

PERBANDINGAN HASIL ANALISIS BUTIR BERBASIS TEORI SKOR MURNI KLASIK DAN MODEL RASCH

Abstrak

Penelitian ini membandingkan pendekatan teori tes klasik (CTT) dan model Rasch dalam melakukan seleksi butir berdasarkan parameter-parameternya. Penelitian ini diaplikasikan pada subjek sejumlah 1545 orang dengan menggunakan tes penalaran fluida yang merupakan salah satu tes dalam *AJT Cognitive Battery Test*. Tes penalaran fluida yang digunakan meliputi 3 subtes yaitu penalaran induksi (Gf11-13), penalaran sekuensial (Gf15), dan penalaran kuantitatif (Gf16). Hasilnya menunjukkan bahwa pendekatan model Rasch mengeliminasi butir lebih banyak dibandingkan pendekatan CTT pada ketiga subtes yang diujikan. Subtes Gf11-13 menghasilkan 23 butir ketika dianalisis menggunakan pendekatan CTT, berbanding 19 butir dengan menggunakan pendekatan model Rasch. Subtes Gf15 menghasilkan 51 butir ketika dianalisis menggunakan pendekatan CTT, berbanding 42 butir dengan menggunakan pendekatan model Rasch. Subtes Gf16 menghasilkan 27 butir ketika dianalisis menggunakan pendekatan CTT, berbanding 17 butir dengan menggunakan pendekatan model Rasch. Pada level tes ketiga subtes memproduksi harga reliabilitas yang tinggi ketika dihitung menggunakan pendekatan CTT maupun pendekatan model Rasch. Kedua pendekatan dapat digunakan secara bersamaan dalam melakukan analisis butir soal.

Kata kunci: Teori tes klasik, model Rasch, parameter butir, seleksi butir.



ITEM COMPARISON BETWEEN CLASSICAL TEST THEORY- BASED ITEM ANALYSIS AND RASCH MODEL-BASED ITEM ANALYSIS

Abstract

This study sought to compare item selection analysis using classical test theory (CTT) approach and Rasch model approach based on their parameters. Fluid reasoning test, which was a part of *AJT Cognitive Battery Test*, was given to 1545 people who were chosen as the subjects. Fluid reasoning test consisted of three subtests, namely induction reasoning (Gf11-13), sequential reasoning (Gf15), and quantitative reasoning (Gf16). The result showed that Rasch model approach was able to eliminate more items compared to CTT approach in all three subtests. Twenty three items from Gf11-13 were left when it was analyzed by CTT approach, while Rasch model analysis ended up with only 19 items. The difference was even more starking in Gf15 subtest, where CTT approach-based analysis left with 51 items, while Rasch model-based analysis left with only 42 items. Items left in Gf16 subtest using CTT approach-based item analysis were 27, ten points more than those of Rasch model. On the test level, the reliability of all three subtests were high when they were analyzed using both CTT and Rasch model approach. Both approaches were able to be employed at the same time in item analysis.

Keywords: classical test theory, Rasch model, item parameter, item selection.