REVIEW

Literature Review of Measurements of Personality Traits across Cultures

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ARTICLE INFO	ABSTRACT

After more than one century's exploration from academia, both researches and measurements related to human personality traits have been fully developed with the effort of many researchers. *Big Five*, as one of the most popular assessments for personality traits, was formed based on the etic approach assuming there should be a universal or generalizable measurement for personality traits across cultures. However, with the increasing impact from different cultures as well as in-depth understanding from researchers, more doubts of etic approach on measuring personality were proposed. Emic approach stressing the significance of specific-cultural method in anthropological research has been accordingly investigated. The following *Big Six* and *Big Seven* scales were constructed under this approach. These measurements were already examined to have higher validity and reliability on measuring personality traits when implementing in the relevant group of people. Therefore, this study was supposed to give a literature review summarizing the definition process towards personality traits, the specific content and development of the mentioned measurements using etic and emic approach, the measurement issues based on the relevant researches, and some further considerations for etic and emic approach in assessing personality traits.

1. Introduction

Back in the mid-19th century, personality first emerged in the study of anthropology. The initial step that most researchers investigate the measurements of human personality traits is to explore a comprehensive understanding of what exactly is personality. Kajonius and Mac Giolla in their article defined personality as the cycle process of people's thinking, affective feeling, and external behaviors, which has strong heredity and stability over time [1]. With the advancement in personality research, Church stated that the conceptualization of personality construct should be more comprehensive by considering the influence of various cultures [2]. Thus, more additional elements such as dispositional traits, the adaptation of personal characteristics, and life narratives within cultural contexts, were incorporated into the understanding of personality. During the period of capturing the meaning of personality, numerous cross-cultural researchers became

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interested in the interactive process between personality and culture by comparing human personality traits across cultures, also known as etic research. This type of research focused on building the universality of existed Western personality models by testing the invariance of personality structures cross-culturally [3].

According to many empirical researches, the Big Five model was believed to be the most predominant model that most cross-cultural researchers used to measure personality, thus making it central to understand personality [4]. The Big Five model has received wide consensus on its capability of capturing the universal personality factors despite different cultures, economic status, social environment, and human behavioral expression. However, the model was argued by its lower replicability of personality structures factors across cultures, and this model was mainly designed to understand personality and human behaviors in most Western countries. For this reason, other models of personality traits such as Big Six and Big Seven were developed by using the emic approach to capture personality traits outside Western countries. These personality models were examined to have strong correlations with the Big Five models [4]. However, cross-cultural researchers also found that some differences exist among Big Five, Big six or Big Seven. A further suggestion for assessing personality was shown in the previous article, which is known as the combined Emic-Etic approach. The main idea of this approach is to help cross-cultural researchers to build a comprehensive framework in personality that are universal and cultural-specific. The integration of both etic and emic approaches would expand people's understanding of personality at a universal level [3].

This literature review will start by reviewing literature that explores and defines personality. This can assist people to understand how people conceptualize personality. The next part will conduct after searching for more references that illustrate etic approach in cross-cultural research and measurement issues around this approach. Importantly, some well-known measurements models such as Big Five, Big Six (HEXACO), and Big Seven were highlighted under etic approach. At the end of the review paper, it summarized and discussed some considerations for investigating personality structures using etic measurement.

2. Literature Review

2.1 A Comprehensive Understanding of Personality Trait

According to Mc Adams and Pals study, a whole description of one person's life should include the examination of the different patterns of their dispositional traits, the adaptive process of characteristics, and life narratives that embody life in details, where all are satisfied with the demands of species evolutionary and impacted by cultural elements at the same time[5]. This broad notion was summarized by Church who distinguished four personality aspects with unique values: evolved universal human nature, dispositional traits, characteristics, as well as life narratives [2]. "Evolved universal human nature" stress the primitive satisfaction of humans such as basic survival, psychological well-being, and species reproduction through the adaptions of original needs, motives, affect, and mental mechanisms. "Dispositional traits" regard to the personal difference within a broad set of dimensions. For instance, two dimensions called extraversion and conscientiousness are supposed to explain the degree of behavioral consistency across various cultures. Most personality psychologists treat dispositional traits as fundamental tendencies or temperaments based on biological perspectives. "Characteristics adaptations" are mainly about the components such as goals, values, beliefs, or self-cognition that caused other individual differences and may contribute by the interactive process between the basic tendencies and external influence from environment, such as culture. The last one is life narratives, which refers to how unique personal experiences or stories people constructed were integrated into the meaningfulness, coherence, as well as identity of their life [5].

Notably, Church stated that different psychological perspectives conceptualize personality differentially. He pointed out that cross-cultural psychologists, who are more likely to use an etic approach in studying personality, focus on dispositional traits and characteristics [2]. However, cultural psychologists who tend to apply the emic approach to personality research emphasize characteristics adaptions and life narratives.

