African Journal of Business Management Vol. 5(21), pp. 8478-8486, 23 September, 2011
Available online at http://www.academicjournals.org/AJBM
DOI: 10.5897/AJBM11.608
ISSN 1993-8233 ©2011 Academic Journals

Full Length Research Paper

Is moral intensity applicable to natural environment issues?

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Accepted 30 May, 2011

Previous research about moral intensity has mostly centered on ethical issues related to people, with relatively less exploration of ethical decisions related to the natural environment. Therefore, this study investigated perceptions toward three aspects of business environmental ethics, including natural ecology definition, business ecological role and business environmental protection; as well as the relationship among three aspects of business environmental ethics and moral intensity was investigated. The authors used the data collected from a survey of staffs, trainees, and trainers of a consulting and training institute, which was established more than 40 years ago. After gathering 448 effective responses, we used structural equation model to test the hypotheses. Results showed that moral intensity may be more prone to teleology and therefore cannot be fully supported in this study to apply to natural environment issues. After all, directions for further research and implications for practice were provided.

Key words: Business environmental ethics, ethical issues, moral intensity, natural environment issues environmental ethics.

INTRODUCTION

As the natural environment deteriorates, the concept of environmental ethics which emphasizes treating environment sincerely and equally has gradually gained increasing attention (Naess, 1973; Taylor, 1986). Concern over the natural environment has been a persistent problem for industrial society (Strong, 1996). Numerous studies begin to connect business environmental operations with environmental ethics and results mostly point toward the need for businesses to pay attention to environmental conservation (Davidson, III and Worrell, 2001; Gladwin, Kennelly, and Krause, 1995; Hart, 1995; Shrivastava, 1995; Tello and Yoon, 2008). Such results more or less form the external pressure for companies to conduct environment-friendly practices.

However, Gadenne, Kennedy and McKeiver (2009) stated that external pressures perhaps can require companies to carry out higher levels of environmental measures but may not improve a firm's environmental awareness. If enterprises do not have higher environmental awareness, their environmental measures may be kind of compliant and of limited effectiveness that they are unable to maintain a sincere approach to ecological environmentalism (Wolff, 1996).

How to measure and improve a company's environmental awareness? Hsu (1998) proposed a construct named business environmental ethics; she thought the level that a company's awareness and care of the environment should be judged and improved through multi facets, including how to define the nature, how to recognize the role of business toward the natural environment, and how to perceive the business policy toward environmental issues. Since business environmental ethics includes an aspect that is related to a firm's environmental policy, it is involved in an ethical decision process. Regarding the influencing factors of an ethical decision process, Jones (1991) proposed an issue-contingent model. Jones thought that an ethical decision is influenced by the issue's moral intensity including the magnitude of consequences, probability and

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concentration of effect, and temporal immediacy. In addition, it also includes social consensus as well as proximity namely the close relationship between the persons being influenced and the behavior policymakers.

Related to the proposition of moral intensity, Morris and McDonald (1995) argued that moral intensity should be unable to be directly measured but can only be indirectly judged on the doer's subjective perception. Meanwhile, many researchers attempted to test the relationship between moral intensity and ethical decisions (Haines, Street, and Haines, 2008; Peslak, 2008; Singhapakdi, Vitell and Franke, 1999); the results in general supported Jones' (1991) model; namely, moral intensity has a certain influence on ethical decisions. However, these researches mostly centered on people related issues; for instance, the influence of moral intensity on consumer's issues etc. Little research has discussed if moral intensity is also suitable for natural environment issues. Therefore, this study examined the relationship between peoples' perceptions toward business environmental ethics and moral intensity in order to understand if moral intensity can be applicable to natural environment issues.

Environmental ethics

Hsu (1998) stated that business environmental ethics are mainly derived from integrating the concepts of environmental ethics and sustainable development. Regarding environmental ethics Leopold (1949) argued that humans should reconsider the scope of ethics and expand human ethics to land ethics. Leopold also thought that mankind and all species are symbiotic parts in the ecological community, so humans should respect the land and all species and biodiversity should be maintained among the ecologies so as to help balance all species and assist all species to adapt to various natural evolutions and changes. Nevertheless, although the environment will change naturally, if humans cause drastic changes in nature, the ecology will be out of balance, which in turn causing the environment to worsen.

