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Research Paper

Relationship between the Personality Traits and Creativity Style among College Students

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ABSTRACT

The aim of this study was to investigate the relationship between college student's personality traits and all domains of creativity. The data in this study has been obtained with the help of the Self-reported measures scales named Brief-big-five-personality-inventory-10, which consists of 10 questions and the Kaufmann Domains of creativity scale (K-DOCS), which consists of 50 items. The relationship between personality traits and creativity style among the college students is an important area of research that has significant implications for individuals. 130 college students from all streams were included in the study without regard to gender. Pearson correlation test analysis was employed on the raw scores and converted score for better analysis. Overall, it showed a positive relation between personality and creativity, this study emphasises the value of respecting and appreciating individual personality and creative characteristics as well as the necessity of fostering circumstances that foster creativity in college students.

Keywords: *Personality, Creativity, Agreeableness, Openness, Neuroticism, Extraversion, Artistic, Conscientiousness, College Students, Mechanical/Scientific, Self/Everyday, Survey, Scholarly, Performance, Correlation, Self-Reported Data, Sampling Bias, Confounding Variables*

Creativity is the interaction of aptitude, process, and environment by which a person or group creates a detectable output that is both original and useful as defined within a social context (Plucker, Beghetto, and Dow, 2004). Mortan Prince once said, "Personality is the sum of all of the biologically innate dispositions, impulses, tendencies, appetites, and instincts of the individual as well as the acquired dispositions and tendencies." "Personality is an organised system of traits, sentiments, complexes, and habits (along with interests and abilities) that distinguishes the individual, as we see him from other individuals," says Vernon. In terms of India, this potential was overlooked, but it is now understood that the identification and nurturing of creative talent is crucial if the country is to keep up with the developed nations of the world.

In a wide range of work domains, creativity is a topic with a broad scope that is significant on both an individual and social level. At the human level, creativity can result in novel

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approaches to daily tasks and problem-solving that deviate from the norm; at the societal level, creativity can result in new scientific discoveries, products, methods, and social reforms. Educational institutions must give students the chance to engage in creative thinking in order to prepare them for the knowledge society and innovation economy. In order to stress creative teaching and learning, some colleges and universities have already changed their curricula. However, these changes have only occurred in a small number of elite universities and places in various nations. To meet the demands of the next century, it appears that a systematic application of creative teaching and learning is still a long way off. For instance, those who are more creative have higher degrees of cognitive complexity and flexibility as well as a greater capacity for divergent thought. They are also better able to deal with confusing and unstructured situations. To further comprehend each person's unique perspectives on creativity, however, few empirical research have been done employing these factors. The conceptual link between thinking patterns and creativity was emphasised by Zhang and Sternberg. However, they emphasised that more empirical study is needed to fully understand the connection between intellectual types and creativity. Many academics have stated that thinking patterns are crucial to creativity. The conceptual connection between creativity and distinctive thinking styles has also been put out in other studies. For instance, Kaufman stated that having a holistic way of thinking is essential for creativity; other academics disagreed, saying that creativity also requires other ways of thinking. In order to explain cognitive inclinations and problem-solving approaches, Kirton created an adaptive inventive theory. He defined innovators as those who prefer to "do things differently" and adaptors as people who want to "do things better."

Previously, it was believed that creativity was a unique talent that could only be used by the most talented individuals, allowing them to excel in various disciplines. In recent years, psychologists have made the case that creativity is a product of specific education and learning rather than a unique talent or skill of a select few. In addition to being a trait found in extraordinary people, creativity may also be seen as a vital life skill that helps people realise their full potential as thinkers, artists, and decision-makers by allowing them to express themselves freely. A variety of cognitive, behavioural, and cognitive-social frameworks can be used to investigate the various conceptions of creativity and innovation. Guilford made a preliminary effort to define the notion. He thought that creativity encompassed the most common traits of creative people that indicate a person's likelihood of expressing creative behaviour, which shows up as invention, synthesis, and planning.

Flexibility of thought, originality of ideas, the capacity to think outside the box, and problem-solving aptitude have all been identified by some psychologists as qualitative components of creativity. It is currently one of the most reliable methods for measuring creativity. The Torrance test of creativity has four subscales: fluidness, expansion, innovation, and flexibility. Unaffected by the many different perspectives and definitions of the nature and dimensions of creativity, one of the fundamental concerns in the field of creativity relates to the variables that affect creativity and its growth. As a result, during the past few decades, researchers in the domains of education, psychology, and particularly educational psychology have become increasingly interested in studying the personality qualities of those who are creative, and they have seen a new wave of research in this area.

