

Studying Impacts of Personality Traits on Creativity (Case Study: University of Isfahan's Students)

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ABSTRACT

This article was aimed to studying Impacts of personality Traits on creativity. In order to examining personality traits, the big five model has been used that consists of five dimensions as Extroversion, Agreeableness, Conscientiousness, Emotional stability, and Openness to experience. In order to collecting data, a questionnaire including 35 items has been designed. Statistical population is university of Isfahan's students and sample size has been calculated 160 students that selected based on available sampling method. In order to studying impacts of personality traits on creativity the ENTER method has have been used, and Durbin-Watson test has been used to determining that whether there is self-correlation between independent variables or not. But also in order to measuring stability of questionnaires' items, Cronbach's alpha has been calculated for each variable separately. The results of this article indicate that personality traits have effect creativity. Between five dimensions of personality, three of them have effect on creativity that including extraversion, consciousness, and emotional stability. These three dimensions have explain 43% of creativity variation. Also Durbin- Watson test results indicate that there is no self-correlation between independent variables.

KEY WORDS: creativity, personality, personality traits, big five model, university of Isfahan.

INTRODUCTION

As we know, some peoples are creative more than others. If we accept this sentence, this question should be answered that what personality has creative peoples and what are their personality traits? In order to answer this question, first this question should answer that what is creativity? Many definitions have been offered for creativity that is about more than 60 definitions for it. [14] Based on this, it is seems necessary that some of this definitions offered for creativity. From psychology perspective, creativity is assumed a concept or phenomena that are a psychological process to resolving problems, fostering ideas, conceptualization, and creating industrial products and services. Based on this creativity is psychological process that is unique and has device-oriented identity. From management perspective creativity means appearance and creating new thought and notion. [1] As seen in two definitions creativity concentrates on two concepts, unique and fiction. Some researchers that have personality-based view to studying creativity, studied creativity based on people's traits such as personality and brain. [2], [3], [5] As we know students have creative thinking than others and if this thinking could improved help them in academic and work places. As we know students especially at university should learn creativity knowledge and its improving methods that could help them in starting new jobs or improve their work knowledge. Based on this, this article was aimed to studying impacts of personality traits on creativity. Based on big five model Personality traits including extraversion, consciousness, and openness to experience, agreeableness, and emotional stability.

PERSONALITY CHARACTERISTICS (BIG FIVE MODEL)

Some researchers believed that almost all dimensions of personality should categorize through big five model's dimensions. [6], [7], [8] it is seemed that big five model dimensions are different in various cultures. [10] But also some other studies indicate that big five model dimensions have genetic themes and that probably are

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congenital. [9] ,[13] The dimensions of this model including extroversion, Agreeableness, Conscientiousness, Neuroticism, and Openness that has been offered in following section. [11]

- **EXTRAVERSION:** The extraversion dimension captures one's comfort level with relationships. Extraverts tend to be gregarious, assertive, and sociable. Introverts tend to be reserved, timid, and quiet. [11] Extraversion categorizes by positive effects and emotions and can be seen as a positive sensation. [4]
- **AGREEABLENESS:** The agreeableness dimension refers to an individual's propensity to defer to others. Highly agreeable people are cooperative, warm, and trusting. People who score low on agreeableness are cold, disagreeable, and antagonistic. [11]
- **CONSCIENTIOUSNESS:** The conscientiousness dimension is a measure of reliability. A highly conscientious person is responsible, organized, dependable, and persistent. Those who score low on this dimension are easily distracted, disorganized, and unreliable. [11] But also conscientiousness dimension can be characterized by reliability, achievement-oriented, and orderly. [13]
- **EMOTIONAL STABILITY:** The emotional stability dimension often labeled by its converse, neuroticism-taps a person's ability to withstand stress. People with positive emotional stability tend to be calm, self-confident, and secure. Those with high negative scores tend to be nervous, anxious, depressed, and insecure. [11]
- **OPENNESS TO EXPERIENCE:** The openness to experience dimension addresses one's range of interests and fascination with novelty. Extremely open people are creative, curious, and artistically sensitive. Those at the other end of the openness category are conventional and find comfort in the familiar. [11]
- As mentioned previously the aim of this article was to studying impacts of personality traits on creativity. In order to this, first one main hypothesis and so five secondary hypothesizes based on it has been formulated as following.
MAIN HYPOTHESIS: personality traits have impact on student's tendency to creativity.
H1: extraversion personality has impact on student's tendency to creativity.
H2: Agreeableness personality has impact on student's tendency to creativity.
H3: conscientiousness personality has impact student's tendency to creativity.
H4: Emotional stability personality has impact on student's tendency to creativity.
H5: Openness to experience personality has impact on student's tendency to creativity.

