

# “Be Good, Be Creative”: the Influence of Personality Traits on Creativity

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## ABSTRACT

Personality traits play a significant role in the development of creativity. Numerous studies have found a connection between personality traits and creativity, but the majority of the time, the literature offers contradictory explanations. To evaluate the validity of earlier research, we replicated earlier results using a new sample in this study. We also research the connection between creativity and personality characteristics, a more precise option, and we explore the subject in greater detail.

**Keywords:** big five personality, personality traits, creativity.

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## 1. Introduction

Employee creativity is essential for increasing organizational productivity and efficiency as well as supporting businesses' survival and success in the face of the rapidly shifting environment of today. According to Hon and Lui (2016), creativity is the mental process of coming up with novel ideas that have the potential to be helpful. Creativity has been deemed essential for businesses to maintain long-term competitiveness (Shalley et al., 2004; Hon and Lui, 2016; Wikhamn, 2019). Creativity depends on both the individual and the context in which the employee works (e.g., job qualities, resources, goals, work environment). It is now commonly acknowledged that creativity is a crucial psychological concept that helps people succeed in a variety of fields in modern society, including the arts, sciences, business, and education. Additionally, it is essential for solving problems in daily life (Cropley, 1990), promoting social responsibility and well-being in individuals (Cameron, Crane, Ings, & Taylor, 2013; Tong, Zhu, Zhang, Livuza, & Zhou, 2019), and having definite implications for active aging (Palmiero, 2015). The association between FFM personality and creativity has been the subject of numerous studies, but more research is needed to fully understand this relationship in the workplace. Furthermore, some of the relationships fall into the category of incoherent literature. Previous research suggest that the cause may be related to the overly inclusive definition of personality traits, and they use personality aspects to partially demonstrate this (Jirásek & Sudzina, 2020). Thus, this studies must therefore delve deeply into certain personality features. Employee creativity is becoming a more important factor in organizational effectiveness, commercial success, and long-term corporate survival (Anderson, Potonik, & Zhou, 2014). Most studies looking at the relationship between FFM personality and

creativity in the workplace focused on a single trait or employed creativity tests to gauge employee creativity (e.g., Furnham, Crump, Batey & Chamorro-Premuzic, 2009), which do not accurately reflect actual problem-solving or idea implementation behavior.

According to the Investment Theory of Creativity (ITC; Sternberg & Lubart, 1991), producing relevant creative works requires a combination of cognitive (such as intelligence, knowledge, intellectual style), affective-conative (such as personality and motivation), and environmental resources. While personality addresses the degree to which cognitive resources are used to develop new ideas, cognitive resources are responsible for producing creative thoughts, explaining how creativity is materialized (Shi, Dai, & Lu, 2016).

### *1.1 The Big Five Personality Traits*

According to Ozer and Benet-Martinez (2005), the Big Five personality characteristics—neuroticism, extraversion, openness, agreeableness, and conscientiousness—have been linked to a variety of behaviors, including academic success and job performance (Costa & McCrae, 1992; Judge, Jackson, Shaw, Scott, & Rich, 2007).

## **2. Literature Review**

### *2.1 The Effect of Big Five Personality Traits to Creativity*

#### *2.1.1 Openess to Experience*

Openness to experience is one of the FFM variables that reveals intellectual curiosity, creativity, originality, and liberal attitudes (Costa & McCrae, 1992). These traits are typical of creative, autonomous thinkers who value the range and depth of experiences necessary for the creative process. According to the self-determination hypothesis, people are more likely to find autonomy satisfied when they actively seek out possibilities for new experiences, variety, and change (Deci & Ryan, 1985). The only personality attribute that has been consistently supported by all analyzed studies is openness to experience. The explanation is probably that, as is clear from its description, it immediately reflects creativity. People become intrinsically driven when their desire for autonomy is met since they are then proactive in looking for personal fulfillment in their work (Deci & Ryan, 2012). Individuals with low levels of openness to experience, on the other hand, could be resistive to change and hesitant to actively seek out new experiences at work. As a result, they can feel less autonomy require satisfaction and work due of pressures or rewards from other sources. An investigation carried out in a classroom environment has confirmed our claim. Overall, building on the above theorizing, we propose:

