

Relationship Between Creativity and Personality

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Abstract--*The study involves studying the relationship that exists between creativity and introverts. These elements both address human attributes and uniqueness. The study intends to add to the existing information regarding the subject hence come up with a standard way and criterion of measuring creativity. The objectives to be addressed by the study will include; evaluating whether there is a positive correlation between introvert attributes and creativity, describing the specific factors that influence a human being's personality, breaking down the aspects that define introverts and their contribution to factors that determine creativity and determining individual factors that dictate the creative nature of an introvert. The study will take into consideration, the main emphasis of the study that shall be aligned along two distinct variables which include both creativity and introversion. Notably, the basis of evaluation shall be aligned with the various results that emerge from the individual test that is conducted to evaluate either variable.*

Keywords--*Creativity; Personality; Introverts*

I. INTRODUCTION

The personality of an individual is usually shaped overtly and covertly by different factors the major ones being the hereditary, biological factors, socio-cultural and the psychological aspects that are found in our localities. Some of the attributes of personality are adjustability, consciousness, unity, integrity, uniqueness, self-concept, flexibility, persistence, social ability consistence [1].

There is a relationship that exists between creativity and the personality psychology. This is because, in both scenarios, the uniqueness of an individual is described and both of the study fields or disciplines focus on the stability and consistency. The creativity of an individual involves the uniqueness of the person from others. This involves the ideas and the behaviors. From the various problems that usually get associated with measuring of creativity, there is the probability of more speculation than the actual information regarding personality construct in its correlation to creativity. The measurement of this relationship has been determined using the methods such as the biographical reports or the autobiographical methods [2]. These include the use of the sense of humor, risk-taking, creative activities and hobbies. The psychometric methods which can be used in assessing the relationship between introverts and creativity are usually comprehensive and complex.

Some of the past studies have indicated that the creativity level of an individual is dependent on the time an individual can spend alone and feel comfortable. This means that introverts could play a critical role in becoming

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creative. Additionally, one of the ways of becoming creative process is by embracing the unconscious processing [3, 4].

Additionally, procrastination could facilitate the development of new ideas. This can be achieved through incubation of the old ideas that are collected from different points and then stored. After incubation, they can then be combined to develop new and creative ideas.

In some cases, brainstorming and coming up with ideas as a group is difficult for introverts. They may prefer being left on their own to think and come up with creative ideas critically. This informs the need for assessing the relationship between creativity and introverts.

The psychometric methods have formed the basis for studying creativity [5]. From the past research, it has been noted that there is diversity in human attributes with the relationship between the individual features in many cases materializing into the influence of an individual's perception regarding an event or phenomena. This study intends to develop research tool (the creativity questionnaire) as the major criterion for determining an individual's creativity. This aspect is informed by the comprehensive literature review.

For the correlation to be achieved between the individual attributes, the study will be tailored towards enhancing the development of a conclusive approach that looks into attaining the correlation that exists between creativity and introversion. The research is motivated by the lack of adequate information in this field hence the need to come up with a valid and reliable tool for the measurement of creativity in this field. The research aims at demystifying the current problems regarding an individual's personality and strength. It will facilitate the creation of awareness regarding the existing misconception towards the attributes of introverts on creativity.

II. METHODOLOGY

This section seeks to explore the various methods, tools and procedure that the research will involve in obtaining secondary data to address the objectives of the project. With the subject matter at hand, the research will explore secondary data where the published articles will be analyzed to help in answering of the research questions and addressing the objectives. Similarly, it explains the origin of such data, how it will be recorded, managed and finally its analysis. In the study, secondary data will be used.

Design

Taking into consideration the nature of the study, the importance of time and an individualized approach is very critical in developing the necessary conclusions[6]. Considering the influence of the future in the development of the anticipated results, the research shall be tailored to a time-based approach. The study will consider the secondary data through proper and critical analysis of literature between 1993 and 2018 regarding the subject matter.

Data collection

The basis of evaluation in this shall be aligned with the various results that emerge from the individual test that is conducted to evaluate either variable. Considering the influence of introversion on creativity the research shall be tailored along creativity which encompasses the dependent variable and introversion which is the

independent variable. In the data collection process, four search engines will be used including Science Direct, Yahoo, ISI Web of Science and the Google Scholar. Additionally, the manual searches will similarly be done for other information regarding the subject matter. Lastly, consultations will also be conducted with specialists in the field of psychology to help add some of the insights that may be left out in the articles reviewed. In the study, the search terms used to obtain the literature were, “The relationship” together with, “creativity” and “introverts” and psychometric study.