RESEARCH METHODOLOGY

As mentioned previously, this article was aimed to studying impacts of personality traits on creativity. In order to collecting data a questionnaire including 35 items (10 questions about creativity and 25 questions about personality traits) has been designed. Statistical population is university of Isfahan's students and sample size that determined based on primary sampling are 142 students and were selected based on available sampling method and then questionnaires has been offered to indicate it and all of distributed questionnaires has been collected through authors. Also the questionnaire item's scales are likert. In order to analyzing data, descriptive statistic, inferential statistics, regression analysis, and Durbin-Watson test has been used. The ENTER method has been used to determining impacts of each personality traits on creativity and rate of this Impacts, and Durbin-Watson analysis has been used to determining that whether there is self-correlation between independent variables or not. Finally in order to measuring stability of questionnaires items, Cronbach's alpha has been calculated for each variable separately.

DISCUSSION

In order to studying impacts of personality traits on student's tendency to creativity, the ENTER method has been used. As indicated in table 1, sig level is 0/000 (is lower than 0/05) indicate that the main hypothesis of this article studying impacts of personality traits on student's tendency to creativity has been supported. Extroversion, Conscientiousness, and emotional stability totally explain 43% of creativity variation. But also Durbin-Watson test indicate that there is no self-correlation between independent variable. Summary of this hypothesis has been offered at table 1.

Table 1: summary of main hypothesis

variable	R	Squared R	Adjusted R square	Standard deviation	Durbin-Watson	Sig
value	0/652	0/430	0/166	0/43669	2/01	0/000

The first secondary hypothesis of this study examining impacts of extraversion personality on tendency to creativity. Based on table 2 because sig level is 0/03 (is lower than 0/05), it is can deducted that extraversion personality have impact on tendency to creativity between students. Also results indicate that extraversion could

explain 0/142 of creativity variation. Summary of this hypothesis has been mentioned in table 2. The results of second secondary hypothesis of this study that examining impacts of Agreeableness personality on tendency to creativity indicate that based on table 2 because sig level is 0/098 (is more than 0/05), it is can deducted that Agreeableness personality have not impact on tendency to creativity between students. Summary of this hypothesis has been referred in table 2. The third secondary hypothesis of this study examining impacts of conscientiousness personality on tendency to creativity. Based on table 2 because sig level is 0/03 (is lower than 0/05), it is can deducted that conscientiousness personality have impact on tendency to creativity between students. Also results indicate that extraversion could explain 0/285 of creativity variation. Summary of this hypothesis has been referred in table 2. The fourth secondary hypothesis of this study examining impacts of Emotional stability personality on tendency to creativity. Based on table 2 because sig level is 0/04 (is lower than 0/05), it is can deducted that Emotional stability personality have impact on tendency to creativity between students. Also results indicate that extraversion could explain 0/397 of creativity variation. Summary of this hypothesis has been referred in table 2. The results of fifth secondary hypothesis of this study that examining impacts of Openness to experience personality on tendency to creativity indicate that based on table 2 because sig level is 0/442 (is more than 0/05), it is can deducted that Openness to experience personality have not impact on tendency to creativity between students. Summary of this hypothesis has been referred in table 2. Finally in order to calculating stability of questionnaire's item Cronbach's alpha has been calculated for each variable separately. Results of this analysis have been referred at table 3.

Table 2: summary of five secondary hypothesis tests

factor value	Standard deviation	Beta	T	sig
extraversion	0/077	0/142	2/307	0/03
Agreeableness	0/166	-0/004	-0/22	0/098
conscientiousness	0/068	0/285	3/0026	0/03
Emotional stability	0/057	0/397	2/039	0/04
Openness to experience	0/176	0/152	0/772	0/442

Table 3: Results of Cronbach's alpha

variable	creativity	extraversion	Agreeableness	conscientiousness	Emotional stability	Openness to experience
Cronbach's alpha	0/812	0/781	0/814	0/684	0/749	0/865

CONCLUSION

This article was aimed to studying Impacts of personality Traits on creativity. In order to examining personality traits, the big five model has been used that consists of five dimensions as extroversion, Agreeableness, Conscientiousness, Neuroticism, and Openness. In order to collecting data, a questionnaire including 35 items has been designed. Statistical population is university of Isfahan's students and sample size has been calculated 160 students that selected based on available sampling method. In order to analyzing data, descriptive statistic, and inferential statistics has been used. In order to studying impacts of personality traits on creativity the ENTER method has have been used, and Durbin-Watson test has been used to determining that whether there is self-correlation between independent variables or not. But also in order to measuring stability of questionnaires' items, Cronbach's alpha has been calculated for each variable separately. The results of this article indicate that personality traits have effect creativity. Between these five dimensions of personality, three dimensions have effect on creativity as extraversion, conscientiousness, and emotional stability. These three dimensions explained 43% of creativity variation. Based on results, students who are more extraversion, conscientiousness, and emotional stability than other ones could have more creativity thinking. Also Durbin- Watson test results indicate that there is no self-correlation between independent variables. Based on this findings university managers could use this suggestions in order to selecting students who are creative- oriented more than others and also they could improve their students creativity through this. For instance students who are more extraversion, conscientiousness, and emotional stability than other students are creative- oriented than others and these students should educated in order to improving this ability and using it in their educational or field issues.

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