

Analyzing the Influence of Linguistic and Cultural Background on Chinese-English Bilingual Personality

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ABSTRACT

As we all know, linguistics is interesting, and it always affects people in many ways. This work wonders what other factors will affect people's personality besides language itself. The first idea that comes to our mind is culture. In this experiment, 200 members from different cultural backgrounds will be gathered, and their scores when finishing the same personality test will be measured. Afterwards, the difference between these test results will be analyzed. After completing the test, the results will be able to demonstrate that culture is one of the factors that affects the change in personality of English-Chinese bilinguals when switching languages, meaning that the result of two groups of participants will be significantly different or have a greater difference in change in the two languages. Through the assessment and comparisons of the figures, the work proved that cultural background has a profound influence on personalities when switching languages.

Keywords: *The Big Five, cultural effect, bilingual, personality*

1. INTRODUCTION

1.1 Background

It is widely known that linguistics is interesting, and it always affects people in many ways. For example, when people switch languages, their personalities will change. And we have found that there is a lot of literature to prove this theory. Therefore, a question that catches our attention is that in the process of language conversion, what other factors will affect people's personality besides language itself. The first idea that comes to our mind is culture. So, this work wonders if cultural background is also an element in the impact of language on people's personality. This paper will discuss and examine this topic. There is little literature to support this idea, so a rigorous experiment will be designed to confirm this topic in this work.

1.2 Background Literature

Early in 1956, Benjamin Lee Whorf proposed the idea

of Language Relativity (Whorf hypothesis) [1], regarding the nature of the relation between language and thoughts. According to trait psychologist Gordon Willard Allport [2], personality traits refer to a pattern of behaviors, thoughts, feelings, and habits in the individuals, which means Whorf's hypothesis built a primary connection to language and personality, thus paving the way for later psychologists to research on the relation between the two.

Later, many researchers were working on the multiple languages' effect on changing personality. The research of Hull, P.V. [3] employed C.P.I. (California Psychological Inventory) to test three groups of bilinguals, including Mexican Americans, Chinese Americans, and Korean Americans. The rating in C.P.I. scales suggested that in each group the bilinguals behaved differently in certain aspects depending on their current linguistic environment, which confirms the existence in bilinguals of differing personalities in the two languages. Besides, Chen and Bond [4] confirmed that the use of a second language activates different behavioral expressions of personality that are appropriate in the corresponding linguistic-social context by doing self-report and behavioral observation.

To better understand why and how personality shifts, a group of cross-cultural psychologists attempted to figure out this issue from the perspective of cultural identity. Evidence suggests significant variation in attitudes, values, perceptions, and behaviors exists in distinct cultures [5]. Thus, monolinguals living in distinct cultural environments should have different personality traits to some extent.

Recent research also shifts focus from examining the differences between groups to differences within groups. Cultural Frame Switching, first proposed by Hong, Chiu, & Kung [6], means the process of bilinguals or multilinguals using different culture-specific mental modules or switching their perspectives of the world, depending on the language that is used. More recently, Ramirez-Esparza et al. [7] used the Five-Factor Model and conducted two studies on American and Spanish monolinguals and bilinguals, separately. The results showed that English-Spanish bilinguals shifted their personality when the cultural frame switches and these changes were consistent with the personality native monolinguals displayed in each culture. In addition, other confounding variables such as anomalous items or translation effects were excluded in their further analysis, which meant languages did influence their personality.

Above all, there are many studies about either languages or cultures' effect on personalities. However, most research does not distinguish the effect of culture and language. Since culture and language are not two completely overlapping factors, it is not quite rigorous to identify them as one thing. Therefore, in our research, we aim to discuss the separate influence of language and culture on personality.

2. PROPOSED STUDY

In this study, we will assume and explore, other than the linguistic influence, whether culture will also affect people's personality. Based on a bunch of prior studies, this hypothesis is basically established. In the experiment which was designed by us, we invited 200 bilingual participants in English and Chinese and we strictly adopted the Big Five model to test to reveal the possible difference under various conditions. This is all in order to have an accurate result for us at the end of the experiment. The calculated scores for personality differ over time, and when we compare the data of the experiment among these two groups, if the difference is large, we can conclude that culture influences personality. Alternatively, it does not affect. The present studies that we do will investigate the relationships between each of these variable's data to allow for a clear differentiation between the possible outcomes.

3. METHODS

3.1 Participants

200 English Chinese simultaneous bilingual participants, aging from 18 to 55, will be recruited for this experiment using volunteering strategy. This age range ensures that the participants possess fully developed language proficiency and mature personality, and the influence of diseases caused by aging can be prevented. 100 members are group 1, with completely Chinese cultural background (that is, living entirely in China); the other 100 individuals belong to group 2, for they are born and living entirely in America. It is worthy to note that all the total 200 participants should lack previous experience of taking this personality test.

