THE CROSS REFERENCE BETWEEN PERSONAL TRAITS AND HUMAN INTELLIGENCES LEADING THE NEW VIEWPOINT IN EDUCATIONAL MANAGEMENT

Loc Nguyen,

University of Science,
Ho Chi Minh city, Vietnam

ABSTRACT

The responsibility of education manager is to develop human intelligences via discovering personal traits. This research gives the brief survey of personal traits and human intelligences and also makes the cross reference between personal traits and human intelligences. Basing on this cross reference, I propose the viewpoint in educational management together with the method to develop students' intelligences. According to the viewpoint, personal traits are neutral and so we should not enhance or restrict any personal trait. What we should focus on is how to develop students' intelligences so as to provide them the best education tuned with their intelligences.

Keywords: personal traits, human intelligences, cross reference, educational management

INTRODUCTION:

Personal trait theory in psychology is responsible for discovering and describing mental and emotional patterns frequently occurring in human activities and behaviors (Wikipedia, Trait theory, 2016). According to Gordon Willard Allport (Allport, 1937), these patterns are called personal traits that are relatively stable in human life and used to characterize a person. Gordon Willard Allport referred traits as dispositions that shape a person's behavior (McLeod, 2014). Personal traits are classified into independent dimensions or factors that mutually orthogonal though such factors are slightly correlative in some cases. There are two common personal trait systems such as 3-factor system and 5-factor system. According to Eysenck's personality theory, three major factors are introversion/extroversion, neuroticism/stability, and psychoticism/socialization (McLeod, 2014) and (Miles & Hempel, 2004). The 3-factor system states that three major factors are sufficient for describing a person but the 5-factor system adds 2 more factors into personal trait theory so as to give us a comprehensive description about personal traits (Wikipedia, Trait theory, 2016). This paper focuses on 5-factor system and uses it as a research object and thus, the well-known 5-factor system is Big Five personal traits (Goldberg, 1990). The author Lewis R. Goldberg is one of pioneers of Big Five model. Imagine that human behavior and emotion are modeled as multi-dimension mental space with 5 dimensions or factors such as openness, conscientiousness, extraversion, agreeableness, and neuroticism. Shortly, by referring to (Wikipedia, Big Five personality traits, 2016), following are description of these factors with regard that terms "factor" and "dimension" have the same meaning in this research and each dimension has high level and low level. These two levels express two poles of their dimension. Please read the document (John & Srivastava, 1999) to comprehend the Big Five model.

- *Openness* dimension (Wikipedia, Big Five personality traits, 2016) measures the degree of creativity and preference for novelty. High level of openness expresses invention and curiosity. Low level of openness expresses consistency and cautiousness.
- *Conscientiousness* dimension (Wikipedia, Big Five personality traits, 2016) measures the degree of self-discipline and dutifulness. High level of conscientiousness indicates persons who have well-organized mind. Low level of conscientiousness indicates careless and easy-going person.
- *Extraversion* dimension (Wikipedia, Big Five personality traits, 2016) measures the degree of sociability and tendency for gregariousness. High level of extraversion indicates persons who like to interact with other people and tends to be talkative and enthusiastic and assert themselves. Low level of extraversion indicates persons who tend to be less involved in social world and more independent.
- *Agreeableness* dimension (Wikipedia, Big Five personality traits, 2016) measures the degree of compassionateness and preference for cooperativeness and helping people. High-level agreeableness persons are easy to sympathize with other people and enthusiastic to help other people. Low-level agreeableness persons are unconcerned with other people.
- *Neuroticism* dimension (Wikipedia, Big Five personality traits, 2016) measures the degree of emotional impulsion. High-level neuroticism persons are easy to get negative emotion such as anger, anxiety, or depression because they are very sensitive. Low-level neuroticism persons have good control of emotion and they are calm and have emotional stability.