After the proposition of land ethics, Naess (1973) also brought up the viewpoint of deep ecology, where he emphasized that humans should think more deeply about the relationship between humans and the environment; humans would find the whole Earth is full of species and each one has its own intrinsic meaning. Based on this viewpoint, Taylor (1986) developed a series of arguments and dialectics. He believed that nature is full of vitality, all species are interdependent, and all species have intrinsic meanings and are mutually equal; he also pointed out that human history is much shorter than those of many species and humans cannot survive alone. Since mankind is a new resident on the Earth and needs help from other species, humans should be more humble and should not be conceited as being the best species and arrogantly meddle in nature. Taylor even brought up some concrete environmental ethical principles, including:

1. Nonmaleficence, which means except for self-defense or survival needs, mankind should not harm other living species;
2. Noninterference, which denotes that all species should get along peacefully and try to safeguard each other's freedom and not to interfere with each other;
3. Fidelity, which indicates that since humans should have interpersonal fidelity, they should treat other species with fidelity as well and behaviors like hunting, trapping, fishing, etc. are all deceptive so as to catch other species;
4. Restitutive justice, which intends that mankind should redeem one's own sins of environmental destruction in the past in order to be able to align with common justice; therefore, the mankind should undertake protection work more aggressively.

Sustainable development

Sustainable development places importance on limited resources. It is impossible for each generation to consume and spend extravagantly, so business growth should be restrained to reduce the resource depletion. Gladwin, Kennelly and Krause (1995) argued that sustainable development mainly emphasizes the balance of economy and ecology and the interdependence of humans and nature. In addition, Gladwin et al. also pointed out that even though many viewpoints of sustainable development are similar to environmental ethics, the essence of environmental ethics is eco-centric to claim that all beings have intrinsic values, whereas sustainable development is broadly homocentric. That is, when humans view nature, there is no avoidance of self-interested considerations. Therefore, the intrinsic values of all species whoever argued always reflect human's values. Even so, Gladwin et al. still appealed that humans should stay alert and not confine nature to only be of instrumental value.

How to implement sustainable development in companies? The World Business Council for Sustainable Development brought up the concept of the eco-efficiency in 1992; the council emphasized companies should produce more from less and utilize the cyclic process of plan-do-check-action (PDCA) to achieve continuous improvements in environmental quality. In addition, Shrivastava (1995) believed that companies can, using life-cycle analysis, understand how much products affect the environment during production and in turn they can manage the products' inputs, production, and recycling; the practices can include: reducing waste, increasing material re-utilization, increasing product safety, properly handling product recycling, etc. Secondly, companies can employ eco-sustainability to create competitive

strategies (Hart, 1995; Tello and Yoon, 2008). For example, companies can incorporate environmental protection concepts into their product design to create differential advantages for products; companies also can prevent pollution in order to lower costs and manage products to gain leading positions; or companies can shape the sustainability vision in order to obtain preemptive opportunities in line with trends.

Business environmental ethics

Sustainable development and environmental ethics both are concerned about the environment, but there are some fundamental differences in their arguments. For example, sustainable development emphasizes economic aspects but has not redefined the environment, so it still regards the environment as the object that can be managed and consequently, it emphasizes the efficiency of environmental management and benefits that environmental management can bring. Oppositely, environmental ethics expand ethical consideration to non-human species and redefine species to be entities that have the same level as mankind but have different intrinsic values, so mankind should consider how to get along with species harmoniously and mutually support and truly care about the natural ecology (York, 2009).

Regarding the differences between sustainable development and environmental ethics, Hsu (1998) combined these two concepts with a complementary view and developed a new construct: business environmental ethics. Hsu laid out arguments of both concepts and replaced “mankind” with “businesses”. If there is any contradiction among arguments, she held focus group meetings or expert interviews to decide which is better or whether retouch is needed. Such a process can improve the description of reality and consider the business logic to avoid the construct too idealistic (Dentchev, 2009). Lastly, Hsu divided business environmental ethics into three aspects and gave each an operational definition: 1. Natural ecology definition, which means the perception toward the definition of nature, for example, considering nature as a spiritual meaning for various lives; 2. Business ecological role, which means the perception of business role toward the ecological environment, for example, whether the company should take the role of moral responsibility for the natural environment; 3. Business environmental protection, which means the perception toward firms’ environmental policies, for example, whether companies should cooperatively protect environment.