III. RESULT AND DISCUSSION

According to a study by Naude [7] on the relationship between personality and creativity, a psychometric study, different methods used and the results found contribute to the current study in one way or another. The objectives addressed in the study included the development of a creativity questionnaire basing on the main criteria for the creativity as influenced using a proper survey of the literature. Additionally, it aimed at administering the questionnaire together with the ATTA (Abbreviated Torrance Test for the Adults), and the (16PF). This would help in determining whether a typical 16PF profile can be found for the identification of creative individuals.

In the research by Naude [7], the sampling was done among the fourth year students taking Psychology at the University of Pretoria. These constituted the respondents in the study. The existing gaps that called for the study included the inadequate information and research in the area hence the vital need for the development of a valid and reliable instrument for the measurement of creativity. Due to the lack of knowledge, the creative people in the society have sometimes been misunderstood or misinterpreted. The study sought to provide the knowledge gap that exists with regards to the relationship found between creativity and personality. The methods of data collection included the random sampling of the psychology students who were interviewed using both closed and open-ended questionnaires. Different sets of the questionnaires were administered, and different respondents gave their views and opinion regarding the subject in question. The data was then analyzed, and the results presented.

From the same study by Naude [7] it was confirmed in line with the previous research that there is some relationship between creativity and the personality trait. The creative subjects in the study indicated that they perceive themselves to be highly independent in their thoughts and perceptions. They also added that they are competent, individualistic, are more open to the life experiences and are more dominant when compared to the less creative subjects. Similarly, both the subjects with high creativity and the average ones responded that they usually tend to be more socially bold, uninhibited, spontaneous and more venturesome than the other subjects that low creativity levels. Some less creative and others with average creativity tend to be shyer, timid, restrained and are similarly more sensitive to threats. The low creative ones also indicated being warmed hearted, outgoing, participative, and easygoing than the others with average creativity. The average candidates with regards to creativity are usually more critical. Additionally, the results showed the candidates with low creativity similarly seems to be group-dependent, sound followers and are joiners. They are also characterized by less intelligence and more concrete thinking than the students who have the high creativity or average creativity levels.

In a study by Ryhammar [8], the multifaceted nature of creativity has also been indicated. It was realized that creativity comes about due to the many interactions that exist among the multiplicity of the significant dimensions of the subject. The study contributed to the enhancement and the expansion of knowledge in the domain of the different research and triggers more research with the aim of clarifying the various characteristics and nature of creativity.

The study by Jauk et al. [9] contributes to the current study since it aimed to find out the relationship that exists between personality trait and creativity. Since introversion, as studied in the current research, is an aspect of personality trait, the two studies complement one another. The gap in the initial study is that there few constructs used in the questionnaires hence creating room for more research where questionnaires with more construct can be highlighted. From the findings, the study builds on the current study and strengthens the hypothesis that there is a significant connection between introversion and creativity.

In another study by Ciorbea and Pasarica [10], the research aimed at studying the relationship that exists between academic performance and personality. With the consideration of the academic performance as an intellectual competence indicator, there has been the need to identify the connection that exists between the intellectual competence beyond the psychometric approaches of the intelligence and personality. The study aimed at achieving this goal by assuming that the academic performance relates to the neuroticism, psychoticism, and extraversion negatively. On the other hand, the assumption was that there is a positive relation between academic performance and the organization levels during the different activities. Additionally, the study aimed at considering the significant variation that exists between the groups with lower academic performance and those with higher academic regarding the different self-esteem.

In a study by Smith and Tegano [11], the evaluation involved the use of EPQ to facilitate the measurement of Extraversion, Neuroticism, and Psychoticism. Additionally, the Rosenberg's self-esteem scale and MBTI for the organization levels during the activities were similarly used. The evaluation of the academic performance was done by the final grade of the project and the overall grade obtained in the previous academic year. In the study, the researchers similarly used structured questionnaire where 80 respondents were interviewed between the age of 22 and 28 and who were recent graduates from the university. In the findings, the study by Smith and Tegano[11] indicated that there exists a statistically significant variation between with low academic performance and those with high academic performance regarding the self-esteem. It was realized that the self-esteem assists the students in achieving good results academically while low self-esteem, on the other hand, deters the students from achieving good results. Students that possess high self-esteem do not usually have the inferiority feeling when in the presence of others. They make good communication and boundaries with the other people and easily accept corrections, learn new things and are usually aware that they are at moments not knowing certain concepts. They can capitalize on their strengths while they also improve on their weaknesses.

