

Effects of Moral Development on Employees' Intent to Report Wrongdoing in an Organization

<조직 내 부정 신고의 의도에 대한 도덕발달의 영향>

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ABSTRACT

대부분의 연구자들은 조직 내에서 발생하거나 은폐된 부정의 증거를 드러내는 내부고발을 도덕적 행동으로 간주한다. 이러한 믿음은 내부고발자가 도덕발달이라는 점에서 다른 사람들보다 높은 수준에 있는가라는 의문을 갖게 한다. 이 연구의 목적은 조직에서 내부자의 부정 신고 의도와 콜버그의 도덕발달 6단계 간의 관계를 검토하는 것이었다. 내부 부정 신고의 유형과 콜버그 도덕발달 이론에 관한 선행연구를 검토한 후, 질문지 방법을 사용하여 데이터를 수집하였다. 290명의 최종 유효 표본을 분석에 사용하였다. 분석 결과, 콜버그 도덕발달 이론에서의 P-score는 부정 신고에 유의한 영향을 미치지 못하였다. 한 가지 흥미있는 결과는 도덕발달과 내부자의 부정 신고 의도는 콜버그 6단계의 각각에 따라 다른 것으로 나타났다는 점이다. 콜버그의 6단계 중 윤리적 기준과 규정의 준수 의무를 강조하는 4 단계는 내부신고 의도가 높았으나, 집단의 감정, 믿음, 이익을 강조하는 3 단계는 낮았다. 이 연구는 내부고발 의도 촉진의 방법 모색에 대한 함축적 의미를 제시한다.

Key words: Reporting wrongdoing(부정의 신고), Kohlberg's moral development theory(콜버그의 도덕발달 이론), internal and external whistleblowing(내부형 및 외부형 내부고발)

INTRODUCTION

How readily would employees report wrongdoing witnessed in the workplace? Does an individual's moral development play any significant role in activating his or her intent to "blow the whistle"? Uys (2008) defined whistleblowing as "the unauthorized disclosure of organizational wrongdoing to those who are perceived to be in a position to take action." A sharp increase in interest in maintaining employees' ethical responses has been observed among academics and practitioners

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in the past decade. One of the important goals of private and public organizations' ethics programs is to improve employees' willingness to report wrongdoing occurring within an organization. The

One of the most important issues in an organization is how to nurture employees' development of moral attitudes and behavior (Tsai & Harasym, 2010). In practice, moral development is expected to increase an individual's ethical intentions, decisions, and actions. With these developments in mind, the primary purpose of this study is to explore the relationship between employees' intent to report wrongdoing in an organization and Kohlberg's six stages of moral development. We ask the following key research questions: (1) Do the effects of moral development on employees' intent to report wrongdoing differ depending on various hat are the effects of moral development on employees' intent to report wrongdoing depending on Kohlberg's six stages? The cognitive ties between moral development and employees' intent to report wrongdoing are fully accepted in this study, but the concrete properties of the relationship between the two have yet to be empirically investigated. We hope that this research raises implications to search for ways to foster employees' intent to blow the whistle and to simultaneously inspire employees' moral responses.

LITERATURE REVIEW

Moral Development and Intention to Report Wrongdoing

The impact of moral development on ethical attitudes, intention, and behavior is an issue that has been much discussed over a long period of time (for example, Izzo, 2000). In the literature on whistleblowing, moral development has been an important factor in the process of reporting wrongdoing (Gundlach et al., 2003). For example, Liyanarachchi and Newdick (2009) stated that an individual's level of moral reasoning is one of the important factors affecting an individual's intent to blow the whistle. They claimed that individuals with high levels of moral reasoning would do the 'right thing,' demonstrating ability to solve ethical dilemmas, compared to those with low levels of moral reasoning.

The studies of whistleblowing in various disciplines explained employees' blowing the whistle by discussing their moral codes (Heyes & Kapur, 2009; Wilmot, 2000). Examining the archives of three public organizations and interviews

with reporters, Graaf (2010) suggested a hypothetical view that a sense of justice is one of the strongest reasons for peers to report violations of integrity or the law. A peer's disclosure of wrongdoing may be made when employees feel so morally compelled that they have to say something about the violation. For these reasons, many organizations have increased their efforts in ethics training and education aimed at improving employees' moral reasoning ability. Svensson, Wood and Callaghan (2010) counted the support of whistleblowers as one of the five elements of managerial guidance while developing a model of business practices for sustainable performance. Morris and Wood (2011) also suggested an integrated approach that corporate organizations can employ to encourage their employees' moral development. Despite the increased interest in training and education that fosters employees' moral development, few studies have investigated the effect of moral development on the intent to report unethical behaviors.