Based on Hsu’s (1998) theoretical foundation, Sheng and Hsu (2000) developed a questionnaire and conduct an empirical study. Results verified these three aspects after factor analysis and showed the higher the perception toward business environmental ethics, the higher degree of employees’ cooperation with firms’ environmental measures. Moreover, since a firm’s corporate social performance (CSP) will send signals to job applicants about what it would be like to work for a firm (Greening and Turban, 2000), Backhaus, Stone, and Heiner (2002) found CSP, especially its dimensions of environment, community relations, and diversity will have affect on employer attractiveness for job seekers. As well Sheng (2001) found the job seekers’ perception of business environmental ethics will influence their needs for job condition.

Moral intensity

Business environmental ethics includes an aspect related to business environmental policies; showing this construct is involved in an ethical decision process. Rest (1986) stated that the process of ethical decisions could be divided into four stages. The first stage is moral re-cognition; that is, people need to sense moral meanings of issues, for instance, being aware that businesses have moral obligations toward the natural environment. Second stage is moral judgment to distinguish between right and wrong, for example, judging if the company’s environmental policy or conduct is right or wrong. Then, the third stage is moral intention, attempting to perform right behaviors. Finally, the last stage is the concrete moral behavior--taking the right actions after an attempt.

Many scholars (Cottone and Claus, 2000; Gadenne, Kennedy, and McKeiver, 2009) thought that in general the ethical decision process is influenced by two kinds of factors. The first kind of factor is the principle factor, which means the moral principles of a decision maker. These principles may come from personal experiences or be influenced by demographics such as gender, education, age, etc., and a decision maker will apply these principles to make judgments even facing different ethical dilemmas. On the other hand, the second kind of factor has the social interactive nature, which mainly means when a decision maker faces ethical dilemmas, he or she will be influenced by social interactions or situations at that time such as considering social expectations, legal norms or economic realities, etc.

Moral intensity basically is a factor that has a social interactive nature. When making ethical decisions, people will be influenced by the attributes of moral issues, namely the moral intensity, which includes: 1. Magnitude of Consequences, meaning the harming or benefiting level caused by decision result. 2. Concentration of Effect, meaning the number of victims or beneficiaries that will be influenced under a certain result and the more people that share the influence of the result, the lower the concentration of effect is. 3. Probability of Effect, meaning the probability that the result will happen. 4. Temporal Immediacy, meaning the duration time between the decision/behavior happens and the result appears. 5. Social Consensus, meaning the recognition level of the

public of the decision. 6. Proximity, meaning the physical, psychological or societal closeness of decision makers toward the victims or the beneficiaries (Jones, 1991).

With regard to moral intensity, lots of articles chose specific parts, not all, of moral issue attributes to study, for example only examining magnitude of consequences and so on. Furthermore, many studies have found even though moral intensity will influence the ethical decision process in general, as the different issues or the moral situations become fuzzy, the influence of the moral intensity will change (Peslak, 2008). According to Jones' (1991) original argument, to be appropriate, these attributes should be combined and studied together. May and Pauli (2002) also asserted all attributes should be studied. Therefore, for business and natural environment issues, this research will verify the relationship between business environmental ethics and the overall moral intensity, which covers all six attributes.

Generating hypotheses

Leopold (1949), Naess (1973), Taylor (1986), and Sheng and Hsu (2000) all believed if people could use a more organic or personified approach to define the environment, a more friendly positive emotion toward the environment will occur. Also, Michael et al. (2007) pointed out emotion will influence one's perception about bearing the responsibility of ethical decisions. Aloof people are more inclined to be self-interested; in contrast, people who are empathetic are prone to be altruistic. Thus, this research proposes hypothesis 1 and hypothesis 2 is proposed on Rest's (1986) argument that moral recognition contributes to the formation of moral judgment.