Additionally, they can assist others without necessarily being arrogant or cynical. From the study by Garfield et al. [12] the objective of determining the relationship between academic performance and personality was achieved. The findings indeed indicated that there exist a connection and a relationship between the academic

performance and the personality of the individuals. The accurate identification of the individual variations with regards to personality among the students in academic performance can influence the education sector of different places. Understanding the personality differences can help assist the different students to improve by trying to modify their esteem and behavior hence putting them in the line of achieving high academic results. It also helps the teachers in instilling knowledge in the students and advising them accordingly hence improvement in their academic performance. In many cases, the creative students or people are bright and intelligent. This study can be used to justify that there is a connection between introversion and the creativity. The gap in the study is that it checks on the personality in general without narrowing down to the assessment of either introversion or extroversion as significant aspects of personality trait.

In a study by Furnham and Zhang [13], the research was conducted on the relationship between psychometric and self-estimated intelligence, creativity, academic achievement, and personality. The study aimed at exploring the nature of the relationships that exist between the big five of personality under the measurement of creativity (Baron Welsh Test), self-estimated and psychometric intelligence (Ravens, Wonderlic, and Baddeley Tests).

From the past studies that similarly relates to the findings of this study, it was realized that extroversion (the self-confidence) had a positive correlation to the higher rates of SEI with regards to creativity, intelligence and personality. Lubert and Sternberg [14], believes that one of the fundamental factors that are key to creativity is novelty. This involves the originality and newness of a substance or a concept. Another factor is the appropriateness. Others also believe that creativity is gauged concerning the specific mechanism or process. Many of the researchers have defined creativity as the change in thinking from associate thinking to the cause and effect thinking.

In a study by Eysenck [15], the research involved the gathering and reviewing of the secondary data on the subjects of the study. Additionally, the study used the past literature in coming with the model that could best explain the relationship that exists between the variables of the study. From the study, it was established that there are five steps or significant positions in the connections between intelligence and creativity. The first aspect is that creativity is a subset of intelligence. In the second concept, it is explained that intelligence is a subset of creativity. The third one explains that intelligence and creativity is one thing and the fourth one is that the two are very different and unrelated subjects. The last position which is also the most popular one is that the two are overlapping sets.

Real life creativity has been believed to be determined by the parts of an individuals' general intelligence. This, in particular, includes the fluid's intelligence of an individual or otherwise the natural ability and the personality factor. In research by Feist [16] has realized that certain aspects of the personality traits are linked to the performance of the creativity. The creative people are usually introverted or autonomous self-confident, driven, ambitious, impulsive and dominant. Other aspects related to introversion also indicated closemindedness, conventionality, and conscientiousness. Eysenck [17] similarly illustrates that there is no significant relationship that exists between Neuroticism and creativity. However, there is such correlation between neuroticism and psychoticism. The results showed that there is a significant correlation fluid and predicted intelligence with

openness as well as psychometric creativity. The conscientiousness and openness to experience were found to be predictors to the psychometric creativity. This study highlights the relationship that exists between the different aspects of personality and creativity. The gap identified in the research is that it only used the IQ test in determining the creativity in the different scenarios or the assessment of the various personality parameters.

To understand the concept of introversion as an aspect of personality, the different concepts highlighted in this article including intelligence, and academic performance must be well understood since they contribute to the overall measurement of creativity. This study further identifies the other factors that affect personality and creativity in one way or another. Some of the identified factors include academic performance intelligence and the personality. From the analysis, it is evident that there exists a relationship between introversion as a personality trait and creativity. This is evident about extraversion whereby aspects such as dominance, self-confidence, self-direction, and independence contribute to academic performance that can also be used to evaluate creativity.

IV. OVERALL DISCUSSION

Based on the literature reviews, it is evident that there exists some connection between personality and creativity. In particular, introversion affects the personality in one way or another. Feldhusen[18] found out that a personality factor including self-confidence entails a condition in which creative aspects and behavior can most be nurtured, and creative activities are carried out. Additionally, this condition may serve as a stimulator or a facilitator of the cognitive, creative process. The positive self-concept of the creative individuals is accompanied by the social competence. These conclusions conflict the other findings that the creative individuals suffer from emotional or social deficiency.

According to Smith and Tegano[11], creative people have the perception that they are likable and in many cases usually enjoy the company of others. This similarly contrasts the characteristics of introverts who in many cases keep their issues and thoughts to themselves. Other attributes of the creative people as identified by literature include positive self-concept and the motivational dimension of risk taking. These two are similar for the individuals who are characterized by introversion.