We split 5 personal factors into 10 poles including inventive/consistence, organized/spontaneous, extrovert/introvert, compassionateness/unconcerned, emotional instability/emotional stability. It is easy to recognize that each pole expresses a level of factor, for example, two poles *inventive* and *consistence* correspond to the high level and low level of the same trait *openness*. Figure 1 describes the mental space of Big Five personal traits.
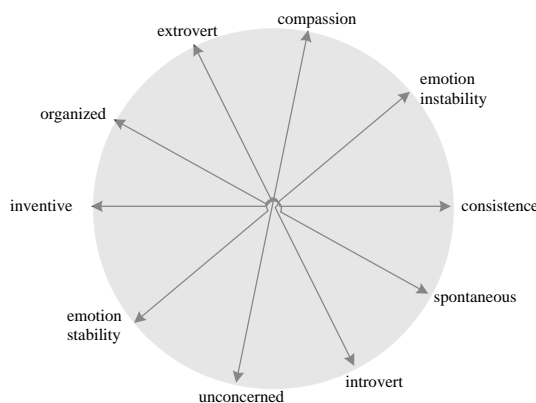

Figure 1: Personal poles of Big Five personal traits

CROSS REFERENCE BETWEEN PERSONAL TRAIT AND HUMAN INTELLIGENCE:

The theory of personal trait is discussed in above section and readers may evaluate which trait, factor or level of factor is good or bad, preeminent or weak but I do not think so. However, before raising my point of view, we should discuss more about theory of human intelligences and how these intelligences connect to personal traits. According to Howard Gardner in his 1983 book "Frames of Mind: The Theory of Multiple Intelligences" (Gardner, 1983), there are eight intelligences such as musical – rhythmic, visual – spatial, verbal – linguistic, logical – mathematical, bodily – kinesthetic, interpersonal, intrapersonal, and naturalistic. Shortly, by referring to (Wikipedia, Theory of multiple intelligences, 2016), following are description of these intelligences. Please read (Fröschl, 2005, p. 30), (Lane, 2000), and (Davis, Christodoulou, Seider, & Gardner, 2011) for more details about human intelligences.

- Musical – rhythmic (Wikipedia, Theory of multiple intelligences, 2016): people are sensitive to sounds, rhythms, tones, and music. They have an artistic sense.
- Visual – spatial (Wikipedia, Theory of multiple intelligences, 2016): people have ability to recognize accurately 3D objects surround them in space and environment. They can easily visualize with the mind's eye. Painters are very good at this intelligence.
- Verbal – linguistic (Wikipedia, Theory of multiple intelligences, 2016): people are good at reading, writing and telling stories. Writers are good at this intelligence.
- Logical – mathematical (Wikipedia, Theory of multiple intelligences, 2016): people are good at mathematics, logical reasoning and making abstraction from data. Mathematician and scientists are very good at this intelligence.
- Bodily – kinesthetic (Wikipedia, Theory of multiple intelligences, 2016): people are good at doing bodily motions, making thing and handling object skillfully. Howard Gardner assumed that careers appropriate to this intelligence are athletes, dancers, musicians, actors, builders, police officers, and soldiers.
- Interpersonal (Wikipedia, Theory of multiple intelligences, 2016): people are good at interacting and co-operating with other persons. They prefer to work and discuss with others and are sensitive to others' feeling. Howard Gardner assumed that careers appropriate to this intelligence are sales persons, politicians, managers, teachers, counselors and social workers.
- Intrapersonal (Wikipedia, Theory of multiple intelligences, 2016): people are thinker being good at understanding everything deeply and thoroughly. They have ability to be self-reflective and introspective and know themselves very well.
- Naturalistic (Wikipedia, Theory of multiple intelligences, 2016): people are good at taking care and nurturing plants, animals and any natural species in environment. Gardner assumed that careers appropriate to this intelligence are hunters, gatherers, and farmers.

Now it is easy to make the connection between human intelligences and personal traits because they are related together, for example, the musicians who get musical – rhythmic intelligence should have high level of openness. Following are intelligences are their related personal pole.

