creative cognition among female young adults.
- There will be a significant relationship between grit and self-esteem among female young adults.

Sample

The sample consisted of data from 56 females between the ages of 18 - 25, studying/working in the field of fashion, art, dance and music in Chandigarh.

Measures

Short Grit Scale (Grit - S): The Grit Short Scale as developed by Duckworth & Quinn (2009), is an 8 item self-report scale. It measures Grit on a 5 point Likert scale, the responses ranging from “Very much like me” to “Not like me at all”. The Grit-S demonstrates internal consistency, test-retest reliability, consensual validity with informant-report versions, and predictive validity. It demonstrates reliability of 0.82 and validity of 0.90.

Rosenberg Self-Esteem Scale (RSE): The Rosenberg Self-Esteem Scale as developed by Morris Rosenberg (1979), is a 10 item self-report scale. It measures self-esteem on a 4

point likert scale, with the responses ranging from “Strongly Agree” to “Strongly Disagree”. The test-retest reliability of the RSE over a period of 2 weeks reveals correlations of 0.85 and 0.88. It also demonstrates concurrent, predictive and construct validity using known groups.

Use of Creative Cognition Scale (UCCS): Use of Creative Cognition Scale as developed by Rogaten & Moneta (2015), is a 5 item self-report scale. It measures the tendency to deploy creative cognition to problem solving, on a 5 point Likert scale ranging from Never (1) to Always (5). The scale has internal consistency reliability of 0.82 and has good concurrent validity through positive correlations.

ANALYSIS OF DATA

Results

Table 1: The table shows the descriptives for all the three variables (Grit, Self-Esteem & Creative Cognition)

	Grit		Self-Esteem		Creative Cognition	
N		56		56		56
Mean		3.37		27.7		18.9
Standard deviation		0.659		4.82		3.47

Table 2: The table shows the correlation matrix between Grit, Self-Esteem and Creative Cognition

	Grit		Self-Esteem		Creative Cognition	
Grit		—				
Self-Esteem		0.543	***	—		
Creative Cognition		0.365	**	0.426	**	—
Note. * p < .05, ** p < .01, *** p < .001						

DISCUSSION

The purpose of this study was to explore the relationship between grit and self-esteem among female young adults with creative cognition. For this purpose, data was collected from a sample of 56 female young adults studying/working in the fields of fashion, art, dance and music in Chandigarh.

The results showed that there is a significant positive relationship between grit and creative cognition ($r = 0.365$; $p < .01$), which indicates that when there is an increase in one, it leads to an increase in the other as well. This result is in the favour of our first hypothesis and thus, proves it right. Suendarti & Hasbullah (2020) examined the effect of grit and creativity on innovative behaviour, mediated by self-efficacy. The results showed that creativity and grit have a positive significant and direct effect on innovative behaviour, indicating that teacher's innovative behaviour can be improved by grit, creativity and self-efficacy. The results of this study fall consistent with the results of our study.

Correlation between self-esteem and creative cognition was computed as well. The results showed that there is a significant positive correlation between the two variables ($r = 0.426$; $p < .01$), indicating that when there is an increase in any one of the two, it will lead to an increase in the other variable as well. This proves our hypothesis right. Monero and Molero (2023) conducted a study to analyse the relationships between creativity and other individual variables such as academic performance, self-esteem and stress in adolescent students. Data was collected using standardized measures from a sample of 743 students ranging from 14 to 19 years of age from Spain. The results showed a positive correlation between self-esteem and creativity. Regression analyses indicated that both stress and creativity are predictors of self-esteem.

Additionally, the study also examined relationship between grit and self-esteem; the results showed that there is a significant positive correlation between self-esteem and grit ($r = 0.543$; $p < .001$), which indicates that when either of them increases, it will lead to an

increase in other one too. These findings are consistent with the study conducted by Weisskirch et al. (2016) where a study was done on Grit, Self-Esteem, Learning Strategies & Attitudes and Estimated and Achieved Course Grades among College Students. In the study it was found that self-esteem predicted the components of grit (perseverance of effort and consistency of interest).

Thus, in accordance to previous researches, the results of this study also proves that high levels of grit and self-esteem will enhance cognitive processes involved in creativity and thereby giving better creative outputs. The positive and significant relationship of the all the variables with each other suggests that they play a critical role in enhancing each other.

CONCLUSION

This paper focused on studying how grit & self-esteem are related to cognitive processes used in creative endeavours. For this purpose, relationship between grit and self-esteem among female young adults with creative cognition was studied. Data was specifically collected from 56 females studying/working in the fields fashion, art, dance and music in Chandigarh. Standardized measures of all the three variables were used, including the Short Grit Scale by Angela Duckworth, Rosenberg Self-Esteem Scale and Use of Creative Cognition Scale by Rogaten & Moneta. The results showed a significant positive correlation between all the three variables, proving the hypotheses right. The results show that if any of the variables I.e. self-esteem, grit and creative cognition increase, it will lead to an increase in the other two as well.

The findings suggest that individuals with higher levels of grit and higher levels of self-esteem are more likely to have enhanced creative cognitive abilities. The findings also points to the importance of factors related to grit (perseverance, resilience, consistency of interest) and self-esteem (positive opinion and beliefs regarding self, faith in one's abilities) as key

contributors to creativity and innovation. Young adults who are able to maintain good levels of grit and self-esteem and are able to achieve a balance between the two, are more likely to excel in creative domains than those who aren't able to do so.

Though various studies have been done previously studying the relations between grit, self-esteem and creative cognition, but this is the first study that studies the relationship of all the three variables together. This gives us better insights on the relationship between them, which can help in formulating better strategies to enhance grit and self-esteem levels in young adults, which help them not only in creative domains but also other academic, professional & personal contexts.

Art as a form of therapy, though being used since decades, has recently seen a rise as a medium of catharsis and development of positive beliefs. Thus, it can be used with young adults to foster grit and high self-esteem. Various concepts that help in harbouring grit and self-esteem like growth mindset, positive affirmations etc. can be taught and adopted in educational institutions with the help of art.

Regular workshops and training that involve the use of reflective activities, which will help the individual know more about oneself. The reflective process also proves as a strengthening factor. Approachable mentors and counsellor with expertise in the field, who can guide the young adult and also provide them with constructive feedback, will also help in boosting their self-esteem.

Encouraging participation with the help of peers, mentors, faculty in various kinds of activities and organizing workshops that require problem solving & working in collaboration to work on new ideas, help nurture and foster creative abilities. All these techniques help in equipping the individual with skills and psychological & cognitive constructs that are needed for personal and professional success.

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