

## MASTER'S THESIS

### Ethical belief and behavior in using information systems: in search of predictive models

Choi, Kin Ying

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**Ethical Belief and Behavior in Using  
Information Systems: In Search of Predictive Models**

**CHOI Kin Ying**

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for the degree of  
Master of Philosophy**

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## EXECUTIVE SUMMARY

The contributions of this thesis are to address the following two main research problems that are encountered in the ethics literature. First, most ethics publications are confused with the concepts of research works in the area of ethical belief and ethical behavior. Second, the studies of influencing factors to the ethical problems are mainly based on a simple pairwise relationship. The major fault of the second approach is that the "pairwise" method, sometimes, does not meet the research requirement of some ethical problems - such as the work of Khazanchi (1995). This thesis recommends solutions to the above two problems.

In this thesis, definitions of the ethical concepts in belief and behavior are offered. The thesis also showed that there are papers in fact mistakenly using these ideas interchangeably in literature. Later, a multivariate approach is proposed to solve the deficiencies of using pairwise approach in studying the influencing factors of the codes of conduct in ethics. The proposed solutions are further elaborated below.

Two separate predictive models for ethical belief and ethical behavior are developed for the study of influencing factors to an Information Systems Professional Codes of Conduct (ISPCC). The proposed ISPCC is based on the linear combination of seven codes of the Institute for Certification of Computer Professionals (ICCP) that were reviewed by Parker (1979). The findings of this thesis are based on a questionnaire survey method. The study subjects are referred as Information Systems (IS) managerial users; that is, functional managers who make use of IS for decision making. A total of 400 participants are randomly

drawn from a database of an IT Management Club of a computer society in Hong Kong. A total of 249 usable questionnaires were returned.

In model development, the Canonical Correlation Analysis (CCA) is adopted as the basis of the problem representations of ethical belief and ethical behavior problems in this thesis. In modeling the CCA models, the linear combination of seven codes of ICCP are treated as the explained variables. The predictor variables for ethical behavior model include two sets of linear combination of factors; namely, individual factors and environmental factors found in literature. The predictor variables for ethical belief model involve only linear combination of individual factors. The proposed two CCA models are solved by a software procedure which is known as the MULTIVARIATE of ANOVA MODELS in SPSS package. The results of these two predictive models are reviewed below.

In the predictive ethical belief model, there are six significant linear combination of explained variables and four significant linear combination of predictor variables. The model suggests that the ethical belief of the IS managerial users who meet the following combination features exhibit higher ethical standards of belief: 1) an older age group, 2) a higher level of education, 3) a higher level of managerial position, and 4) an extensive working experience.

In the predictive ethical behavior model of the IS managerial users, there are seven significant linear combination of explained variables and five linear combination of significant predictor variables. This model suggests that the ethical behavior of the IS managerial users in this study who meet the following combination features exhibit higher ethical standards of behavior: 1) an older age group, 2) a higher level of education, 3) a higher level of managerial

position, 4) an extensive working experience, and 5) possess a religious value. One important note to the above findings is that the ethical behaviors of the IS managerial users are not influenced by the combination features of their peer group, top management and company policy.

In comparing the results of the above two predictive models, two additional significant combination factors for the ethical behavior model are reported as: 1) "integrity" of explained variable, and 2) "religious value" of predictor variable. When comparing the mean values of the ethical belief and behavior, the results show that the standard of one's ethical belief is always higher than one's ethical behavior.

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