

Contents lists available at [ScienceDirect](http://www.sciencedirect.com)

International Journal of Intercultural Relations

journal homepage: www.elsevier.com/locate/ijintrel

Using cognitive pretesting to explore causes for ethnic differences on role-plays

Janneke K. Oostrom^{a,b,*}, Marise Ph. Born^{a,1}^a Institute of Psychology, Erasmus University Rotterdam, P.O. Box 1738, 3000 DR Rotterdam, The Netherlands^b VU University Amsterdam, Department of Social and Organizational Psychology, Van der Boechorststraat 1, 1081 BT Amsterdam, The Netherlands

ARTICLE INFO

Article history:

Received 26 March 2012

Received in revised form 5 December 2013

Accepted 29 December 2013

Keywords:

Cognitive pretesting

Role-play

Majority/minority differences

Adverse impact

Personnel selection

ABSTRACT

This study used cognitive pretesting to assess what factors could be causing score differences between ethnic majority and ethnic minority applicants on role-plays. In a laboratory room, equipped with a video camera, cognitive interviews were conducted among 12 ethnic majority and 12 ethnic minority students to examine ethnic differences in the interpretation of the instructional texts of two role-plays. Four trained assessors independently rated the participants' videotaped responses. The assessors were asked to indicate whether the participants had understood the instructional text in general, the intended meaning of specific words or phrases, the problem, the job role, and the context of the situation. Ethnic differences were found for almost all of these aspects of the instructional texts (d -values varied between -0.02 and 0.89), indicating that the texts often did not activate the same concepts in the ethnic minority group as in the ethnic majority group. Ethnic differences in verbal ability explained only part of the ethnic differences in the interpretation of the instruction of the role-plays. Cognitive pretesting seems to be a valuable method to assess differences between ethnic majority and ethnic minority applicants in how they interpret test items and instructional texts.

© 2014 Elsevier Ltd. All rights reserved.

1. Introduction

Organizations are often caught in a difficult dilemma facing the practice of personnel selection (Campion et al., 2001). On the one hand organizations strive to maximize the predictive validity of their selection instruments. On the other hand organizations strive to hire a diverse workforce to improve perceived fairness, avoid litigation, serve the needs of diverse customers, and encourage innovation (De Dreu & West, 2001; Jackson, Joshi, & Erhardt, 2003). Both goals cannot be achieved simultaneously, because many valid selection instruments exhibit mean score differences by ethnicity such that minority groups score lower than majority groups (Pyburn, Ployhart, & Kravitz, 2008). Ployhart and Holtz (2008) provide an overview of mean group score differences of commonly used selection instruments. The largest Black–White score differences are found for cognitive ability tests ($d = 0.99$; uncorrected) and assessment centers ($d = 0.60$ or less; uncorrected). As mean score differences by race or ethnicity contribute to the adverse impact of the selection instruments (Pyburn et al., 2008), it is important to further understand these group differences.

* Corresponding author at: VU University Amsterdam, Department of Social and Organizational Psychology, Van der Boechorststraat 1, 1081 BT Amsterdam, The Netherlands. Tel.: +31 20 5983382.

E-mail addresses: j.k.oostrom@vu.nl (J.K. Oostrom), born@fsw.eur.nl (M.Ph. Born).

¹ Both authors contributed equally to the study.

The present study will focus on ethnic difference on a common type of exercise used in assessment centers, namely role-plays (Spychalski, Quinones, Gaugler, & Pohley, 1997). Role-plays fall under the category of work samples. In general, work samples are thought to have high levels of validity (Schmidt & Hunter, 1998) and are associated with positive applicant reactions (Cascio & Aguinis, 2005). Because they reflect aspects of the future job, work samples function as a realistic job preview for applicants (Spychalski et al., 1997). They are also stated to exhibit small mean score differences by ethnicity (e.g., Heneman & Judge, 2006). However, a recent meta-analysis by Roth, Bobko, McFarland, and Buster (2008) showed that ethnic score differences on work samples are markedly larger than previously thought ($d = 0.73$; uncorrected). Little genuine understanding is obtained as to what aspects of work samples are causing ethnic score differences.