**Hypothesis 1.** Openness to experience is positively related to creativity.

#### *2.1.2 Conscientiousness*

People that are conscientious are typically diligent, persistent, and goal-oriented, which results in higher task performance (Barrick et al., 2002). When the circumstances permit the emergence of the trait influences, conscientiousness is thought to lead to low levels of creative behavior. Low amounts of creative behavior would arise from conscientiousness if managers kept a careful eye on employees and teammates didn't encourage it (George & Zhou, 2001). Another personality trait that has contradicting research is conscientiousness. Three earlier studies found statistically significant results, two of which (Karwowski et al. (2013), focusing on self-reported creative self-efficacy and creative personal identity; Silvia et al. (2014), focusing on real everyday creative

activities) voted for a positive relationship, while the third (Batey, Chamorro-Premuzic and Furnham (2010), focusing on self-reported ideational behavior) voted against it. However, in other research, conscientious workers are therefore likely to amass rich mastery experience and grow a strong, effective belief in their capacity for creativity as a result of their high performance. Less conscientious workers, on the other hand, can lack the confidence to participate in creative processes, which are frequently fraught with difficulties and hazards, because they do not obtain enough mastery experience from effectively completing their jobs. Overall, building on the above theorizing, we propose:

**Hypothesis 2.** Conscientiousness is not related to creativity.

### 2.1.3 Extraversion

Extraversion represents a dynamic approach to the material and social world and its components are positive and enthusiastic emotions, groupwork, activeness, decisiveness and courage, positivity and intimacy. High levels of extroversion increase a person's drive to learn and use their expertise. Their ambition causes them to concentrate on effort and mastery in reaching their goals (Zweig and Webster, 2004). These characteristics boost the likelihood of success, pleasant experience, and ultimately creativity in those who follow the tasks and insist on them with confidence in the face of unknown conditions. Overall, building on the above theorizing, we propose:

**Hypothesis 3.** Extraversion is positively related to creativity

## 3. Research Methodology

### 3.1 Sample and Procedure

Data were collected using an on-line questionnaire. The sample for this study is made up of 51 retail business workers in Banjarnegara. To collect the information needed to evaluate the suggested hypotheses, a survey questionnaire from prior studies was used. In person meetings, emails, and other forms of communication, they received a briefing about the reason behind the data collecting. They received assurances on the privacy of their comments and personal information. Since there was no right or incorrect response for any question throughout the entire questionnaire, all participants were urged to carefully read the questions and respond in accordance with their point of view.

Dependent variable:

- Creativity. We measured creativity using ten combination items from Scott & Bruce (1994), George & Zhou (2001), Ettlé & O'Keefe (1982), and Tierney et al., (1999). We have tested the validity and reliability of each question item. to view the question items, see Appendix.

Independent variable:

- Personality traits. We measured personality traits (Openness to Experience, Conscientiousness, and Extraversion) based on 44 item Big Five Inventory questionnaire. The respondents rated statement on a 1-5 Likert scale where 1 means strongly disagree and 5 means strongly agree. Individual items are listed in the Appendix.