Research on the personality qualities of creative persons has been done for many years; it is not a recent phenomenon. As far as Stein's research on the personality traits of creative people has gone, he has discovered the following characteristics: a high motivation for achievement, high curiosity, a discipline orientation and order in the works, the power of

self-expression and self-sufficiency, an unconventional and ambitious personality, perseverance and discipline in the works, independence, intuition, and the ability to influence others. Travers has asserted that despite the fact that these characteristics point to a creative individual having a gorgeous and fascinating personality, these people may not necessarily be adored by their coworkers and associates. The truth is that the reverse is true.

In addition to defining the personality qualities of creative persons and how these traits impact them, Torrance argued that personality may both facilitate and impede creativity. According to this theory, the easiest ways to be creative are to be willing to take risks, curious, independent in one's thinking, persistent and consistent, brave, and involved in affairs. The hardest ways to be creative are to be domineering, negative, resistant, fearful, fault-finding, critical of others, compromising, giving in to power, and having low self-esteem. In a similar spirit, Sternberg is one of the new theorists who proposes that creativity comes from six different but connected sources: mental aptitudes, knowledge, thinking styles, motivation, environment, and personality.

According to him, personality attributes including the propensity to overcome hurdles, take on risks, and embrace difficulties, the propensity to tolerate uncertainty and ambiguity, and strong self-efficacy are linked to creative performance. For instance, the research by Karwowski et al. revealed a favourable and significant correlation between students' creative self-efficacy and creative personal identity and the three of the big five personality factors: extraversion, openness to experience, and conscientiousness. In conclusion, it can be said that these theories and researches emphasise the innate and internal role of creativity and that the researchers and theorists feel that creativity is something that is internal and innate. As a result, they speak about creative personalities rather than creative individuals because they believe that creativity is something that is internal and innate.

Growth is highly significant. It has been observed that, parallel to one's growth, some of these children develop their innate creativity and keep it active, while others do not grow their innate talent, despite the fact that research by neurology experts has shown that all babies and children are born with some sort of innate ability. The involvement of the environmental and educational elements that these youngsters are surrounded by may be easily identified and understood as the root cause of this problem. As a result, it is possible to claim that an adult's creativity is the product of interactions between their internal and external environment.

There are many different external elements that influence creativity, but the most significant ones include social structures like the family, formal and informal educational systems, information and communication technologies (ICTs) and mass media, culture, customs, etc. According to the social dimension of creativity, researchers in this field think that the virtual world can serve as an inspiration for fostering creative ideas in the fields of art, design, architecture, management, etc., and that it can make it easier to learn, develop knowledge, and receive feedback, criticism, and criticism from others. It will enable access to the use of increasingly sophisticated technologies and result in the establishment of learning groups. In reality, participation in a variety of social networks, online communities, and virtual organisations exposes people to a wealth of knowledge, stimuli, concepts, strategies, and ways of thinking that all encourage varied thought.

Depending on the user's usage patterns, personality attributes, and level of use, researchers in the field of creativity feel that the impact of information and communication technology

on creativity may be favourable. Additionally, those with the drive and aptitude to utilise these technology resources are more marketable on the labour markets due to their higher levels of creativity, competition, and adaptability. We can therefore draw the conclusion that research on the interaction between creativity and personality traits, with a focus on the function of ICTs, is of particular significance and has significant implications for people working in educational systems at various levels of schooling. One of the main objectives of higher education is actually to support students in their development of creative thinking.

Academic or scholarly creativity is one particular area of creativity that has captured the attention of numerous researchers. Academic creativity is the process by which a learner conceptualises, absorbs, and produces knowledge in academic subjects like science and mathematics. It is believed to involve divergent thinking, which has historically been seen as the key component of creativity, as well as creative analysis (Kaufman, 2012). Many teachers work to encourage pupils' inventiveness. The purpose of this study was to test the relationship between personality types and scholarly creativity in undergraduate students in order to advance our understanding of the factors influencing scholarly creativity. Special emphasis was placed on the mediating roles of various creative styles in this relationship.