Innovative individuals have greater levels of risk-taking and are similarly self-confident. This explains the reason as to why they can come up with great ideas and products. They have been described to be highly versatile, curious and have broad interests although some of the less creative individuals also exhibit these characteristics. According to Eysenck [17], most of the conservatives and submissive people are said to be less creative. From the literature, despite the fact that some of the introverts are conservatives, they could have the ability to come up with great ideas which could similarly be used in production.

From literature analysis, when comparing the less creative and the creative individuals in respect to self-sufficiency versus group independence, the creative people tend to be more self-sufficient and resourceful. They like making their personal decisions. On the other hand, people who are less creative are usually group-dependent, sound followers and are joiners of developments established by others. However, other research similarly shows that the introverts could similarly be resourceful, self-sufficient and would prefer to make their own decisions. This may also

help them in enhancing their ability to come up with great ideas hence be creative [16]. The studies show that they tend to be more autonomous with great levels of aspiration. They are also not usually easily satisfied by mere explanations hence making them prone to constructive criticism.

A study by Eysenck [15] also supports the findings that the intuitive individuals usually consider themselves to be independent. These are attributes that may be found in the introverts who may prefer to work on their own. They are in many cases independent of their judgments. Since these are traits that are majorly exhibited by the introverts and they also characterize the creative individuals, it can be noted that there exists a connection between personality, specifically introversion and creativity. Houtz et al. [19] explains that accepting the initiatives and responsibilities is an attribute in the creative people. Across the literature, it is also evident that these characteristics are closely related and are conducive to enable the individuals to make rational and own decisions.

From the literature, it has been identified that the creative people are more self-sufficient and intelligent than the less creative people. This confirms the traits of the introverts who may detach themselves from crowds and groups. Despite their operations as individuals, they may be more self-reliant hence would still come up with products that qualify them to be creative. Other findings show that the creative individuals who similarly exhibit other characteristics such as the strong internal control have high self-esteem. They also seem relaxed as they carry out their activities and have less tension hence their ability to come up with good results. The research also indicated that the females look more relaxed as they undertake their activities hence they can deliver good results.

In comparison between profession and introversion, literature has indicated that people in courses or professions like architecture and engineering tend to be introverts since they want time and quite an environment to help them in the accomplishment of their tasks. Their environments also do not accommodate many people or publicity hence they majorly seek quiet places and, in many cases, would want to be alone. Regarding the nature of their activities, the male people usually dominate these fields [20,21,22].

Creativity to some extent generally implies a great focus on the imagination. It involves viewing issues and considering them from a varied point of view and necessarily not the arbitrary way of carrying out the activities. The creative people have been identified to be more analytical, liberal and critical. In many cases, these individuals tend to get into trouble or usually conflict with the authority and then use their critical analysis and intellect to bring understanding or explain their decisions. This is usually experienced among the introverts who in many cases do not use words to express themselves or their actions, but rather use scientific concepts or experimental illustrations to justify their stands. Whenever there is a misunderstanding due to the concepts, they use their intellects to explain the reasons behind their decisions. This is usually referred to as an intellectualized form of aggression.

In justifying the connection between extraversion and less creativity, studies have also indicated that many of the extroverts are group dependent and are outgoing and venturesome. They feel the need to be associated with a given group or some locality. They are followers and feel the need to contribute to and rally behind people's opinion or way of life.

V. CONCLUSION

When comparing the current study focus with the previous research through literature review, it is evident that most of our findings regarding the relationship between personality and introversion are supported by the literature. The current research confirms the findings of the previous studies that there exists a connection between personality traits and creativity. The creative subjects have been found to possess most of the traits of introverts including being competent, individualistic, open and vast inexperience, independent in thought and are dominant than the less creative subjects. Similarly, the research has found that the individuals with high and average levels of creativity perceive themselves to be self-sufficient, resourceful and usually prefer making their own decisions. Despite the assessment of creativity in different dimensions among the variables of study, it has been realized that there exists a relationship between creativity and other aspects such as environment, profession among other areas. It is realized that creativity comes about as a result of interactions among the various significant dimensions of creativity. The study has vastly contributed to addition and expansion of knowledge especially in the field of creativity and personality research, with the focus on the connectivity between introversion and creativity. The current study recommends and triggers further study on the different multifaceted nature of creativity concerning the various aspects of study in question. The different variables that need to be considered for an individual to be considered creative can be assessed.

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