2.2 Etic Approach of Personality- A Cross-cultural Perspective

In general, cross-cultural researchers have stressed more on the difference of dispositional traits and characteristics adaptations of individuals. They are more likely to compare multiple cultures to find cross-cultural generalizability or universals. In the past thirty years, numerous cross-cultural studies have emerged that often use an etic approach to emphasize the comparability of human personality traits across various cultures [2]. In addition, culture is considered as relatively fixed and "outside" the individuals when researchers adopt the

cross-cultural perspectives. Through the application of traditional measurements, personality traits are measured in a manner that ignores the additional contexts (e.g., cultures). Based on Van de Vijver and Leung study, etic approach designed to examine the feasibility and practicability of current personality constructs or measurements when they are exposed to the novel cultural context [6]. Therefore, the underlying structures, mean levels, and correlations of personality construct would be compared during the process.

2.2.1 Big Five Model

Internationally, the most prominent example of the etic approach in cross-cultural personality research is a five factors structure called Big Five, or Big Five Model (FFM). The Big Five Model has received a wide consensus from personality researchers. The common labels for these five factors or five broad personality domains are: Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness [7]. Many researchers agreed that the structure of FFM related to basic human biological tendencies, and by excluding the elements of cultures, FFM can describe personality in across all cultures [8]. Aligning with Church's article, there is sufficient evidence that dispositional traits are biological to a huge extent and, that traits are not just cultural products [2]. Meanwhile, Kajoinius and Mac Giolla stated that a huge amount of evidence supports the usefulness of FFM in measuring personality across different countries or ethnic groups, which further suggest that personality is cross-culturally equivalent to some extent. They pointed out that based on the research results from Japan, Germany, and Canada, the notion of universal FFM and its link to genotype was confirmed. In addition, the sex difference on the personality traits was replicable across different countries. For example, a higher level of Neuroticism and Agreeableness on woman have been noted across 56 cultures through self-report measurement [1]. A similar statement was also noted in article of Benet and Waller, which demonstrated the existence and universality of FFM in more than 50 societies across different continents. Besides, Big Five traits were examined to associated with a series of psychological outcomes, which included performance on employment, satisfaction in personal relationship, leadership, educational outcomes, internet indulgence, as well as health condition [5]. The above showed the significant influence that FFM has had on the general human life [4]. Therefore, the reliability and practicability of FFM have let many personality or cross-cultural researchers to advocate that this model is the fundamental framework for describing and assessing personality.

According to Kajonius and Mac Giolla's article, the FFM has been examined in many countries with different languages using the Revised NEO Personality Inventory (NEO-PI-R) or the BIG Five Inventory (BFI) [1]. In Marsh et al.'s article, they summarized several additional instruments are used to measure personality traits, and part of the additional instrument is known as the family of NEO instruments includes the 60-item NEO-Five Factor scale [9]. These instruments are used widely by many researchers and received lots of attention.

Despite a growing consensus on FFM, some concerns have been recently raised by many researchers. One major issue concern is the exaggeration of FFM universality [4]. When researchers try to measure human personality traits, most of the time they are targeting and measuring the traits from FFM. This has created two issues. The first one is that the five traits in the FFM cannot be fully embodied or replicated in certain circumstances. For instance, Gurven et al. tested the FFM in a huge illiterate and indigenous group of people in Tsimane instead of the often-targeted literate and urban population. The result showed that just two out of five factors, industriousness or Conscientiousness, and pro-sociality or Agreeableness could be embodied, and the authors argued that these two factors might be the common principles that reflect socioecological characteristics in the small societies [10]. They finally proposed that personality factors are likely to be limited by education level and the characteristics of the targeted samples (i.e., rich, or the poor people). Three out of traits in the FFM: Agreeableness, Conscientiousness, and Extraversion were established in some other research. The Openness factor in the FFM is not likely to be retrieved in many cross-national studies. For instance, Openness was not found to be a salient personality dimension in China [3]. The next issue is that other personality traits not included in the FFM are excluded, thus limiting the ability to fully understand human personality traits. The emerged traits outside of the FFM such as Honesty-Humility in the Big Six Model, Negative Valence, and Positive Valence are the obvious evidence that shows that FFM structure is insufficient.

2.2.2 Big Six (HEXACO) Model and Big Seven Model

At present in Feher and Vernon's article, the HEXACO, a personality model with six factors, is developed via the etic approach and applied to certain amounts of countries all over the world. All six factors in the HEXACO are Extraversion, Agreeableness, Conscientiousness, openness, Emotionality, and Honesty-Humility. The sixth

trait factor, labeled as Honesty-Humility, has been shown to be a salient factor in many cross-cultural studies. The Honesty-Humility factor mainly refers to the fairness and modesty that was embodied by some cultures. Some measurements used to assess this personality trait model were also established [4]. Although Ashton and Lee said that although understanding some factors in the HEXACO such as Agreeableness and Emotionally are slightly different from the FFM, there are strong correlations between HEXACO and Big Five corresponding factors such as HEXACO Openness and Big Five Openness [11]. Meanwhile, Big Five Agreeableness and Honesty-Humility in the HEXACO showed a significant positive relationship. Gaughan et al. pointed out that the correlation of the similar constructs in FFM and Big Six model range from .52 to. 87, but the correlation between Honesty-Humility and Agreeableness in the two models is almost .07. Despite the similarities between two model, the predictive power of the HEXACO was found to be higher than the BBF in many criteria, such as psychopathic traits, risk-taking, hope to take power, and business decision [12].