Researchers are working to understand the fundamental causes of creative thought and behaviour, which has drawn a lot of interest to the study of creativity and personality in recent years. As a multidimensional concept, creativity includes cognitive, emotional, and motivational processes that promote the development of unique and worthwhile ideas. The steady thinking, emotion, and behaviour patterns that characterise a person's personality are reflected in their personality characteristics. Understanding the relationship between creativity and personality can offer important insights into the elements that support or obstruct creative thought.

REVIEW OF LITERATURE

One of the earliest studies on this topic was conducted by Barron and Harrington (1981), who investigated the relationship between personality traits and creative achievement among college students. They found that students who scored high on measures of openness to experience and independence were more likely to engage in creative activities and achieve creative success.

Sen, Arun K., et al. (2000) conducted an investigation with 300 kids (aged 15–16 years) to determine the links between creativity, intelligence, personality, and academic accomplishment. It demonstrates the strong positive correlations between creativity and certain personality traits (such as extraversion, a theoretical and aesthetic value pattern, and academic success). Intelligence and creativity did not correlate in any meaningful way.

According to Gelade's findings from 2002, among the scales on the NEO-PI-R, a popular self-report personality test, the scale for openness to experience had a significant positive correlation with the innovative creative style as determined by the Kirton Adaption-Innovation Inventory (KAI), whereas conscientiousness had a significant negative correlation with the innovative style. According to Gelade's research from 2002, innovators typically scored higher on extroversion than adaptors do, whereas neuroticism and agreeableness did not significantly correlate with innovators' KAI scores.

According to an empirical study by Liu and Wei from 2003, personal characteristics have a substantial impact on cognition, which in turn has a big impact on ambitions for expansion

and organisational structure in the entrepreneurial realm. Accordingly, this study comes to the conclusion that personality factors can greatly affect creativity, which in turn can significantly affect entrepreneurial intentions. In other words, creativity might act as a mediating factor between a person's personality and their entrepreneurial aspirations. The findings of this study can broaden the scope of cross-cultural cognitive startup models' applications, enrich their theoretical frameworks, and support this theoretical model with empirical data.

In their 2010 study, Batey and Safiullina looked at the role of fluid intelligence, general knowledge, and the Big Five personality traits in predicting four measures of creativity: fluency in rated DT, divergent thinking (DT), self-rating creativity, creative achievement, and a combined measure of total creativity. Fluid intelligence consistently predicted creativity when it was measured with the DT test. Personality traits consistently predicted creativity when measured in terms of accomplishment or self-rating.

Research on creativity and the personality traits of extroversion and introversion was done by Sharma and Chauhan (2010). Extroversion-introversion is a key component of personality, and the present study employed the Neymen-Kohilstedt Diagnostic Test for Introversion-Extraversion (Indian Adaptation by Dr. Jai Prakash). This study disproves any link between the creative tendencies of extroverts and introverts, which will benefit everyone involved in the personality development of students.

Karwowski, Lebuda, and Wiśniewska (2013) investigated the relationship between the Big Five personality traits and creative styles among college students. They found that openness to experience was positively associated with all creative styles (i.e., exploratory, conceptual, and behavioural), whereas conscientiousness was negatively associated with exploratory and behavioural styles.

Another study by Karwowski and Beghetto (2018) investigated the relationship between personality traits and creative self-efficacy among college students. They found that openness to experience, neuroticism, and extraversion were all positively associated with creative self-efficacy.

Creative performance has recently been explained using the idea of creative self-beliefs. The ability of an individual to benefit from the experiences in his or her life is a key factor in the development of self-belief. Various personality traits that have been linked to creative processes, such as extroversion, openness to new experiences, curiosity, etc., determine these events as well as how each individual experiences them (Karwowski, 2012; Kaufman & Beghetto, 2009; Silvia, Beaty, Nusbaum, Eddington, Levin-Aspenson, & Kwapil, 2014). College Students' Creative Personalities College students as a whole were investigated for their creative profiles, taking both pathological and adaptive features into account. In addition, differences by major were also evaluated in order to understand distinctive characteristics in each group and forecast potential outcomes on achievement.

METHODOLOGY

Aim of the Study:

To Examine the relationship between personality traits and creativity style among the college students.

Objectives of the Study:

- To examine the impact of varying levels of creativity on the various personality types of PUC students.
- To determine the precise interactions between personality type and various aspects of creative thinking among college students.

