PRANEE SRĪPA : A COMPARISON OF ANALYSIS METHODS IN BALANCED
INCOMPLETE BLOCK DESIGN HAVING A COMPLETE MISSING BLOCK. THESIS
ADVISOR : SUPOL DURONGWATANA, Ph.D. 121 PP.

The purpose of this study is comparison of three analysis methods
when the data of a block has missed in balanced incomplete block design.
They are P.D. PURI method, G.N. WILKINSON method and estimation method of
missing value by minimization of sum squares of errors. They are determined
by their mean absolute error and the power of tests for several situation
of experiment. The data were generated through simulation using the Monte
Carlo technique. Each situation was repeated 1,000 times.

The results are as follow :-

1. Mean absolute error for three methods are not significantly
different. The difference is only computation but final results will
provide equal sum squares of error.

2. The third method provide higest power for all situations.

As the results of these, if the data will be a missing block in
balanced incomplete block design then the third method will be the
appropriate alternative.