After carrying out a series of empirical studies, Almagor et al. showed the existence of the underlying seven higher-order factors. They stated that the five factors in the Big Seven model were to some extent similar but not the same as those in the FFM. These seven factors are Negative Emotionality, Positively Emotionality (similar to Neuroticism and Extraversion in FFM, respectively), Agreeableness, Dependability (similar to Conventionality in the FFM), Unconventionality (similar to Openness in the FFM), Positive Valence (PV), and Negative Valence (NV). The two new factors PV and NV stand for the extremely positive and negative self-evaluation, respectively. In the few decades after the inventory of the Big Seven Model developed, more and more personality researchers have found similar seven-factor models across different cultural samples and languages, including Hebrew, Spanish, and Tagalog. Although the derived seven-factor structures are not completely the same, all of them identified the similar PV and NV factors showed in the original work of Almagor et al. [13].

2.3 Measurements Issues in Etic Approach

Although these etic personality inventories have been applied widely, some measurement issues still exist. First, the source of cross-cultural research bias is found to be more than the bias that can be detected by prevailing equivalence procedures. There are three sources of bias: construct, method, and items. Some researchers noted that all personality constructs were established in Western countries. Thus, it would have some construct bias when transporting these personality measurements into a non-Western culture such as Asian culture (e.g., the understanding of the Openness factor between Western countries and East countries is different). Method bias is mainly caused by systematic distortions (i.e., differential response styles) [3]. Although Harzing identified a stable cross-cultural difference in response style within 26 countries, that type of difference should be further studied in future research. At the item level, the bias is frequently found during the process of test adaptation when an item written in one culture is hard to apply to another culture [14]. According to the study of Osterlind and Everson, many advanced tools are developed and used in finding item bias [15].

The second methodological issue in etic personality instrument is the gap between substantive theories related to the difference in personality structures and the equivalence of personality models as well as the corresponding inventories (e.g., FFM and NEO-PI-R). The current framework on the cross-cultural difference in personality are relatively humble, and most of them only stress the difference on the mean score [3]. Also, as stated in Church's article, several researchers only summarized the cross-cultural personality difference by comparing personality traits at mean levels across different cultures [2]. However, Terracciano et al. indicated the correlation between the mean personality profiles and the national personality profile is relatively small [16].

3. Discussion

Based on the information mentioned above, two further considerations are provided here so that etic personality models can be refined to better capture the personality traits across cultures. First, researchers should pay attention to the generalizability of the etic personality models across cultures when conducting cross-cultural research [17]. As mentioned before, these personality traits models were established in Western countries. Thus, researchers should consider if these models could be highly replicated in other countries or cultures. As Feher and Vernon stated in their article, the ability to capture components within non-Western contexts is weak [4]. Therefore, it is valuable to explore other personality traits or components outside of the existed etic models are valuable (e.g., the factor "Interpersonal Relatedness" was found during learning Chinese personality traits). In addition, it is meaningful to increase the sample diversity when testing these personality models. Specifically, people with varied characteristics should be included in the research instead of including only those well-educated, comparatively rich, urbanized, and western samples.

Otherwise, the universality of these etic personality models cannot be ensured [1]. Here, it is necessary to advocate a useful approach that can support the development of the etic personality models. For instance, emic approach is a useful way to capture unique constructs of personality traits in non-Western cultures. The major contribution of the emic approach in personality researches is the identification of indigenized of personality traits during the process of learning thoughts and behaviors within a particular culture. The combination of both the etic and emic approaches in learning personality traits has been proposed by many researchers. The biggest goal of this integration is to fill the gap between the mainstream personality model and indigenous components, and further provide a comprehensive framework in personality dimension [3].

The second consideration is at the measurement level. As mentioned in the issues of etic personality measurements, some types of bias in personality measurement are found. Luckily, some equivalence or invariance procedures are designed to invert the bias, such as conceptual equivalence, linguistic equivalence, and measurement equivalence. Regarding the measurement equivalence, Vandenberg and Lance said that both exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) are better tools to ensure the measurement equivalence [18]. However, Marsh et al. indicated that CFA has failed to support the FFM and its inventory (e.g., NEO instruments) although EFA has consistently detected the factors in the Big Five. Such limitation in statistical tools has led more researchers to question the structures of the Big Five and other relevant models at the measurement level [9].

4. Conclusions

Previous research has shown the popularity and importance of the etic approach in conceptualizing personality traits across cultures. Some well-known personality models, such as FFM, Big Six model, and Big Seven model, have already gone through a series of refinement as they are applied to various countries. Although these personality models have fainted popularity worldwide, they are still subjective to issue with universality and replicability. Also, bias and inequivalence in its measurements still existed. Accordingly, the suggestion of a combined etic-emic approach and increasing reliance on CFA to increase the measurement equivalence in personality research is proposed.

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