

Regional Difference in Ethics Decision Making: A Study of IT Pre-professionals in China



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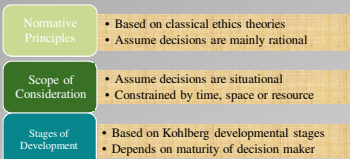


Introduction

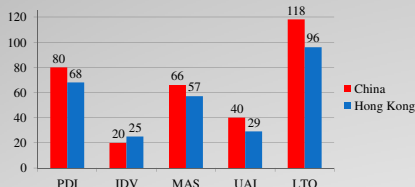
Information and communications technology played a significant role in the recent economic growth of China, which now ranks as the second largest economy in the world. As a result, China faces many social and ethical challenges common to technology-advanced countries. Ethical reasoning and practices are often influenced by cultural expectations and regional norms. The purpose of this study is to investigate ethics decision making by IT professionals in different regions of China. In contrast with many previous studies on comparisons across different countries, this research focuses on intra-country differences.

Theoretical Background

IT ethics decision making may be analyzed from many different perspectives. In this research we shall focus on three: (a) Normative ethics principles, (b) Scope of consideration, and (c) Stage of psychological development.



In addition, Hofstede's cultural dimensions theory is used to comparing and analyzing the results



Methodology

Data was collected by distributing survey the survey "I.T. Ethics Decision" at four different regions of China with different degree of Westernization:

- Hong Kong: Hong Kong Institute of Technology
- Guangzhou: Jinan University
- Wuhan: Wuhan University of Sciences and Technology
- Changshu: Changshu Institute of Technology

The questionnaire of the survey contains three parts:

- Demographics
- Decision choices would be made in an IT ethics scenario (1) and the reasons *
- Decision choices would be made in an IT ethics scenario (2) and the reasons **

Both versions of I.T. Ethics Decision – paper and electronic – were used with the collection of 950 raw data before October 1, 2011. The raw data were carefully reviewed. Data values that are obviously wrong or do not make sense were discarded. This yielded 708 usable data sets. The resultant data were analyzed using cross-tabulation and Chi-square tests by SPSS.

Since the purpose of our research is to determine whether there is any difference in ethics decision making for subjects from the four different regions, the independent variable is the "Survey Center".

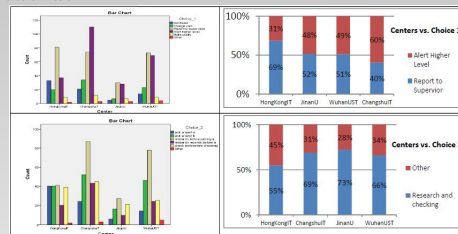
Dependent Variable	Questions
Scenario 1	Scenario 2
(Survey question to which the dependent variable corresponds)	
Ethic_1	Ethic_2
Choice_1	Choice_2
Reason_1	Reason_2
Scope_1	Scope_2
Punish_1	Punish_2
ForMe_1	ForMe_2
Peers_1	Peers_2
Community_1	Community_2
Society_1	Society_2
Principle_1	Principle_2

Results

The Chi-square values of the cross tabulation between the independent variable and dependent variables were examined. Out of the 20 sets of cross tabulation, 11 of the dependent variables showed Chi-square values that are significant different with respect to the region (survey center) variable. Table below lists all variable-pairs that show significant differences, $p \leq 0.05$. To conserve space, the remaining 9 "non-significant" cases are not shown here

Scenario	Centers vs.	Chi-square	df	p
Scenario 1	Choice_1	44.738	15	0.000
	Reason_1	41.825	15	0.000
	Scope_1	21.246	12	0.047
	Punish_1	17.287	6	0.008
	ForMe_1	18.591	6	0.005
	Society_1	12.828	6	0.046
Scenario 2	Choice_2	45.099	15	0.000
	Reason_2	42.572	15	0.000
	Punish_2	18.343	6	0.005
	ForMe_2	13.919	6	0.031
	Society_2	17.955	6	0.006

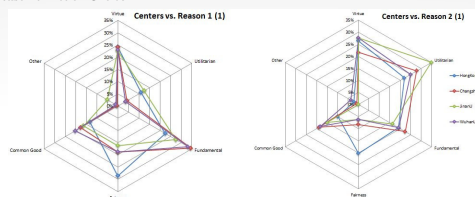
1. Choice of Action



The graphs on the right bear out the differences.