A Typology of Employees' Report of Wrongdoing

While performing their own work, employees may perceive that wrongdoing has been committed by another worker in the workplace. From an ethical perspective, employees are quite likely to adopt one of two forms of response: correct the wrongdoing by reporting it; or stay away from it. Whistleblowing, an act to speak up to correct the wrongdoing, is divided into two categories based on the routes of reporting: internal or external whistleblowing (Dworkin & Baucus, 1998; Zhang, Chiu & Wei, 2009). Internal whistleblowing employs a path such as a hierarchical command line of supervisors, ethics officers, inspectors, or a confidential "ethics hotline" in an organization, whereas external whistleblowing is the act of reporting outside the organization such as regulatory or auditing agencies, police & prosecutors, the press, etc.

Many organizations establish strategies that promote internal reporting when employees find wrongdoing, because the organizations cannot uncover all wrongdoing without the voluntary intent of employees to report misbehavior that occurred in their workplace (Ethics Resource Center, 2010). In particular, employees' internal whistleblowing is often encouraged by organizations, because it allows managers to take corrective action (Miceli, Near, & Dworkin, 2009).

Kohlberg's Six Stages of Moral Development

Kohlberg's (1981) theory of moral development, based on Piaget's theory of moral reasoning, is the theory most frequently adopted by researchers and practitioners who seek ways to facilitate ethical behavior among employees. The theory assumes that as children grow up, they develop a sense of right and wrong by interacting with others in society. Kohlberg (1981) has separated moral development into six stages in 3 levels: pre-conventional (Stage 1, 2), conventional (Stage 3, 4) and post-conventional morality (Stage 5, 6). Stage 1: The first stage focuses on children's morality, showing their obedience to rules and authority, and their avoidance of punishment. Rules are absolute in this stage, and are determined by external authorities. Stage 2: Children recognize right action by reasoning what actions instrumentally serve their own needs. They adhere to rules in order to obtain rewards. Stage 3: Adolescents are aware that they should be a good person to their immediate group; they are more concerned about expectations from their interpersonal feelings with and approval from their families, close friends, or groups of peer workers. Stage 4: Adolescents perceive themselves as playing an important role in society, and thus comply with laws and uphold the social order. Stage 5: Adults recognize that there are different values, opinions, and beliefs among people, and respect human rights and values as inherently belonging to an individual. Adults honor legal and social contracts, even when they conflict with the rules of their group. Stage 6: Adults believe that universal ethical principles such as justice, conscience, honesty, etc. exist, and should be achieved. Stages 5 and 6 of post-conventional moral reasoning are the highest stages in the developmental sequence of morality. Kohlberg's six stages are summarized by their moral perspectives and considerations in Table 1.

TABLE 1
Kohlberg's Six Stages of Moral Development

Level	Stage	Moral perspectives	Major considerations in moral reasoning
III	6	Universal principle perspective	The organizing of a society in terms of ideals, which appeals to a rationale for human beings
	5	Contract perspective	5B: The organizing of social arrangements in terms of intuitively appealing ideals
			5A: The organizing of a society by appealing to consensus-producing procedures, insisting on due process and basic rights
II	4	Society perspective – Law and duty to the social order	The legal system maintaining conventional procedures and social structure
	3	Social relationships perspective	Positive intentions or concerns for maintaining good interpersonal relationships
I	2	Instrumental egoism	Direct advantages to the actor and fairness of simple exchanges of favor for favor
	1	Blind egoism	Avoidance of punishments

Source: Excerpted and modified from Rest and Narvaez (1994).

Kohlberg's theory of moral stages is predicated on cognitive thinking as a way for an individual to gather information and make moral judgments. Presumably, this can also be achieved sequentially. For example, after accomplishing the lower and easier stages, people advance to the next, more complex stages. Each person makes progress through the stages, skipping none of them, by means of various interactions with others in society.