Hypothesis

- H1: There is relationship between the two variables creativity and personality.
- H2: There is a relationship between extraversion and creativity across all domains.
- H3: all creative areas and the personality attribute of agreeableness are related.
- H4: there is a relationship between personality type conscientiousness and all domains of creativity.
- H5: There is a relationship between personality type Neuroticism and all domains of creativity.
- H6: There is a relationship between personality type Openness to experiences and all domains of creativity.

Sample and Its Selection

Sampling is the technique used in statistical analysis to select a specific number of observations from a larger population. Here in this research the purposive sampling type is used to sample from a larger population used to measure the personality traits and creativity style among college students. The research was done on total 130 college students of all streams, without any division on both males and females. The sample mainly consists of people in the age group of 18 to 24 years who are in college.

Rational

To see how personality traits and creativity style interact during this period might help people better grasp how context and environment affect these attributes. College is a special time of development and exploration for many people. Research on personality traits and creative approaches among college students might be put to use in fields like career counselling and development. People can make better decisions about their future by having a better understanding of how personality traits and creative approaches affect employment choices and success.

Overall, studying the relationship between personality traits and creativity style among college students is crucial for both theoretical and practical reasons, and can offer insightful information on the emergence and expression of creativity.

Description of Tools Employed

Brief-big-five-personality-inventory: The Big Five Personality Inventory - 10 (BFI-10) is a condensed version of the widely used and popular Big Five Personality Inventory, designed to quickly assess an individual's personality traits. It consists of 10 items, with two items for each of the Big Five dimensions: openness, conscientiousness, extraversion, agreeableness, and neuroticism. Respondents rate each item on a 5-point scale, from "strongly disagree" to "strongly agree."

Kaufman Domains of Creativity Scale (K-DOCS): A self-assessment tool for measuring creativity across five domains was designed with 50 items. The K-DOCS is unique in that it evaluates creativity across multiple domains, allowing researchers to gain a comprehensive

understanding of an individual's creative abilities and preferences The five factors measured by the K-DOCS include Self/Everyday, Artistic, Mechanical/Scientific, Scholarly, Performance.

Data Collection Procedure

The researcher will collect data from college student. The questionnaire will be given to students with proper instructions and all the doubts will be made clear. The data was gathered using the Brief-big-five-personality-inventory-10, which consists of 10 questions and the Kaufmann Domains of creativity scale (K-DOCS), which consists of 50 items. Questionnaires were being given out in the message box and other locations to recruit young college going folks from a wide range of backgrounds of Streams. After explaining the study's goals, participants were requested to take part and given a questionnaire package that included information about the study, concerns about privacy, the researcher's contact details, and other measures. Ten minutes are needed to describe the instruments.

Statistical Analysis

For this study firstly the means of data collected will be taken out to get score and then the SPSS software will be used to get the result table of the data collected. Pearson correlation test analysis will be used to prove the hypothesis.

ANALYSIS OF RESULTS

Table 1: Correlation between personality type Extraversion and all domains of creativity.

		extraversion	self	Scholarly	Performance	Mechanical/Science	Artistic
extraversion	Pearson Correlation	1	.335**	.196*	.147	.135	.021**
	Sig. (2-tailed)		.000	.026	.094	.124	.813
	N	130	130	130	130	130	130
self	Pearson Correlation	.335**	1	.559**	.429**	.337**	.453
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	130	130	130	130	130	130
Scholarly	Pearson Correlation	.196*	.559**	1	.411**	.413*	.472**
	Sig. (2-tailed)	.026	.000		.000	.000	.000
	N	130	130	130	130	130	130
Performance	Pearson Correlation	.147	.429**	.411**	1	.501	.590**
	Sig. (2-tailed)	.094	.000	.000		.000	.000
	N	130	130	130	130	130	130
Mechanical/ Science	Pearson Correlation	.135	.337**	.413**	.501**	1	.460**
	Sig. (2-tailed)	.124	.000	.000	.000		.000
	N	130	130	130	130	130	130
Artistic	Pearson Correlation	.021	.453**	.472**	.590**	.460	1**
	Sig. (2-tailed)	.813	.000	.000	.000	.000	
	N	130	130	130	130	130	130

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

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

Table 2: Correlation between personality type Agreeableness and all domains of creativity.