### 3.2 Analytical Procedures

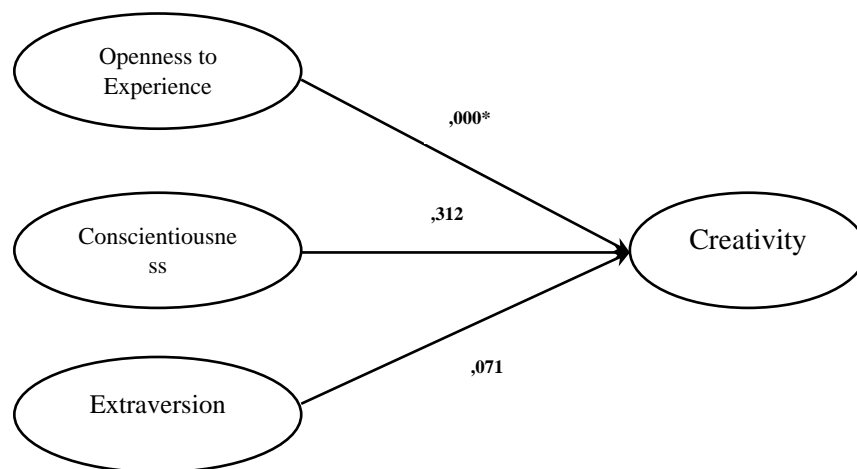
To test the proposed theoretical model for this study, we used multiple regression analysis. There are some rationales which let us choose this data analysis. First, this analysis is being frequently used and has gained extensive application in the field of management and relevant disciplines (Aghmiuni et al., 2019; Real et al., 2014; Siyal et al., 2019). Second, as the objective of this study is to analyze the outcome variables, we found multiple regression analysis as an appropriate approach to do the same (Sarstedt et al., 2014). Finally, researchers can evaluate the strength of the relationship between an outcome (the dependent variable) and a number of predictor variables as well as the significance of each predictor to the relationship using multiple regression analysis, frequently with the effect of other predictors statistically eliminated. Consequently, we used IBM SPSS for this study. Before proceeding to test the consistency, rationality and multiple regression, and numerous assumptions related to the normality as well as multicollinearity, the common method bias is essential to be analyzed.

#### 4. Results

Validity and reliability tests were performed prior to the multiple regression test. The test results demonstrate the validity and reliability of every questionnaire item. Given that the Variance Inflation Factors are 1.76 in their maximum (Openness to Experience), multicollinearity is not a problem. The test findings also demonstrate that the variable variance is normal and not heteroscedastic.

##### 4.1 Tests of hypotheses

The three personality traits that were utilized as independent variables were determined by the results of numerous regression tests. Therefore, the following outcomes are attained: First, Openness to Experience is significant (Sig = 0.000) and have a large positive effect (t stat = 4.345) to creativity, supporting H1. Second, conscientiousness does not support H2 that there is no relationship between conscientiousness and creativity (Sig = 0.312). Five, Extraversion is weakly significant (sig = 0.071) and have a small positive effect (t stat = 1.849) to creativity, providing weak support for H3. the results of the multiple regression test can be seen in Table 1.



The outcomes of the multiple regression analyses for hypothesis 1-3 are shown in Fig. 1 and Table 1. Not all of the hypothesized correlations between the three personality traits and creativity (hypotheses 1-3) were supported, as shown in Fig. 1, according to an analysis of the crucial ratios, Openness to Experience is significant and have a large positive effect to creativity (hypothesis 1), there is no relationship between conscientiousness and creativity (hypothesis 2), and extraversion is weakly significant and have a small positive effect to creativity.

Table 1. Multiple Regression Analyses Model with Personality Traits

<b>Coefficients<sup>a</sup></b>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5,828	4,244		1,373	,176
	Openness To Experience	,547	,126	,542	4,345	,000
	Conscientiousness	,132	,129	,116	1,023	,312
	Extraversion	,285	,154	,220	1,849	,071
a. Dependent Variable: Y						

When compared to other variables, openness to experience has the highest value, as shown by the standardized coefficient beta (0.542). this suggests that the biggest factor influencing creativity is openness to experiences.

## 5. Discussion

The purpose of these studies was to investigate the relationship between personality traits and creativity. We added to the overwhelming evidence that Openness to Experience is a personality trait most strongly related to creativity when comparing our results with the prior research. We also showed that Extraversion weakly increases creativity with insignificant result. Nevertheless, the lack of a relationship between conscientiousness and creativity is the most unexpected finding. In this regard, our findings contradict the findings of previous literature where they reported significant results between conscientiousness and creativity (Jirásek & Sudzina, 2020), while our sample showed insignificant relationship.