The present study will use so-called cognitive pretesting (Willis, 2005) to gain understanding about score differences between ethnic majority and ethnic minority applicants on role-plays. This study will look into ethnic differences in the interpretation of instructional texts for role-plays which prepare applicants to subsequently play their role in the exercise. The study was conducted in the Netherlands. Most research on ethnic differences on selection instruments has been conducted in the US. Therefore, the present study will extend the literature on ethnic differences on selection instruments by its focus on a European context. Unlike traditional immigration countries, like the US, Canada, or Australia, the Netherlands (and other countries that belong to the European Union) experienced large-scale immigration only since World War II. Three categories of immigrants can be distinguished in the Netherlands: (1) immigrants from the (former) colonies, (2) foreign workers and their families from Mediterranean countries, and (3) refugees and asylum-seekers from countries with political unrest (Eldering, 1997). The ethnic minority population composition and the definition of minority member status, therefore, differs between the Netherlands and other countries (Hanges & Feinberg, 2009). In the Netherlands and several other countries that belong to the European Union, ethnic minority membership is based on the nationality and country of birth of a person, his or her biological parents, and his or her biological grandparents (De Meijer, Born, Terlouw, & Van der Molen, 2006). In Section 1.1 possible causes for ethnic score differences will be described. In Section 1.2 the method of cognitive pretesting will be described.

1.1. Causes for ethnic score differences

Ethnic score differences are often attributed to a test's cognitive loading. Cognitive loading refers to the correlation between test scores and performance on a measure of cognitive ability (Whetzel, McDaniel, & Nguyen, 2008) and has repeatedly been identified as a driver of ethnic score differences (Spearman's hypothesis; Jensen, 1998): tests with a higher cognitive loading show larger ethnic score differences than tests with a lower cognitive loading (e.g., Goldstein, Yusko, Braverman, Smith, & Chung, 1998; Roth et al., 2008; Te Nijenhuis & Van der Flier, 2003). This pattern is attributed by some psychologists to cultural differences in general cognitive ability (e.g., Jensen, 1998).

However, ethnic score differences can also be caused by test bias, or by a test's cultural loading which can cause test bias. Test bias refers to score differences on an instrument that do not correspond to differences in the underlying trait or ability (Van de Vijver & Tanzer, 2004). Three different types of test biases can be distinguished, namely construct bias, method bias, and item bias (see Van de Vijver & Tanzer, 2004, for a detailed description). According to Helms-Lorenz, Van de Vijver, and Poortinga (2003) and Malda, Van de Vijver, and Temane (2010), a test's cognitive loading can be confounded with its cultural loading, which refers to the specific cultural knowledge (i.e., shared declarative and cultural knowledge) that is required to perform well on the test (Malda et al., 2010). Selection instruments are usually constructed by members of the ethnic majority group. For applicants who are familiar with the culture of the ethnic majority group, the relevant associations therefore are readily made between the test content and their declarative and cultural knowledge. These readily made associations facilitate the successful completion of the test. Ethnic minority applicants, however, do not necessarily share their declarative and cultural knowledge with the ethnic majority group and as a consequence may have difficulty to perform well on the instrument (Malda et al., 2010). Helms-Lorenz et al. (2003) and Malda et al. (2010) believe that a test's cultural loading rather than its cognitive loading is the factor explaining ethnic score differences as score differences on a variety of tests including cognitive ability tests have been found to diminish when both the ethnic majority group and the ethnic minority group have been equally exposed to the test content (e.g., Fagan & Holland, 2002; Malda et al., 2010).

Over the years, many strategies have been proposed to reduce ethnic score differences, such as so-called score banding, retesting, enhancing applicant reactions, and removing irrelevant test variance (see Ployhart & Holtz, 2008, for an overview). However, such strategies may fail to actually reduce ethnic score differences (e.g., retesting; Sin, Farr, Murphy, & Hausknecht, 2004) or they impair test validity (e.g., score banding; Aguinis, 2004). The present study presents an alternative method to reduce ethnic score differences due to a test's cultural loading. It aims to locate specific items or words that do not activate the same concepts in the ethnic minority group as in the ethnic majority group, by means of so-called cognitive pretesting.

1.2. Cognitive pretesting

1.2.1. Previous research on cognitive pretesting

Cognitive pretesting, a method stemming from cognitive psychology, can be used to evaluate whether respondents correctly understand, process, and respond to any type of test material (Conrad & Blair, 2009; Willis, 2005). Cognitive pretesting involves interviewing respondents while they read and respond to instructional texts, self-report items, or

Download English Version:

<https://daneshyari.com/en/article/946976>

Download Persian Version:

<https://daneshyari.com/article/946976>

[Daneshyari.com](https://daneshyari.com)