3.2 Materials

In order to gain more accurate and reliable results, the professional personality test will be incorporated to evaluate people's personality traits under different language conditions. Within each group, half of the population will be randomly assigned to take the Chinese-version personality task first and take the English-version a week later, while the remaining will finish the two tests in opposite order (English-version first, Chinese-version later). After all the participants have done the two tests and all the results are obtained, the similarity and difference within and between the groups will be examined.

3.3 Measures

This study will stick closely to the evaluation standard Five-Factor Model (Digman, 1990), which includes traits of Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. The chosen personality test is based on the FFM and called The Big Five personality test, which was created by Canadian psychologists Christopher Peterson and Alon Halevy and later developed by Goldberg in 1992. The access of this personality test can be reached through the website <https://bigfive-test.com/zh-Hans>. By letting the same participant finish both English-version and Chinese-version tests, it is clear to see how people reveal different traits when switching languages. The results of the same cultural background group will reveal the basic and elementary similarity for people under the same cultural background. The results can also reveal whether the influence brought by difference of cultural background is significant enough to the Chinese-English bilingual users.

4. RESULTS AND DISCUSSION

After completing the 120 questions included in the personality test, the generated data will include the scores

of the five personalities of THE BIG FIVE (total score of 120). Based on these values, the proportion of the five personalities of the tested person can be shown and the type of personality that participants are inclined to have can be determined. At the same time, the test will also generate the scores of specific indicators in each personality (the total score is 20) and their proportions. Therefore, we can judge the reasons for the formation of THE BIG FIVE scores from the scores of specific indicators. The specific indicators of each personality type are detailed in table 1. Then the two Chinese and English test results done by the same participant will be compared.

According to our hypothesis, the data generated by the two groups (100 each) of Chinese-English bilinguals with completely different growth environments and cultural backgrounds should be significantly different. One group of participants proves to have similar personalities after the test, while the other group of participants shows greater personality differences (see

Figure 1), or the result shows that the personalities of the participants are all different, but the difference between the two groups is very large (see Figure 2). Although the personality of Chinese-English bilinguals living in different cultural backgrounds has all changed when switching languages, because of the dramatic difference in conversion, this work can still prove that the cultural background has a profound influence on the personality changes of Chinese-English bilinguals when they switch languages.

However, there are some alternative answers. One possibility is that the test results of the two groups of participants prove that they have the same personality in the Chinese and English language systems. There is also a situation where the two groups of participants have different personalities when switching languages, but the amount of change in this difference is similar. In both cases, it seems that cultural background factor has no effect on the personality changes of Chinese-English bilinguals when switching languages.

Table 1. THE BIG FIVE and Their Respective Specific Indicators

THE BIG FIVE	Specific Indicators					
Neuroticism	Anxiety	Anger	Depression	Self-Consciousness	Immoderation	Vulnerability
Extraversion	Friendliness	Gregariousness	Assertiveness	Activity Level	Excitement-Seeking	Cheerfulness
Openness	Imagination	Artistic Interests	Emotionality	Adventurousness	Intellect	Liberalism
Agreeableness	Trust	Morality	Altruism	Cooperation	Modesty	Sympathy
Conscientiousness	Self-Efficacy	Orderliness	Dutifulness	Achievement-Striving	Self-Discipline	Cautiousness

