THE EFFECT OF THE NUMBER OF INTERVALS TO THE SENSITIVITY AT ANALYSIS OF DIFFERENTIAL ITEM FUNCTIONING USING MANTEL-HAENSZEL'S CHI-SQUARE PROCEDURE

Heri Retnawati and Kana Hidayati

Mathematics Education Departement, Yogyakarta State University

At analysis of item bayes or called with differential item functioning (DIF) using the Mantel-Haenszel's Chi–square procedure, the students in a group is grouped pursuant to their reached score, in a certain interval. This research is aimed at revealing the effect of the number of interval to the sensitivitas at DIF analysis using the Mantel-Haenszel's Chi-Square procedure. Data used at this research is the responses of students of the third grade of SLTPN in Yogyakarta to UAN in 2002 / 2003 academic year. Analysis DIFin this research is conducted by making 3, 4, 5, 6, 7, 8, and 9 intervals in students' group pursuant to their reached score using Mantel-Haenszel's Chi-Square procedure. The result of this research showed that the number of intervals causes the differencies of the number of items load DIF significantly in every interval, and it causes the differencies of sensitivity in the DIF detection; and making 4 intervals in group of students is the most sensitive way in the DIF detection using Mantel-Haenszel methods, than others.

Keyword : DIF, the Mantel-Haenszel's Chi-square, intervals