To assess Kohlberg's moral development researchers have largely employed the Defining Issues Test (DIT), which Rest (1979) developed to displace Kohlberg's Moral Judgment Interview (Trevino, 1992: 448). The DIT uses the Likert scale to rate dilemmas of moral reasoning. It asks subjects to read cases that pose moral dilemmas, to select one of the actions with which they most agree under the

relevant circumstances, and simply to rate and rank twelve items in terms of how importantly their moral judgments regarding the dilemmas are considered (Rest et al., 1999a: 295). For example, the subject is asked to answer each of the statements, indicating how they are important when he or she makes a decision relevant to the dilemma. And each statement is rated and ranked as highly important. When a statement does not make sense, it receives a low rating of importance. Based on their response, researchers identify the form of moral reasoning that the subjects more importantly consider among the six distinct stages. The scores of each stage indicate the degree to which a respondent finds moral reasoning to be important in each of the stages. Higher scores indicate higher moral development. The P-score of Kohlberg's highest moral level is calculated by summing the scores from stages 5A and 5B, and converting the total to a percentage. This shows respondents' preferences for post-conventional moral reasoning (Kohlberg's Stages 5 and 6). Later, Rest et al. (1999b) developed the DIT2 (the more recent version of the DIT). Although numerous studies have adopted this instrument, there have been some criticisms regarding the use of the DIT P-score.

HYPOTHESIS DEVELOPMENT

Kohlberg's six moral stages are expected to evidence different relationships with employees' intent to report wrongdoing. Previous studies have reported significant differences in moral reasoning between people who would report wrongdoing and those who would not. For example, using Rest's (1979) DIT as a measure of moral reasoning, Brabeck (1984) reported that subjects who blew the whistle tended to exhibit a higher level of moral reasoning than those who did not. This did not change when the subjects' gender, assertiveness scores, etc. were controlled statistically. Liyanarachchi and Newdick (2009) hypothesized that "individuals with higher levels of moral reasoning are more likely to blow the whistle than individuals with lower levels of moral reasoning." Based on their experimental examination of the relationship between accounting students' level of moral reasoning and their propensity to blow the whistle, they supported this hypothesis. These studies indicated that employees who would report wrongdoing tend to have higher P-scores than those who would not, although employees' intent to report wrongdoing could vary according to particular considerations

within the six stages. This leads to hypotheses 1:

H1a: Employees who would report wrongdoing will receive significantly different scores than those who would not, based on which of Kohlberg's six moral development stages the subject had achieved.

H1b: Employees who would report wrongdoing will have higher P-scores than those who would not.

Employees' intent to blow the whistle may be more closely related to a particular stage of moral development, since each stage entails different considerations in moral reasoning from the others. According to Kohlberg (1981)'s multi-stage theory of moral development, the persons at Stage 3 devote greater care to the group's feelings, beliefs, or interests when a resolution to an ethical dilemma is sought, whereas Stage 4 is more focused on an individual's duties and obligations to obey ethical standards, rules and regulations of the organization, relative to other stages. Accordingly, the higher the scores of employees at Stage 4 are, the more likely it is that employees would report wrongdoing. On the other hand, employees with higher scores in Stage 3 will tend to be more reluctant to report wrongdoing, because a central idea of moral reasoning in Stage 3 is to fulfill the expectations and feelings of either family or coworkers. Thus, our second hypothesis would be as follows:

H2: Stage 3 will have a significantly negative impact on employees' Yes intent to report wrongdoing, but that of Stage 4 will be positive.

Researchers have regarded employees' reports of wrongdoing as moral action (Zhang, Chiu & Wei, 2009), ethical resistance (De Maria, 2008), organizational citizenship behavior (Carr & Lewis, 2010), and a form of pro-social behavior (Dozier & Miceli, 1985). Malek (2010) assumed that reporting misbehavior was a moral requirement of employees, and regarded as one of their duties. Liyanarachchi and Newdick (2009) noted that individuals evidencing high levels of moral reasoning are more likely to do the 'right thing' than individuals exhibiting low levels of moral reasoning. Taylor and Curtis (2010) tested the hypothesis that perceived moral intensity is positively associated with reporting intent. Assessing the effects of accounting students' moral reasoning levels on their intent to blow the whistle, Liyanarachchi and Newdick (2009) also stated that individuals

exhibiting a high level of moral development are more likely to blow the whistle. Researchers consider employees' intent to report wrongdoing an ethical matter. In practice, a number of countries have established laws and procedures to protect employees who report wrongdoing in an organization (De Maria, 2006), and an organization itself also encourages its employees to report wrongdoing as soon as it is discerned (Miceli, Near, & Dworkin, 2009). Thus, employees with DIT P-scores in the highest level of Kohlberg's moral development are more likely to react to wrongdoing observed in an organization by reporting it. Therefore, we hypothesize that:

H3a: The P-score (Kohlberg's highest level, e.g. percent of Stage 5 and 6 scores) will be a significant predictor of employees' intent to internally or externally blow the whistle in an organization.

H3b: The impact of moral development on employees' intent to internally or externally blow the whistle will be different, based on which of Kohlberg's six stages the subject had achieved.