- Musical people tend to poles such as inventive, spontaneous, and emotional instability.
- Visual people tend to poles such as inventive and emotional instability pole.
- Verbal people tend to poles such as inventive, spontaneous, compassionateness, and emotional instability.
- Logical people tend to introvert pole and inventive pole.
- Bodily people tend to poles such as organized, introvert and emotional stability.
- Interpersonal people tend to poles such as inventive, extrovert, and compassionateness.
- Intrapersonal people tend to poles such as consistence, organized, introvert, and unconcerned.
- Naturalistic tend to poles such as extrovert, compassionateness and emotional instability.

Figure 2 is the cross reference between personal traits via poles and human intelligences. The personal poles are in the left side and right side and the intelligences are in the middle. The same color lines refer to one intelligence.
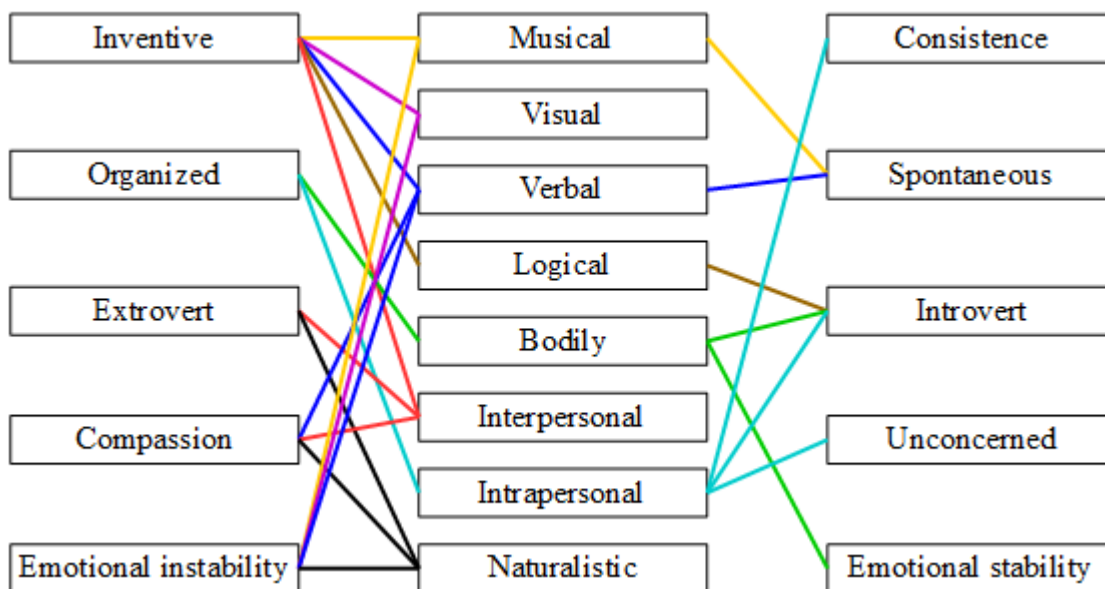
Figure 2: Cross reference between personal traits via poles and human intelligences

The cross reference indicates that every intelligence relates to at least one pole in regardless that referred poles are high level or low level. It means that there is no good or bad personal trait and each trait is dominated over a specific intelligence. For example, spontaneity and emotional instability are negative traits but they are very necessary to artists like musician, painter, etc.

A researcher at Hanoi National University of Education suggested me to find out relationships between personal traits based the cross reference. This is an excellent idea that I did not concern yet. The indirect relationships of traits with regard to intelligences are classified into two groups such as global implicit relationship and local implicit relationship. As a convention, personal poles are referred as personal traits.

- Global implicit relationship is involved in many intelligences. For example, inventive trait relates to verbal intelligence which, in turn, refers to compassion trait which relates to interpersonal intelligence. Later on, interpersonal intelligence refers to extrovert trait. Finally, the global implicit relationship includes inventive trait and extrovert trait which relate to two intelligences such as verbal and interpersonal.
- Local implicit relationship is involved in only one intelligence. For example, given musical intelligence, relevant traits such as inventive, emotional instability, and spontaneous shape a musical-related implicit relationship. Local implicit relationship is more specific than global implicit relationship.