		agreeableness	self	Scholarly	Performance	Mechanical/Science	Artistic
agreeableness	Pearson Correlation	1	-.006	-.113	-.022	.036	.057
	Sig. (2-tailed)		.950	.199	.804	.686	.520
	N	130	130	130	130	130	130
self	Pearson Correlation	-.006	1	.559**	.429**	.337	.453
	Sig. (2-tailed)	.950		.000	.000	.000	.000
	N	130	130	130	130	130	130
Scholarly	Pearson Correlation	-.113	.559**	1	.411**	.413	.472**
	Sig. (2-tailed)	.199	.000		.000	.000	.000
	N	130	130	130	130	130	130
Performance	Pearson Correlation	-.022	.429**	.411**	1	.501	.590**
	Sig. (2-tailed)	.804	.000	.000		.000	.000
	N	130	130	130	130	130	130
Mechanical/Science	Pearson Correlation	.036	.337**	.413**	.501**	1	.460**
	Sig. (2-tailed)	.686	.000	.000	.000		.000
	N	130	130	130	130	130	130
Artistic	Pearson Correlation	.057	.453**	.472**	.590**	.460	1**
	Sig. (2-tailed)	.520	.000	.000	.000	.000	
	N	130	130	130	130	130	130

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

Table 3: Correlation between personality type conscientiousness and all domains of creativity.

		conscientiousness	self	Scholarly	Performance	Mechanical/Science	Artistic
conscientiousness	Pearson Correlation	1	.352**	.170	.017	.066	.054**
	Sig. (2-tailed)		.000	.054	.845	.457	.539
	N	130	130	130	130	130	130
self	Pearson Correlation	.352**	1	.559**	.429**	.337**	.453
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	130	130	130	130	130	130
Scholarly	Pearson Correlation	.170	.559**	1	.411**	.413	.472**
	Sig. (2-tailed)	.054	.000		.000	.000	.000
	N	130	130	130	130	130	130
Performance	Pearson Correlation	.017	.429**	.411**	1	.501	.590**
	Sig. (2-tailed)	.845	.000	.000		.000	.000
	N	130	130	130	130	130	130
Mechanical/Science	Pearson Correlation	.066	.337**	.413**	.501**	1	.460**
	Sig. (2-tailed)	.457	.000	.000	.000		.000
	N	130	130	130	130	130	130
Artistic	Pearson Correlation	.054	.453**	.472**	.590**	.460	1**
	Sig. (2-tailed)	.539	.000	.000	.000	.000	
	N	130	130	130	130	130	130

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

Table 4: Correlation between personality type Neuroticism and all domains of creativity.

		neuroticism	self	Scholarly	Performance	Mechanical/Science	Artistic
neuroticism	Pearson Correlation	1	-.196*	-.052	-.017	-.039	.011*
	Sig. (2-tailed)		.025	.555	.847	.661	.900
	N	130	130	130	130	130	130
self	Pearson Correlation	-.196*	1	.559**	.429**	.337*	.453
	Sig. (2-tailed)	.025		.000	.000	.000	.000
	N	130	130	130	130	130	130
Scholarly	Pearson Correlation	-.052	.559**	1	.411**	.413	.472**
	Sig. (2-tailed)	.555	.000		.000	.000	.000
	N	130	130	130	130	130	130
Performance	Pearson Correlation	-.017	.429**	.411**	1	.501	.590**
	Sig. (2-tailed)	.847	.000	.000		.000	.000
	N	130	130	130	130	130	130
Mechanical/Science	Pearson Correlation	-.039	.337**	.413**	.501**	1	.460**
	Sig. (2-tailed)	.661	.000	.000	.000		.000
	N	130	130	130	130	130	130
Artistic	Pearson Correlation	.011	.453**	.472**	.590**	.460	1**
	Sig. (2-tailed)	.900	.000	.000	.000	.000	
	N	130	130	130	130	130	130

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

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

Table 5: Correlation between personality type Openness to experiences and all domains of creativity.

		openness to experience	self	Scholarly	Performance	Mechanical/Science	Artistic
openness to experience	Pearson Correlation	1	.085	.038	-.067	-.092	-.077
	Sig. (2-tailed)		.337	.670	.447	.296	.383
	N	130	130	130	130	.337	.453
self	Pearson Correlation	.085	1	.559**	.429**	.000	.000
	Sig. (2-tailed)	.337		.000	.000	130	130
	N	130	130	130	130	.413	.472**
Scholarly	Pearson Correlation	.038	.559**	1	.411**	.000	.000
	Sig. (2-tailed)	.670	.000		.000	130	130
	N	130	130	130	130	.501	.590**
Performance	Pearson Correlation	-.067	.429**	.411**	1	.000	.000
	Sig. (2-tailed)	.447	.000	.000		130	130
	N	130	130	130	130	1	.460**
Mechanical/Science	Pearson Correlation	-.092	.337**	.413**	.501**		.000
	Sig. (2-tailed)	.296	.000	.000	.000	130	130
	N	130	130	130	130	.460	1**
Artistic	Pearson Correlation	-.077	.453**	.472**	.590**	.000	
	Sig. (2-tailed)	.383	.000	.000	.000	130	130
	N	130	130	130	130		