- The action choices of the Hong Kong subjects are very different (see graph on left) from those subjects in the other three regions in China mainland.
- In Scenario 1, the Chinese (mainland) subjects have a much greater tendency to alert a HIGHER level of management as oppose to Hong Kong subjects who tended to report to the immediate supervisor. This seems to reflect the greater "power-distance" characteristics of Chinese subjects as reported by Hofstede (2010).
- In Scenario 2, again the action choices of the Hong Kong subjects are significantly different from those of the Chinese subjects. The graph on the right indicates that a greater percentage of subjects from China would choose to conduct further research and checking before making a decision, reflecting the greater "uncertainty avoidance" characteristics of Chinese subjects compared to Hong Kong (Hofstede 2010).

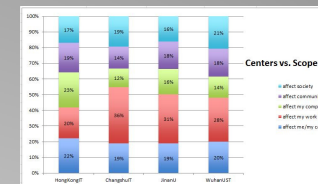
2. Reason of Action Choice



The reasons given by the Hong Kong subjects are significantly different from those by the Chinese subjects.

- In Scenario 1, the Chinese subjects regarded "Fundamental rights" as the most important reason for their decision choice, while the Hong Kong subjects regarded "fairness" as the dominant reason. Noting the drive of the Chinese people for democratic reform during the past few decades, this finding is not difficult to understand.
- On the other hand, in Scenario 2, where an environment issue is involved, utilitarian principle was considered the dominant reason by the Chinese subjects, while the virtue principle was considered the dominant reason by the Hong Kong subjects.

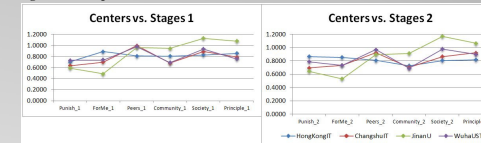
3. Scope of Consideration



Significant regional differences at the 0.05 level were found in Scenario 1 but not in Scenario 2. The graph shows that:

- The "team" factor is the most important consideration for the subject from China mainland
- The "company" or the "personal interest or career" factors are more important for the subject from Hong Kong
- This is not unlike what were reported by Hofstede (2010), who found that the Chinese culture is more towards the "collectivistic" end of the continuum, while the Hong Kong culture is more towards the "individualistic" end of the continuum.

3. Stages of Development



- The Guangzhou (Jinan U) subjects scored low for the two early stages (Punish, ForMe) in the "Preconventional" level, but scored high for the two last stages (Society, Principle) in the "Postconventional" level.
- The Hong Kong subjects showed exactly the opposite trends. In fact, the actual value of the "average measure of the degree of relevance" for Hong Kong subjects lies mostly around 0.8 for all stages.
- The Changshu subjects and the Wuhan subjects are pretty similar, which is opposite to the expectation that Chugnsu subjects to be more similar to Guangzhou subjects.
- The "developmental" profile of the Hong Kong subjects is found to be very different from the profiles shown by the subjects in the other three regions. The similarity of the developmental profiles of the Changshu, Wuhan, and Guangzhou subjects can be clearly seen, but they are very different from that of the Hong Kong.

Discussion and Summary

- The Chinese subjects, which have a larger PDI measure, were found to prefer to report to a HIGHER level manager than the immediate supervisor, while the Hong Kong subjects with a lower PDI value, were found to prefer to report to an immediate supervisor.
- The Chinese subjects, which have a higher AVI measure, were found to prefer to do more research to find out more about the two companies, before making a decision choice.
- In terms of the scope of consideration, the Chinese subjects' main focus was to consider their own workgroup or peers, while Hong Kong subjects' focus was on self-benefits and career, or the company. This is consistent with the greater IND score for Hong Kong as compared to China.
- The Hong Kong subjects score higher on Preconventional level (reward and punishment orientation), while the Chinese subjects score higher on the Postconventional level (society and principle orientation) which reflects to higher IND score for Hong Kong as compared to China. Hence, the stronger western influence on Hong Kong subjects can be clearly seen.

With the trends an increasing globalized workforce in many companies, the implications of our findings are very relevant for IT managers managing IT projects. In matters relating to IT ethics practices and decision making by IT professionals and pre-professionals, managers not only have to be cognizant of the intercultural differences between people from different countries but also people from different regions of the same country who may have experienced different degree of globalization influences.

Appendix

(*) Scenario 1 involves a choice whether to blow the whistle with respect to certain questionable program coding practices

(**) Scenario 2 involves a choice on whether to take on an IT project from a client with questionable environmental records