

A Grand Theory of STIFIn Personality: Basic Functions Theory Revisited

Farid Poniman* and Niqya Amalia

Abstract--- *The aim of this paper is to propose a new theory of personality that can lead to a holistic description of the mechanism of thinking and decision making of an individual. The central discussion of this proposal is to provide descriptive answers to various basic questions. The concept of this theory does not use the traits or behavioral approach, but it uses a perspective from genetics, neuroscience, biopsychology, and basic function theory. The recent studies on personality are still focused on the determination of personality traits and the application of the roles played by each personality, whereas the most important role of these recent studies is that they should be able to provide a grand theory. In this paper, the main discussion will be focused on providing concepts and changing several definitions that can directly explain phenomena that are in accordance with natural conditions.*

Keywords--- *Personality, Genetics, Neuroscience, Biopsychology, Grand Theory.*

I. INTRODUCTION

There are different paradigms about personality types and this must indeed exist because there are very complex phenomena in all areas of life. Research in personality takes a short cut by taking general theories without linking them to the development of other theories. The basic problems of personality psychology are about the many interesting questions in the latest personality studies, but in fact, there are no researchers who have tried to develop a grand theory of personality¹. Personality psychology theories do not have a generally accepted framework, and some theories only apply to certain domains¹.

Today, explanation in understanding humans with a genetic approach is far better for personality psychology², and this is in line with the development of neuroscience and biopsychology. And, this also answers Eysenck's question³, because at that time the development of neuroscience findings was still not perfect for explaining the biological and psychological linkages of humans.

Biopsychology is the scientific study of biological behavior^{4,5}. This study studies how the brain and nervous system produce behavior and vice versa how behavior modulates brain and body functions⁵. Some people refer to this discipline as psychobiology, behavioral biology, or neuroscientific behavior, but researchers prefer to use the term biopsychology because it shows a biological approach to the study of psychology rather than vice versa⁶. The study of biological behavior has a long history and began to develop rapidly when the discipline of neuroscience developed in the 20th century⁶. The birth of biopsychology does not have a definite date, but the publication of organizational behavior in 1949 by D.O. Hebb plays a key role in this biopsychological theory^{2,7}. In his book, Hebb developed the first comprehensive theory of how complex psychological phenomena, such as perceptions, thoughts, emotions, and memories, might be produced by brain activity⁶.

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II. CONSIDERATION OF METHODS

This paper uses a multi-disciplinary conceptual approach. Based on an integrative analysis of literature from early and current work in personality psychology, modern natural science can teach us about the need for abstract grand theory and strive to be generalizable valid⁸. The grand theory seeks to articulate propositions - basically, statements of cause and effect relationships - which broadly apply to all cases and contexts in some of the phenomena of interest discussed in the field of study⁹. For theories to be applied to all cases and contexts, the concepts used to construct theories must be articulated at a high level of abstraction⁹.

The Role of Neuroscience and Biopsychology in Personality Studies

A technology called electroencephalography (EEG) can infer regional activity in the neocortex, which is the outermost layer of the brain¹⁰. Neocortex handles many human activities that people usually do such as reasoning, language, perception, and decision making¹⁰. Every region of the brain handles the same thing for each individual¹⁰. However, each individual is different depending on how much they use it¹⁰. How focused is one using the region of the brain while ignoring others¹⁰? Working patterns of one's brain help to define someone as a unique individual¹⁰. We can use the neuroscience of personality to understand ourselves and others to enjoy more meaning and efficiency in our lives¹⁰.

Meanwhile, in the development of biopsychological science, it is stated that to understand how the brain can influence behavior, it is necessary to have a clear picture of anatomy, including the location of its main region and the way body structures are connected¹¹. Both the endocrine system and nervous system provide important means for communication in the body¹¹. The nervous system allows very fast responses that require immediate action, while the endocrine system responds more slowly and may take several minutes or even hours to reach a target, and usually has a longer duration of action¹¹. Nevertheless, both systems work towards integrated functions in many types of individual behavior¹¹. Based on the explanation above, it means the nervous system produces behavior and vice versa.