H_1: Definitions influence ethical decisions.
H_{1a}: Definitions influence the moral recognition of ethical decisions; that is, the more people are inclined to the organic or personified definition of a natural ecology, the more they think businesses should take on the role of bearing the moral responsibility.
H_{1b}: Definitions influence the moral judgment of ethical decisions, that is, the more people are inclined to the organic or personified definition of a natural ecology, the more they can approve of businesses' environmental protection actions.
H_2: Moral recognition influences moral judgment; that is, when people think businesses should bear more ecological moral responsibility, they increasingly can approve businesses' environmental protection actions.

Carlson, Kacmar, and Wadsworth (2002) pointed out that the more objective view the decision makers hold, the less moral intensity perceived by decision makers. This finding means when people are more prone to an organic or personified environmental definition, people can have more subjective emotions toward the environment, have a connecting feeling toward natural environment issues, and then have a more sensitive awareness toward the moral intensity of environmental issues. Next, according to the viewpoints of Jones (1991) and Morris and McDonald (1995), once people are aware of the moral intensity, ethical decisions, including moral recognition and moral judgment, will be influenced. Accordingly, this study proposes the following hypotheses:

H_3: Definitions influence moral intensity; that is the more organic or personified definition of natural ecology people have, the higher the moral intensity people perceive about the environmental issues.
H_4: Moral intensity influences ethical decision.
H_{4a}: Moral intensity influences moral recognition of ethical decision; that is the higher the moral intensity people perceive about environmental issues, the more they think businesses should bear the moral responsibility role toward the ecology.
H_{4b}: Moral intensity influences moral judgment of ethical decision; that is the higher the moral intensity people perceive about environmental issues, the more they approve a businesses' environmental protection actions.

METHODOLOGY

The present study chooses the trainees and employees including consultants and staff members of a consulting and training institute established more than 40 years ago as the research subjects. After obtaining the institute's approval, questionnaires were spread over different times to all employees while stratified sampling was used for the trainees. For total 14 types of courses, this study randomly selected 10 percent of the trainees of each course to dispatch questionnaires. Total of 550 questionnaires were dispatched to all subjects. After removing questionnaires with inconsistent answers on items, 448 questionnaires were effective, consisting of 295 trainees, 89 consultants, and 64 staff members; the effective response rate was 81.45%.

The main reasons for choosing these subjects to conduct survey were:

1. It was easy for the researcher or the assistants to go to the single site (training centre) in person to dispatch the questionnaires, which increased questionnaire returns, let respondents have enough time to fill in the questionnaire attentively, and reduce response errors through questionnaire explanation and small gifts;
2. The institute has a long history, good reputation, and quite a few senior professional consultants. These people have assisted a lot of businesses, thus we inferred that they will have some impacts on businesses' thinking;
3. After trainees including top level managers returned to their companies, when training was complete, they usually had better performance and were promoted. Therefore, these trainees had certain influences on business decisions.

Concerning measuring instruments, the research first adopted the questionnaire designed by Sheng and Hsu (2000) to measure the perception of three aspects of business environmental ethics, including natural ecology definition, business ecological role, and business environmental protection. Then, because there was no relevant questionnaire for measuring moral intensity concerning environmental issues, the researcher designed a questionnaire in

Table 1. Reliability and construct validity.

Variables	Item	Correlation Coefficient Item vs. Variable	Cronbach's alpha
Moral Intensity	1. Businesses damage the ecological environment severely.	0.7748	0.9077
	2. On average, companies' destruction to the ecological environment will be shared among many victims.	0.5444	
	3. While operating, companies will possibly destroy the ecological environment.	0.7456	
	4. Businesses' destruction to the ecological environment is seen immediately	0.8101	
	5. The public is really concerned about the issues between business and natural environment.	0.7967	
	6. I will really sympathize with the victims of ecological environment destruction.	0.8042	
Natural Ecology Definition	1. Nature is not only materials gathering but also has the spiritual meanings of various lives.	0.6979	0.8485
	2. Companies should realize more about the close feelings of the mankind and the earth.	0.7667	
	3. Natural environment is the same as humans, easily injured.	0.6872	
Business Ecological Role	1. Companies should, with conscience, take the moral responsibility for environment.	0.7032	0.8638
	2. Companies' role is complying with the nature, not conquering the nature.	0.7610	
	3. The moralities exist between companies and natural environment.	0.7595	
Business Environmental Protection	1. Companies should internalize sustainable concepts into their organizational culture.	0.2186	0.6931
	2. Companies should cooperate to advance the environmental protection.	0.6689	
	3. Concepts of protecting environment should be put in practice for any company.	0.7159	

