Chapter 5 Developing a Visual Assessment

ABSTRACT

Chapter 5 provides an example of an attempt to develop a visual assessment of extroversion. Two separate studies were conducted. In the first study, the complete process of image selection, evaluation, and validation of the instrument is provided. After the development of the instrument is complete, and illustration of how the cross-cultural equivalence was assessed across two cultures is provided. The second study extends the first study by including the text-based questions of the Big Five Inventory for both cultures, and by adding some simple text to the images. The chapter concludes with a discussion of steps that could be included to limit bias in such assessments.

INTRODUCTION

Can a visual assessment of personality be constructed that can be used across cultures? Or is the interpretation of images so bound to culture that it is impossible to find images that would be culturally neutral? Those are the questions being explored in this Chapter. An image-based assessment designed to measure the Big 5 personality traits (openness, conscientiousness, extroversion, agreeableness, neuroticism) is explored across two cultures: One Western culture, the US, and one Eastern culture, India. The structure of this chapter is as follows:

DOI: 10.4018/978-1-5225-2691-9.ch005

- A description of the Big 5 Personality measure
- A review of cross-cultural research on the traditional Big Five assessment
- A description of Study 1, that explains the process of constructing a visual assessment of extroversion, and an analysis of data from the two countries
- A description of Study 2, which extends Study 1, with the addition of text to the images
- A summary of the findings of the chapter

In this chapter, only one subscale will be presented, extroversion, to illustrate the process of designing, evaluating and validating such a measure. The same process would be undertaken for the remaining four subscales. Respondents would receive a score on all the dimensions of the scale; however, since the traits are not overlapping, they are typically measured separately. Since the primary interest of this illustration is discovering how well images generalize across cultures, and not personality measurement per se, for the sake of space, only one scale is fully developed and illustrated here. Data were collected across two cultures to compare how well the images generalized across the cultures. While it is likely that other cultures would also be interesting to test, the initial exploration is using only two cultures to investigate the feasibility of developing such an assessment. Data were collected from both respondents in the United States as well as India using Amazon mechanical Turk software. India was chosen as the second county to choose a country with a large population, increasing the chance of variability in the responses, and also that was culturally dissimilar to the United States. Since most of the research on cultural equivalence of visual communication involved both Western and Eastern cultures, a similar strategy was chosen here, since that is where most of the cultural differences are likely to manifest.

In this chapter, two separate studies are described that sought to investigate the cultural equivalence of a visual assessment. Image selection, data collection, and evaluation of the resulting instrument are illustrated for two cultural groups in different contexts. To better understand the process involved in constructing the instrument/assessment, it is helpful to understand something about the original assessment on which this visual assessment was based. Therefore, a description of the Big Five Inventory precedes the discussion of constructing the visual assessment.

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