III. STIFIN PERSONALITY

The STIFIn theory of personality relies scientifically on an analytical psychological approach¹², compiled with the Whole Brain theory¹³, and the Triune Brain theory¹⁴. The basic functions of the human personality are divided into four types, namely the mind function (abbreviated T), the feeling function (abbreviated F), intuition function (abbreviated I), and the sensing function (abbreviated S)¹². This basic function is called the four types of intelligence in the brain quadrant theory¹³. The four basic functions if related to the theory of the brain quadrant, the four basic functions are eternally originating from the hemisphere of the brain that is most often used. The left brain quadrant (left neocortex) is both an intelligence and a personality character of thinking (T)¹⁵. The right brain quadrant (right neocortex) is both intelligence and intuiting personality character (I)¹⁵. The left lower brain (left limbic) quadrant is both an intelligence and a sensing personality character (S)¹⁵. The right lower limb (right limbic) quadrant is both intelligence and personality feeling (F)¹⁵. This means that the basic functions¹² have in common with the intelligence quadrant¹³. The strengths of each intelligence are following their names; S has sharp senses, T is strong in thinking, I is very creative, F is good at protecting the feelings of others¹⁵.

There is one type of individual who does not fall into the category of the four basic functions or quadrants of intelligence, and this type is dominant using other brain hemispheres, namely insting that are in the middle or bottom (midbrain) which connect directly to the spine¹⁵. The other four intelligence as centers of cognition requires a more systematic thought process and are processed first in the brain with a longer process, whereas insting (In) intelligence responds more spontaneously referring to the accumulation of long life experiences¹⁵.

Based on the Triune Brain theory¹⁴, the tasks of the midbrain (reptilian brain) are as follows; cerebellum, its main task is to maintain balance and coordination of body movements, initiate initial body movements such as walking, dancing, but is unable to handle complex movements well, and it is involved in learning the skills of movement. Medulla helps control bodily functions such as breathing, digestion, and heartbeat. Midbrain helps most sensory-motor functions. Pons, deliver and receive information about movements. Brain Stem connects the nervous system with the body, so the two can communicate quickly¹⁵.

That has been described above shows as a physiological function of the reptilian brain. Thus it can be said to be significant to be a type of intelligence itself, as the fifth type of intelligence, which is located in the middle of the lower part of the head¹⁵. Thus the personality character is ultimately determined by one hemisphere of the brain or one type of intelligence that dominates among the five other brain hemispheres. That one is referred to as a type of intelligence or also called a personality character. The intelligence type is defined as the type of intelligence as well as a person's personality based on the function of the brain's most dominant hemisphere. Sensing is a type of intelligence that relies on the senses. Thinking is a type of intelligence that relies on logical thinking. Intuiting is a type of intelligence that relies on its sixth sense in making decisions which means it is always projected forward. Feeling is a type of intelligence that always refers to feelings. And, insting is a type of intelligence that always refers to the seventh sense in making decisions, which means spontaneous and willing to sacrifice.

Table 1 shows the conclusions from studies of previous theories, namely the theory of basic functions¹², the theory of the quadrant of the brain (The Whole-Brain)¹³, and the theory of brain strata (triune brain)¹⁴, which then gave birth to a new theory of personality character or intelligence, namely the STIFIn theory of personality.

Table 1: Conclusion of Personality Character

Basic Functions (Carl G. Jung)	Type of Intelligence (Ned Hermann)	Triune Brain (Paul Maclean)	Intelligence /Character of Personality (STIFIn)
Sensing	Left Limbic	Mammal Brain	Sensing
Thinking	Left Neocortex	Human Brain	Thinking
Intuiting	Right Neocortex	Human Brain	Intuiting
Feeling	Right Limbic	Mammal Brain	Feeling
		Reptile Brain	Insting

The characteristics of the brain have an impact on ways of thinking and ways of learning¹². A part of the dominant brain determines preferences for ways of thinking and learning. What is the cause of one of the dominant functions, has not yet been conveyed by Jung in his theory. But in line with the theory of neuroscience¹³ that among the ABCD brain quadrants, there is one dominant intelligence, which is associated with one of the dominant brain hemispheres. Based on that, STIFIn theory lays the foundation of understanding that there are five hemispheres of the brain with a package of brain functions, each of which will affect human behavior according to the brain functions that most influence it and all are equal, none are superior.

The concept of introvert and extrovert is orientation and not a basic function in itself¹². It is in this section that the MBTI concept is trapped, because the 16 indexes made by MBTI¹⁶, it places introverts and extroverts parallel to other basic functions¹⁵. Likewise, with the basic concept of the Big Five, it has placed equality of traits or the nature of Openness (meaning introverted or extroverted) with all four traits (other traits)¹⁵. Introverts and extroverts are not separate types of intelligence but are likened to steering, while the type of vehicle is an intelligence type¹⁵. When the wheel brings the intelligence type inside, it becomes an introvert¹⁵. When the wheel takes the intelligence type outside, it becomes an extrovert¹⁵. When viewed genetically, the introvert-extrovert orientation is derived from the workings of the white layer and gray layer in the brain¹⁷. If the white layer is more active, then the introvert, if the gray layer is more active, then the extrovert¹⁷. Both of these layers are found in the limbic brain and neocortex¹⁷.