person, referred to the measuring methods of Morris and McDonald (1995), Singhapakdi, Vitell and Franke (1999). For example, we used "Businesses damage the ecological environment severely" to measure the magnitude of consequences and also used other items to measure concentration of effect, probability of effect, temporal immediacy, social consensus, and proximity.

After collecting 448 effective questionnaires, the research used Cronbach α to examine internal consistency of each variable. Results are as shown in Table 1; α value of moral intensity is 0.91, of natural ecology definition is 0.85, of business ecological role is 0.86, and of business environmental protection is 0.69. Overall, measures are over 0.7 and reliabilities are acceptable (Cuieford, 1965; Nunnally, 1978).

We also measure the construct validity of questionnaire for business environmental ethics and moral intensity, mainly adopting suggestions of Kerlinger and Lee (2000). First, we assumed the sum-up score of items for each variable was valid and then used the correlation coefficient between the score of individual item and the sum-up score to judge for the construct validity of each variable. Results are also as shown in Table 1. Except for the first item of business environmental protection has low coefficient, while other coefficients are above 0.5, generally showing the construct validity is acceptable.

RESULTS

Table 2 is the overall fit test including the test on predictive validity of variables; this mainly investigated, using structural equation model, the overall structure's causal relations among moral intensity, natural ecology definition, business ecological role, and business environmental protection. If the causal relations can be accepted, then the variables have predictive validity.

Table 2. Overall fit test.

Reference indicator	Indicator value	Judgment criterion
χ2	297.4274***	p-value < 0.01
χ2/d. f.	297.4274/80 =3.72	The smaller the better, best to be smaller than 0. 3.
GFI	0.9089	The bigger the better, best to be bigger than 0.9.
AGFI	0.8634	The bigger the better, best to be bigger than 0.9.
RMR	0.0549	The smaller the better, best to be smaller than 0 .05
NFI	0.9041	The bigger the better, best to be bigger than 0.9.

*** p-value < 0.001.

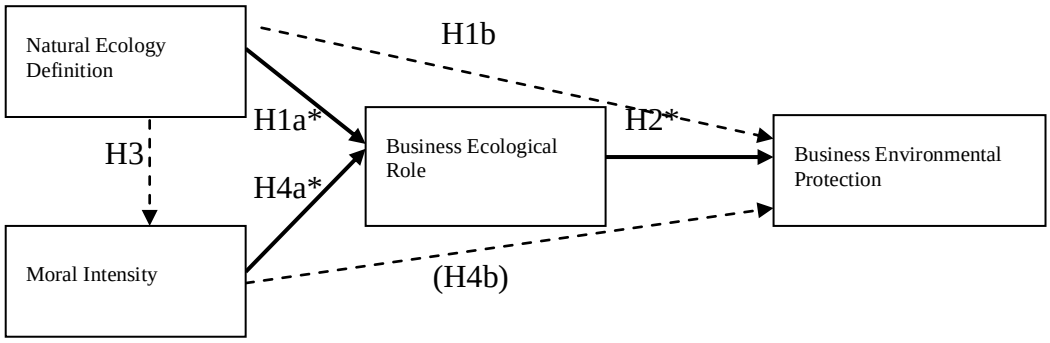

Figure 1. Path diagram of hypotheses test.

From Table 2, we can see χ^2 is 297.4274 (p-value < 0.001) and χ^2/d.f. is 3.72 (close to 3), GFI is 0.9089 (> 0.9), AGFI = 0.8634 (close to 0.9), RMR = 0.0549 (close to 0.05), and NFI = 0.9041 (> 0.9). Referring to Jöreskog and Sörbom's (1996) suggestion, these data show the causal structure is basically appropriate and also show this study's variables have acceptable predictive validity.