The possible explanation of the relationship between openness to experience and creativity is because openness to experience is related with divergent thinking, creative accomplishment in science and art (e.g. “I’m someone who has few artistic interests”, “I’m someone who is sophisticated in art, music, or literature”), as well as the perception of one's own creativity in various domains and an assessment of originality, which is an important factor for the description of Creative Self Efficacy (Karwowski and Lebuda, 2016).

Additionally, George and Zhou (2001) did not discover a relationship between employee creativity and conscientiousness (as rated by supervisors). However, they discovered that the association was influenced by the level and type of environment. Employees with high conscientiousness had lower levels of creativity if they were carefully watched and also worked in an atmosphere where their peers (a) weren't helpful, (b) gave them false information, or (c) made the workplace

environment generally unpleasant. Conscientiousness has been found to be an inconsistent predictor of creativity, displaying positive, negative, and zero relationships, according to a careful analysis of earlier studies. However, different outcomes are likely to show up if only a portion of the Conscientiousness construct was used (Palmon et al., 2009).

### *5.1 Limitation & Future Research*

This study's primary limitation is that all assessments were self-report, which could lead to frequent method bias. It may be better if the literature on personality traits and creativity is supplemented by research that uses external measures (e.g. supervisors). The second limitation is the character of the study used. Despite using a sizable sample, the correlational study failed to control for a number of potential mediators and moderators of the examined associations. Future research should determine if there are any factors that can moderate or mediate the association between personality traits and creativity. It would also be better if further research examines all aspects of personality traits.

## **6. Conclusion**

We agree with the conclusion of Jirásek & Sudzina (2020) that the relationship between personality traits and creativity is complex. From the results of the research we have done, this further enriches the existing literature on personality traits and creativity. From the many inconsistent results regarding conscientiousness and extraversion, our results further strengthen the argument that there is no significant relationship between conscientiousness and extraversion on creativity. Likewise with openness to experience, our findings reinforce previous findings where openness to experience is the aspect of personality traits that most strongly influences creativity.

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## Appendix

### A. Questionnaire Items

<b>Personality Traits</b>		
Variables	No	Item
Openness To Experience	1	I am someone who is original, comes up with new ideas
	2	I am someone who is curious about many different things
	3	I am someone who is ingenious, a deep thinker
	4	I am someone who has an active imagination
	5	I am someone who is inventive
	6	I am someone who values artistic, aesthetic experiences
	7	I am someone who prefers work that is routine
	8	I am someone who likes to reflect, play with ideas
	9	I am someone who has few artistic interest
	10	I am someone who is sophisticated in art, music, or literature
Conscientiousness	1	I am someone who does a thorough job
	2	I am someone who can be somewhat careless
	3	I am someone who is reliable worker
	4	I am someone who tends to be organized
	5	I am someone who tends to be lazy
	6	I am someone who does things efficiently
	7	I am someone who makes a plans and follows through with them
	8	I am someone who is easily distracted
Extraversion	1	I am someone who is talkative
	2	I am someone who is full of energy
	3	I am someone who generates a lot of enthusiasms
	4	I am someone who has an assertive personality
	5	I am someone who is sometimes shy, inhibited



	6	I am someone who is outgoing
	7	I am someone who is able to communicate honestly
	8	I am someone who is sociable
<b>Creativity</b>		
	1	I become as creative as possible in doing work
	2	I use existing information or materials to develop ideas that are useful for the company
	3	I suggest a new way to improve the quality of work within the company
	4	I show creativity to the company when given the opportunity
	5	I suggest new ways to do tasks at work
	6	I am not afraid to take risks
	7	I have new innovative ideas
	8	I identify opportunities for new processes/products
	9	I often have a new approach to problems that occur at work
	10	I often develop ideas that are useful for the company