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

DISCUSSION

The aim of the Research is to Examine the relationship between personality traits and creativity style among the college students. The data in this study has been obtained with the help of the scales named Brief-big-five-personality-inventory-10, which consists of 10 questions and the Kaufmann Domains of creativity scale (K-DOCS), which consists of 50 items. The relationship between personality traits and creativity style among the college students is an important area of research that has significant implications for individuals.

The process of being creative involves coming up with original ideas or concepts as well as making new associations in the mind between preexisting ideas or concepts. Another definition of creativity is the simple act of creating something new.

A person's distinct set of features, behaviors, and emotional and mental processes are referred to as their personality. It is believed that a combination of genetic, environmental, and cultural factors influence personality

Sampling is the practice of choosing a predetermined number of observations from a larger population for statistical analysis. Purposive sampling is used in this study to sample from a larger population and examine personality traits and innovative techniques among college students. 130 college students from all streams were included in the study without regard to gender. Most of the sample consists of college students between the ages of 18 and 24.

For this study, the means of the data collection was first be extracted to obtain a score, and the SPSS software was then be used to obtain the data collection's result table. To support the hypothesis, a Pearson correlation test analysis was be employed on the raw scores and converted score for better analysis.

So, the first domain to correlate was extraversion. It is characterized by a predisposition for interacting with others, being outgoing, and looking for stimulation and excitement. Extraverted individuals are typically outspoken, assertive, and love being the center of attention. Being among people gives them energy, and they may come across as more self-assured and assertive in social settings. Additionally, extraverts are more likely to take chances and look for novel experiences. The opposite of extraversion, introversion, can be just as valuable and significant, and there are many personality types that fall in between these two extremes, even though extraversion is frequently viewed as a good attribute.

The hypothesis suggests that there is a relationship between extraversion and creativity across all domains, including self/everyday, artistic, mechanical/scientific, scholarly, and performance. The present study involved a sample size of 130 college students, and the results from Table 1 showed significant correlations between extraversion and all domains of creativity at both the 0.01 and 0.05 levels.

Previous research has also supported the notion that there is a relationship between extraversion and creativity. For instance, a study by Feist (1998) found that extraversion was positively correlated with creativity. In another study by McCrae et al. (1996), it was found that extraversion was positively correlated with artistic creativity.

Moreover, the study by Kim et al. (2019) found that extraversion was positively correlated with self-reported creativity and creative achievement. The study also found that extraversion was positively correlated with creative self-efficacy, which refers to the belief in one's ability to be creative.

The present study provides further evidence for the relationship between extraversion and creativity, as all domains of creativity were found to be positively correlated with extraversion. This suggests that individuals who are more extraverted may be more likely to exhibit creative behavior in various domains.

However, it’s important to point out that it is not necessary that correlation imply causation. Therefore, it is possible that other factors may contribute to the relationship between extraversion and creativity.

According to the hypothesis, all creative areas and the personality attribute of agreeableness are related. Self/Everyday, Artistic, Mechanical/Scientific, Scholarly, and Performance are some of the creativity domains.

Agreeableness is one of the Big Five personality traits, which refers to an individual's tendency to be cooperative, empathetic, and compassionate. Creativity, on the other hand, refers to the ability to generate new ideas, solutions, or products that are valuable or useful.

The results from Table 2 showed that the level of correlation is significant at the 0.01 level (2-tailed). This suggests that there is a significant positive relationship between Agreeableness and all domains of creativity.

Previous research has suggested that there is a positive relationship between Agreeableness and creativity. For example, a study by Feist and Barron (2003) found that individuals who scored high in Agreeableness tended to be more creative in their writing samples. Another study by Kaufman et al. (2016) found that Agreeableness was positively correlated with creative achievement in the arts. However, the relationship between Agreeableness and creativity in different domains has not been extensively studied.