Next, this study tested the latent variables and hypothesis 1 to hypothesis 4. Table 3 shows each λ reaches a level of significance (t-value>1.96); therefore the latent variables were verified. Table 4 is the result of hypotheses test and Figure 1 shows the path diagram. From Table 4 we can see that hypothesis 1-1, 2 and 4-1 are accepted (t-value> 1.96) while hypothesis 1-2, 3 and 4-2 are rejected.

DISCUSSION AND CONCLUSION

This study's main objective was to investigate the relationship between business environmental ethics and moral intensity. Figure 1 shows the results for H_1 to H_4. Among them, H_{1a} is supported, showing that the more people are inclined to the organic or personified definition of natural ecology, the more they approve of the opinion that businesses should take on the role of bearing the moral responsibility. Meanwhile, although not statistically significant, H1b shows that people's personified definition of the natural ecology positively influences his or her approval level of businesses environmental protection. The result for H_{1a} and H_{1b} somehow supports the argument of environmental ethics theorists, including Leopold (1949), Naess (1973), and Taylor (1986); that is, people's friendly definition of the environment will make people have a positive emotion toward the environment and in turn make people approve of ethical decisions that are favorable to the environment.

Moreover, Rest (1986) stated that people's moral recognition can influence moral judgment, which is evidenced from the statistical acceptance of hypothesis 2. Accordingly, people's moral recognition, namely, recognizing businesses' ecological role, can influence peoples' moral judgment on business environmental protection.

As for how to change peoples' definition of environment, York (2009) asserted if we adopt environmental pragmatism, namely keep the open-ended inquiry on the real life problems between humans and the natural environment, it is possible to make the definition of environment clarifier or in a more common consensus, then we can incorporate environmental ethics into the decision framework of actual business operations. In practice, Sheng and Hsu (2000) and Rozzi et al. (2006) suggested to encourage people go outdoors and experience the beauty of nature in person, for example making a business ecological tour, which is helpful to keep

Table 3. Latent variables test.

Latent variable	Parameter value	t-value
Latent variable, natural ecological definition includes three items	λX_1=0.7696	25.0674*
	λX_2=0.8977	32.6371*
	λX_3=0.7551	24.2289*
Latent variable, moral Intensity includes six items	λY_1=0.8136	28.8194*
	λY_2=0.8600	33.5085*
	λY_3=0.5642	14.3465*
	λY_4=0.8316	30.5156*
	λY_5=0.8397	31.3213*
	λY_6=0.8254	29.9081*
Latent variable, business ecological role includes three items	λY_7=0.5183	12.2921*
	λY_8=0.4610	10.3884*
	λY_9=0.7261	19.4318*
Latent variable, business environmental protection includes three items	λY_{10}=0.5619	13.3883*
	λY_{11}=0.5823	14.1203*
	λY_{12}=0.5537	13.1007*

* t-value >1.96.

Table 4. Hypotheses test.

Hypothesis	Parameter value	t-value
H_{1a}: Definitions influence the moral recognition of ethical decisions	γ_2 = 0.3311	5.6198*
H_{1b}: Definitions influence the moral judgment of ethical decisions	γ_3 = 0.0830	1.2114
H_2: Moral recognition influences moral judgment	β_3 = 0.9480	18.8415*
H_3: Definitions influence moral intensity	γ_1 = 0.0880	1.6807
H_{4a}: Moral intensity influences moral recognition of ethical decision	β_1 = 0.3070	5.3168*
H_{4b}: Moral intensity influences moral judgment of ethical decision	β_2 = -0.0302	-0.4726

t-value>1.96.

keep employees good interactions with nature, leading to the intimate and friendly definitions of nature. Based on these arguments it may be interesting for future research to explore what kind of “outdoor interaction” between people and natural environment will improve peoples’ friendly definition of environment.

Lastly, the other two hypotheses are related to moral intensity. The inference of H3, derived from Carlson, Kacmar, and Wadsworth’s (2002) research about moral intensity, is not significantly supported even though it is positively related in this study. Hypothesis 4 is based on Jones’ (1991) argument; among them, H4a is supported but H4b is not significantly supported and even appears to be negatively related. Accordingly, in the present study Jones’ argument is only partially supported.