From the cross reference shown in figure 2, there are 8 local implicit relationships are listed as follows:
- Musical-related relationship includes traits such as inventive, spontaneous, and emotional instability.
- Visual-related relationship includes traits such as inventive and emotional instability pole.
- Verbal-related relationship includes traits such as inventive, spontaneous, compassionateness, and emotional instability.
- Logical-related relationship includes traits introvert and inventive.
- Bodily-related relationship includes traits such as organized, introvert and emotional stability.
- Interpersonal-related relationship includes traits such as inventive, extrovert, and compassionateness.
- Intrapersonal-related relationship includes traits such as consistence, organized, introvert, and unconcerned.
- Naturalistic-related relationship includes traits such as extrovert, compassionateness and emotional instability.

There are some interesting discoveries about implicit relationships as follows:
- A local implicit relationship represent an intelligence of a given person and so, its traits are homogeneous.
- A global implicit relationship can include two other opposite traits which are two poles of the same dimension. For example, given the aforementioned global relationships including inventive trait and extrovert trait, this relationship also includes introvert trait because inventive trait relates to logical intelligence which, in turn, refers to introvert trait. As a result, two opposite traits such as extrovert and introvert coexist in the same global relationship. If we "apply" this global relationship many times into the cross reference, we will

recognize that all traits are related together. Pioneers of personal trait theory like Lewis R. Goldberg separated a large number of various traits in order to group similar traits into five major isolated factors in Big Five model (Goldberg, 1990). Conversely, such five isolated factors are related together by some implicit ways. This paradox is interesting, which proves the neutrality of personal traits, in which there is no good or bad trait. The research only discovers the implicit relationships based on human intelligence but I believe that there exist other ways to find out such relationships.

A PROPOSAL OF EDUCATIONAL MANAGEMENT:

According to discussion in above section, my viewpoint is that personal traits are neutral and so we should not enhance or restrict any personal trait or personal pole. What we should focus on is how to develop students' intelligences so as to provide them the best education tuned with their intelligences. The proposed educational management way includes 4 following steps:

1. Discovering students' personal traits. The normal way is to create the questionnaires and test exercises in order to discover reasonably students' personal traits. There is an open research to compose optimized questionnaires. Analyzing students' answers and results in order to determine their personal traits.
2. Counting the number of connections between their personal traits and potential intelligences. These connections are shown in figure 2. Basing on this number of connections, teachers can predict students' intelligences. Their intelligences are the ones having the largest number of connections.
3. Giving students curriculums and teaching methods that are appropriate to their intelligences.
4. Observing their study results and adjusting curriculums and teaching methods as suitable as possible. If their intelligences are changed or predicted intelligences are incorrect, then go back step 1.

I do not consider which stage of education such as early education, undergraduate, or postgraduate to which the proposed management method is appropriate yet. This is still open research but I think it is as soon as better. However discovering personal traits by using questionnaires in the early stage is a hazardous problem and I think another analytic approach at step 1 is better.

Human is the collection of many personal traits and all of us have some intelligences among eight intelligences. Some people are specially talented because they dominate over some personal traits although these traits may be negative or they may loss or be weak in some abilities so as to be preeminent in other abilities. The reason goes beyond this research but we assert that all of us, including talented people, are equalitarian and have the same level to contribute to society as much as possible. The purpose of educational manager is to develop intelligences and not to concern with what kind of some intelligence is or how about some personal trait is because we often focus on some necessary intelligences such as logic, mathematics, and techniques. For my opinion, all intelligences are useful in the national strategy of comprehensive development. However, this idea is ideal because at certain point in time, this development strategy must concentrate on certain domains and certain goals and so the education management must obey such strategy. It means that some students having some intelligence are not supported as much as other students. Do agree this decision in order to finish the strategy and so we will have a chance to approach the comprehensive development.

CONCLUSION:

The main result of this research is to make connection between personal traits and human intelligences and from there; personal traits are descriptive outside attributes of intelligences. They are clues so that we can discover intelligences instead of enhancing or restricting them. Basing on this result, the research asserts that the purpose of educational manager is to develop intelligences and not to concern with what kind of some intelligence is or how about some personal trait is and we should aim to the strategy of comprehensive education development.

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