The white layer has a higher cell density because it contains more brain cells so that stimuli or biorhythmic sources in the brain occur more dynamically¹⁷. Therefore people whose white layers are more active, have steering from the inside out so that the energy comes from inside¹⁷. He was stimulated from inside his brain out, or it could be called, he stimulated his surroundings¹⁷. Meanwhile, the gray layer has a more tenuous cell density because it contains fewer brain cells so that stimuli or biorhythmic sources in the brain occur more static¹⁷. Therefore people who are more active in the gray layer have a steering wheel from the outside in because their less dynamic biorhythmic sources tend to wait or respond to stimuli from the outside so that the energy comes from outside themselves¹⁷. He was stimulated from the outside, or it could be called he received stimuli from the surroundings¹⁷.

In the type of Insting intelligence (In) it does not have a rudder. Biologically in midbrain and hindbrain have cell homogeneity between the outside and the inside¹⁵. Inside and outside functions are no different. The lower cerebral and midbrain hemispheres maintain the balance of the body¹⁵. Thus there are nine types of personalities that come from the four intelligence types after being attached by the steering wheel plus an insting intelligence type. The nine personality types are Sensing introvert (Si), Sensing extrovert (Se), Thinking introvert (Ti), Thinking extrovert (Te), Intuiting introvert (Ii), Intuiting extrovert (Ie), Feeling introvert (Fi), Feeling extrovert (Fe), and Insting (In)¹⁵. After the rudder has a role in each type of intelligence, the intelligence type becomes the best in its field or deserves to be called the productivity brand of each personality. Genetic personality is defined as a personality type that is influenced by intelligence drives or stimulated by the layers of the brain.

Why are the Intelligence Types and the Personality Types Genetic?

Humans are formed by about 20% of genetic factors in themselves, and 80% of environmental factors that influence it¹⁷. Discussing genetic matters means discussing something that is fixed, unchanging, stable, repeating to the same pattern, and "inviting" humans, consciously or not, to return to their basic patterns or characteristics, throughout their lives from birth to death later¹⁷. Genetics cannot change because it comes from DNA¹⁵.

There are four nucleobases in DNA, namely Adenine, Guanine, Thymine, and Cytosine. Whereas in RNA there is Uracil nucleobase¹⁷. In STIFIn theory, based on the study of human genome¹⁸, Sensing has predominant DNA Adenine code, Thinking predominant Guanine code, Intuiting predominant Thymine code, Feeling predominant Cytosine code, and Insting has excess RNA composition in Uracil¹⁷. In this case, the position of the intelligence type and the genetic personality is the same as the sex which from birth to death will be impossible to change¹⁷.

There are genetic hereditaries, including brain capacity and blood type¹⁷. Brain capacity is related to one's IQ, meaning that one's IQ is not much different from the IQ or brain capacity of parents, grandparents, and so on. While gender, intelligence type, and genetic personality are nonhereditary genetic¹⁶. No one knows whether our child will be born male or female, what are the intelligence type and the genetic personality¹⁷. There is no pattern because all three are not revealed¹⁷. There is no formula, and there is no Mendel law¹⁹.

Nature, Character, Personality, and Behavior

Many are still not able to distinguish between nature, character, personality, and behavior. When viewed from the lowest strata, the strata are as follows:

1. Behavior: human behavior which has not yet become traits.
2. Personality: human tendencies that have become traits.
3. Character: the traits that occur repeatedly because it has become a habit or has become myelin.
4. Nature: that is traits that are inherent in a person and deep to the genetic level, but this character may be the result of massive embellishment that exceeds myelin because there are additional values such as strong alignment fanaticism or synergy of sincerity and habit.

Beyond these four things, there is a genetic personality, which is the personality that comes from genetic factors¹⁷. Without being shaped by the environment, accustomed to being repeated and trained, this personality has existed since birth¹⁷. Only indeed to make it truly visible, optimal, and increasingly sharp-looking, there needs to be a focused training exercise.

IV. CONCLUSION

Personality researchers, however, find it difficult to predict personality precisely when still using the trait and behavior approach. This is evidenced by the results of empirical studies that still do not show the influence of human personality in any way. In sum, this paper offers a grand theory of personality while at the same time revising the theory of basic functions¹² that has lasted for quite some time. The development of neuroscience and biopsychology studies can help answer a person's reasons for thinking, acting, and preferences. For this reason, this theory needs to be carried out in a continuous scientific study, and can further develop mid-range theory and applied theory in the future.

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