Not only in this study but also in the studies of Deborah (2006), Piercy and Lane (2007), and Wasieleski and Hayibor (2008), findings show that the relationship is not stable between moral intensity and certain ethical decision processes or some ethical decisions that are under certain specific situations. For example, Haines, Street, and Haines (2008) found people’s perception of the importance of an ethical issue may affect some steps of an ethical decision but may not influence all steps. That is, the issue-contingent model proposed by Jones (1991) is not supported in all studies.

Such a phenomenon may have two reasons: First, some limitations in research resulted in deviations. Second, the arguments of Jones (1991) may have some implicit restrictions that were not considered in advance in this or other research.

For the first reason, without doubt, there are many limitations in this study. For example, there was no moral intensity questionnaire specifically designed for natural

environment issues in the past, so this study had to self-design the items to measure the related moral intensity. Although the construct validity was confirmed in this study, it still was the first time to use these items and of course there are rooms for improvement. In addition, Christensen and Kohls (2003) and Piercy and Lane (2007) pointed out that ethical decision processes are influenced by many causes, including organizational and individual causes, which might moderate the results.

These causes were not considered in this research. With regard to the second reason, according to Jones' (1991) definition, we can find the six attributes of moral intensity are basically dependent on the results of moral issues, for example, magnitude of consequence, concentration of effect, and probability of effect, etc. That means moral intensity is a certain concept that is prone to teleology, namely, using the consequence or effect of a behavior or decision to measure its morality. Nevertheless, beside teleology, there are many other viewpoints such as deontology and virtue ethics to help people judge the morality. For example, Taylor's (1986) fidelity principle is prone to deontology, emphasizing no matter how the result is, deceiving ways of catching the living things should not be allowed. In addition, Chuang (2006) mentioned that the principle of fairness and justice instead of maximum interest or utility of the consequence should be used to consider allocating social resources to various kinds of environmental issues.

Ethical decisions may be affected by teleology, deontology or virtue ethics and everyone's viewpoint may not be the same and may be relative instead of absolute, meaning humans depend on the situation to decide which viewpoint or moral principle to adopt (Forsyth, 1980). Therefore, just using moral intensity, which is prone to teleology, to predict a person's ethical judgment may not be very thorough and appropriate. Accordingly, in this study, arguments of Jones (1991) and Carlson, Kacmar, and Wadsworth (2002) cannot be fully supported.

How to handle the problem that different moral principles may affect one's ethical decisions? Perhaps, when conducting a research of business ethics, first clarify what the decisions are concerned with. If a decision is more concerned with the output not the process, teleology may be proper. For example, in Eva, Katja, and Erich's (2007) research, they showed the participants some vignettes emphasizing different results of investment to recognize their moral perception of investment behaviors. For this case, teleology is appropriately used and their research results verified Jones' (1991) issue-contingent model. Nevertheless, if a study focuses on the issues of basic rights, minority groups, or natural environment protection, which are usually concerned with justice and fairness among unequal parties, deontology may be proper (Robbins, 2005) and Jones' issue-contingent model that is prone to teleology may be not applicable.

After the concerns of decisions are clarified, it should be noticed that there are various facets or streams of deontology and teleology. These facets or streams may have different emphasis and different names such as utilitarianism, egoism or enlightened egoist for teleology; and Kant's formalism or Rawls' contractarianism for deontology (Audi, 1999; Ferrell, Fraedrich, and Ferrell, 2005). Therefore, when considering the influences of different viewpoints of teleology or deontology, the relationship with ethical decisions and moral judgment may become quite complicated.

For exploring a more complicated problem, Hendry (2003) argued that grounded theory proposed by Strauss and Corbin (1990) may be suitable. From open coding to selective coding, grounded theory provides a framework for straightening up the clues in a complicated situation and finding out the possible relationship among different concepts or constructs. Then researchers can develop hypotheses based on the relationship and use, if necessary, statistical methods to test hypotheses. During such a process, researchers may identify, explore deeply and comprehend ethical issues in a dynamic, complex, or even dangerous business world.

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