

# # 3970612227: MAJOR EDUCATIONAL STATISTICS  
KEY WORD: LOG-LINEAR MODEL / CAUSAL ANALYSIS / PATH ANALYSIS

TAWEEPORN BOONWANICH : AN APPLICATION OF LOG-LINEAR MODEL IN CAUSAL ANALYSIS TO STUDY FACTORS AFFECTING STUDY PERIOD OF MASTER DEGREE GRADUATES IN SOCIAL SCIENCES, CHULALONGKORN UNIVERSITY. THESIS ADVISER : ASSIST. PROF. NONGLAK WIRATCHAI, Ph.D. 250 pp. ISBN 974-639-328-6.

The aim of this research was to apply a log-linear model to the causal analysis of the main effects and the first-order interaction effects of factors, directly and indirectly affecting study period of the master's degree graduates in social sciences, Chulalongkorn University. The 6 independent nominal variables were age, a leave of absent, adviser's characteristics, facilities, thesis competency and problems in conducting thesis. Study period, a nominal variable, was treated as a dependent variable. The research sample were two cohorts of 346 and 403 social sciences graduates in the academic years 1992 and 1993, respectively, data were collected by using mailed questionnaires, and were analyzed by frequency and percentage distribution, chi-squares, Cramer's  $V^2$ , log-linear analysis and path analysis.

The research results were as follows : for the 1992 cohort, there were significant direct, main effect of a leave of absent; and first-order interaction between age and facilities, between a leave of absent and problems in conducting thesis, and between adviser's characteristics and problems in conducting thesis on study period. For the 1993 cohort, there were both direct and indirect, main effects of a leave of absent, adviser's characteristics, facilities; and first-order interaction effects between facilities and problems in conducting thesis, between age and a leave of absence and between age and adviser's characteristics.

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