The purpose of this research was to compare of the quality of short form tests by using three item selection methods that were factor loading and item discrimination indices based on the CTT and the IRT. The specific purpose were to compare the construct validity and reliability of short form tests by using three item selection methods. The research instrument was the survey of study habits and attitudes at the lower secondary education level of Brown and Holtzman translated by Khajonsuda Lekpetch. The sample consisted of 979 students in lower secondary education level M.2. Data were analyzed through descriptive statistics. Confirmatory Factor Analysis was performed to determine the construct validity through LISREL8.1, as well as Cronbach's alpha for the reliability.

The results were as follows : 1) The short form tests had construct validity. 2) The short form test developed by discrimination indices item selection based on the IRT provided the highest reliability and the followed by short form tests developed by factor loading and discrimination indices item selection based on the CTT. 3) All short form tests provided high TIF for the persons with intermediate ability (θ between -2 to +2). The short form test developed by factor loading item selection provided the highest TIF and followed by the short form test developed by discrimination indices item selection based on CTT and IRT respectively.

ภาควิชา....วิจัยการศึกษา...........................   ลายมือชื่อนิสิต..

สาขาวิชา...การวัดและประเมินผลการศึกษา.......   ลายมือชื่ออาจารย์ที่ปรึกษา...........................

ปีการศึกษา...2540...   ลายมือชื่ออาจารย์ที่ปรึกษาร่วม......................