DOLACHART TUNTIVANICH: A COMPARISION OF METHODS FOR ESTIMATING POPULATION PROPORTION WITH SENSITIVE CHARACTERISTICS. THESIS ADVISOR: ASSO.PROF. SUCHADA KIRANANDANA, Ph.D., 365 PP.

The objective of this study is to compare 3 methods for estimating population proportion with sensitive characteristics, namely, Warner's method, Sorachai's method and Modified Sorachai's method (method 3). The efficiency of method, 3 is compared with Waner's method and Sorachai's method respectively under the situations of both completely truthful and less than completely truthful responses.

The results of this study can be summarized as follow:

- 1. Modified Sorachai's method was found to be more efficient than Warner's method for all population proportions of sensitive characteristics (1), provided that the probability of choosing a sensitive question by the respondent (p) is approximately greater than 0.33853587 for both completely and less than completely truthful responses.
- 2. Modified Sorachai's method was found to be more efficient than Sorachai's method for population proportions of sensitive characteristics in [0,0.35)], provided that the probability of choosing a sensitive question by the respondent (p) is in the interval [0.7, 0.9] for both completely and less than completely truthful responses.