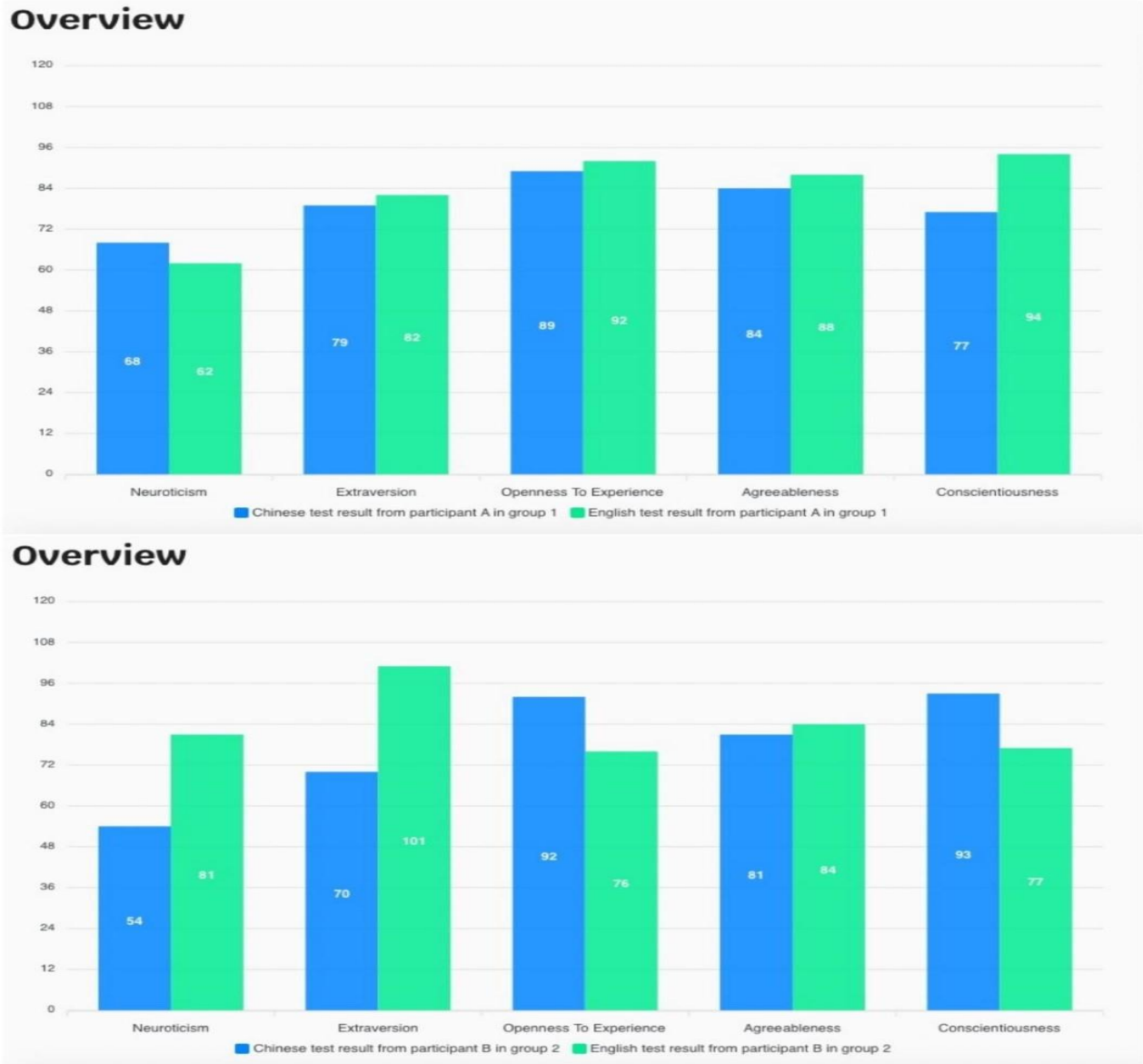


Figure 1. Comparison of Similar Personalities and Hugely Different Personalities When Switching Languages



Figure 2. Comparisons with Different Personalities but Huge Differences When Switching Languages

5. CONCLUSION

This work looks deep into the cultural and linguistic effect on personality by using the test that based on FFM and called The Big Five personality test. Also, the work came to a conclusion by making comparisons with different personalities but huge differences when switching languages. Conclusively, the results indicated that the cultural background has a profound influence on the personality changes of Chinese-English bilinguals when they switch languages.

5.1 Limitation

One major limitation of the study is that it may overlook the fact that the participants have different exhibition degrees of two cultures. For example, for a kid who was born and raised in America by parents who are both from China, it is possible that parents have always talked to the kid in Chinese and taught him or her a lot about Chinese culture at home. In this way, the kid would probably be influenced more by Chinese culture even though he or she has always been living in America. Cases like that may influence the test results as well.

In addition, another limitation of this study, as well as an avenue of future research in this area, is the fact that the test conducted in this study was not objective enough, and that was because the experiment still lacked a professional behavioral assessment system. Therefore, an observation study could not be conducted. As a result, self-reporting bias will be inevitable in our study.

Another indispensable limitation of our study is translation equivalence and language proficiency. During the research, a fact cannot be neglected, that is, the meaning of words expressed in different languages would not be the same or slightly changed when translating, as well as the fact that this would be adding another layer of complexity for the study and make it overall more difficult to conduct and analyze.

5.2 Future Direction

For a follow up to this study, it would be intriguing to see a professional behavioral assessing system emerging in the future, then it could be applied into future research. In this way, it would allow researchers to be able to employ other methods like “observation” to reveal more nuanced differences or changes in personalities of the participants. Lastly, more accurate data and results could be presented.

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