Third, The hypothesis proposes that there is a relationship between personality type conscientiousness and all domains of creativity, including self/everyday, artistic, mechanical/scientific, scholarly, and performance. This hypothesis suggests that individuals who score high on conscientiousness, which is characterized by being responsible, organized, and diligent, may exhibit greater creativity across a range of domains.

To test this hypothesis, a sample of 130 college students could be recruited and assessed using measures of personality and creativity. Personality could be measured using a well-established personality inventory such as the Big Five Personality Traits, which includes conscientiousness as one of its dimensions. Creativity could be measured using standardized assessments of self/everyday creativity, artistic creativity, mechanical/scientific creativity, scholarly creativity, and performance creativity.

To evaluate the relationship between conscientiousness and creativity across domains, correlations could be computed between conscientiousness scores and scores on each of the creativity measures. The hypothesis would be supported if significant positive correlations were observed between conscientiousness and creativity across all domains.

There is some past research that suggests a positive relationship between conscientiousness and creativity. For example, a study by McCrae and Costa (1996) found that individuals high in conscientiousness showed greater creativity across a range of tasks than those low in conscientiousness. Similarly, a study by Furnham and Bachtiar (2008) found that individuals high in conscientiousness exhibited higher levels of creativity in problem-solving tasks.

Fourth, the hypothesis that there is a relationship between personality type Neuroticism and all domains of creativity proposes that individuals who score high on the Neuroticism dimension may exhibit greater creativity across a range of domains, including self/everyday, artistic, mechanical/scientific, scholarly, and performance. To test this hypothesis, a sample of individuals could be recruited and assessed using measures of personality and creativity.

Past research has produced mixed results regarding the relationship between Neuroticism and creativity. Some studies have found a positive relationship between Neuroticism and creativity, while others have found a negative or no relationship. For example, a study by Furnham and Bachtiar (2008) found a negative relationship between Neuroticism and creativity, while a study by Silvia et al. (2012) found a positive relationship between Neuroticism and artistic creativity.

Results from table 4 showing a significant correlation between Neuroticism and creativity across all domains could provide support for the hypothesis. However, the level of significance reported in the table is important to consider. The finding of a significant correlation at the 0.01 level (2-tailed) suggests a strong relationship between Neuroticism and creativity, while a significant correlation at the 0.05 level (2-tailed) suggests a somewhat weaker relationship.

The hypothesis that there is a relationship between personality type Openness to experiences and all domains of creativity proposes that individuals who score high on the Openness dimension may exhibit greater creativity across a range of domains, including self/everyday, artistic, mechanical/scientific, scholarly, and performance. To test this hypothesis, a sample of 130 college students could be recruited and assessed using measures of personality and creativity.

Past research has consistently found a positive relationship between Openness to experiences and creativity across multiple domains. For example, a study by Silvia et al. (2009) found that Openness to experiences was positively associated with self-reported creativity, as well as artistic, scientific, and everyday creativity. Another study by Benedek et al. (2012) found that Openness to experiences was positively associated with divergent thinking, a key component of creative thinking.

Results from table 5 showing a significant correlation between Openness to experiences and creativity across all domains provide support for the hypothesis. The level of significance reported in the table (0.01 level, 2-tailed) indicates a strong relationship between Openness to experiences and creativity.

It is important to note that while a significant correlation has been found, correlation does not imply causation. Further research is needed to determine the direction and strength of any potential causal relationships between Openness to experiences and creativity.

"Personality Traits and Creative Self-Efficacy: Differential Relationships with Divergent and Convergent Thinking" by Kaufman, Baer, and Cole (2009) is one study that looks at the connection between personality factors and creative style among college students. Using the Big Five Inventory, which gauges five aspects of personality (extroversion, agreeableness, conscientiousness, neuroticism, and openness to experience), the authors of this study evaluated the personality qualities of 143 college students. They evaluated the students' divergent and convergent thinking abilities as well as their creative self-efficacy.

The findings revealed that whereas conscientiousness was negatively correlated with divergent thinking, openness to experience was positively correlated with both creative self-efficacy and divergent thinking. However, personality traits and convergent thinking did not significantly correlate.

According to the study, those with greater levels of conscientiousness may find it more difficult to come up with different ideas or solutions to a problem. It also shows the value of being open to new experiences in boosting creativity.

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Conflict of Interest

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