

KEY WORD:

:MAJOR PANICHA SUNGPET : THE DEVELOPMENT OF INDIVIDUAL'S ITEM
PATTERN CONSISTENCY INDEX. THESIS ADVISOR : ASST.PROF.
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The purposes of this research were to develop the individual's item response pattern consistency index called AP index and to examine the validity of this developed index. The research findings were as follows.

1. The developed index called AP index is to measure the degree to which an individual's response pattern consistent with a perfect Guttman pattern. By using the item scores (U_{ij}) the total score (n_i) and the rank numbers of the items in AP formula, The AP value can be obtained from $1 - [\frac{\sum_{j=1}^{n_i} (1-U_{ij}) (n_i-j+1) + \sum_{j=n_i+1}^{\infty} U_{ij} (j-n_i)}{\sum_{j=1}^{n_i} (n_i-j+1) + \sum_{j=n_i+1}^{\infty} (j-n_i)}]$. The index has values that range from 0 to 1.0. The low limit, 0, is attained when examinee's response pattern is a reversed Guttman pattern, and the upper limit, 1, when examinee's response pattern is a perfect Guttman pattern. The AP value could be used as an information to assessed whether an examinee's total score on multiple choice test is representing his ability or not and an additional information for selecting examinees who have the same total score.

2. The validity of developed index examinees from 267 M.S. One students of the Bangkok Archdiocese, who had taken the mathematic test and answered the questionnaire which asked to indicate a reason for each questions they had missed found that :

2.1 AP index had the validity for indicating individual's item response pattern consistent with a perfect Guttman pattern by using the correlation between AP values and the proportion of number of correct responses with confident answer to total number of correct responses and the proportion of number of wrong responses with insufficient knowledge to total number of wrong responses as a criteris for this validity.

2.2 AP index had the validity for discriminating high consistency of item response patterns and low consistency of item response patterns ny using total score, confident answer and student ability in logistic Model as a criteria for discriminating response patterns.