METHOD

The Subjects and Data collection

The data were collected from public officials of education agencies who participated in a three-day ethics training program administered by the Anti-Corruption & Civil Rights Commission (ACCRC), South Korea. The ACCRC ran the program twelve times from June through December, 2008, for the purpose of supporting professional growth and job ethics. During this period, 820 public officials enrolled in the program nationwide on a voluntary basis, completing within a year the total hours required for job training. One of the authors, as an instructor of the program, conducted a survey. We developed a self-report survey questionnaire, containing a scale for participants' moral development and their intent to respond to wrongdoing. The survey was administered on the first day of the program, one day prior to the beginning of regular class sessions. The questionnaire consisted of three sections: the first section asked for employees' intent to report wrongdoing; the second section measured their Kohlberg's moral

development; and the final section requested demographic information. Among 350 recipients of the questionnaire, 317 completed it. The valid sample of 290 respondents was determined by removing any incomplete questionnaires.

Measures

Employees' Intent to Report Wrongdoing To measure employees' intent to report wrongdoing, we employed a brief scenario entitled 'discovering an illegal act.' The scenario was as follows: "you discover some illegal activities that an employee in charge of a purchase or construction agreement has committed by unlawfully offering advantages to a particular contractor for receiving money or other valuables not allowed, and embezzling the related budget by manipulating accounts and receipts." Given this scenario, we asked: Would you report the wrongdoing? The answer to this question was either "yes" or "no." The sub-question was then administered only to the respondents who answered 'yes,' who were instructed to respond to six items. The items are shown in Table 2.

TABLE 2
Question Items for Employees' Intent to Blow the Whistle (N=167)

EW	W1	I would report the wrongdoing to an audit and inspection agency of the government.
	W2	I would provide information to the prosecution/police.
	W3	I would inform the National Tax Service of the wrongdoing.
IW	W4	I would report it to the division in an organization who is responsible for correcting it.
	W5	I would report to management about it.
	W6	I would report it to his/her supervisor.

1) IW= internal reporting; EW=external reporting.

Respondents employed a five-point Likert-type scale from 5 = "Strongly approve" to 1 = "Strongly disapprove." Exploratory factor analysis (EFA) was conducted to As a result of it, ttracted factors accounted for 75.238% of the variance. These factors were employees' intent to mount two types of reporting wrongdoing: Internal and external whistleblowing.

Kohlberg's Stages of Moral Development In order to assess the moral development of the respondents, we employed the Korean Defining Issue Test (KDIT) developed by the Moral Psychology Lab of Seoul National University in South Korea, modifying Defining Issues Test 2 (DIT2), developed by Rest et al. (1999b) in order to apply it to Koreans. KDIT uses three moral dilemmas from Kohlberg's original work, with 12 items for each dilemma. It asks respondents to answer three types of questions: First, they are to select one of three responses to each scenario. Second, they rank the importance of each of 12 items to each of the scenarios. Finally, they select the four most important questions among the items, and rank them by their importance. The KDIT produces the scores for stage 1 to 6, as well as the P-score. The stage scores were calculated by averaging the importance of ratings given to all the items developed, to measure moral reasoning at each stage. The KDIT scoring system does not classify a respondent into a single stage.

Demographic Characteristics The respondents were asked to identify themselves in terms of gender, age, and education level. As a result of our analysis, the demographic characteristics of the respondents were as follows: 150 males (51.7%) and 140 females (48.3%). The ages of the respondents ranged between 23 and 55 with a mean age of 42.09 years. As for its categorical spread, 41 were less than 30 (14.1%), 51 were 30–39 (17.6%), 135 were 40–49 (46.6%), and 63 were 50 or over (21.7%). The education levels were as follows: 11 had less than a high school degree or equivalent (3.8%), 10 had a junior college degree (3.4%), 169 had a 4-year university degree (58.3%), and 100 had a post-graduate degree (34.5%). Thus, the proportion of individuals with a post-graduate degree is fairly high, as it reflects the fact that education is a profession in which many employees earn a master's or doctoral degree during their tenure in office. The sample was demographically representative of the general population of officials in education agencies.

RESULTS

Descriptive Statistics and Correlations

We conducted correlation, t-test, and regression analyses in order to clarify the relationships between employees' intent to report wrongdoing and Kohlberg's six stages of moral development. The means, standard deviations, and correlations among all of the variables were computed. The sample sizes for IW and EW are 167 and a significance level at 5% was applied for testing given hypotheses. The results are shown in Table 3.

The KDIT mean scores of the six stages ranged from 2.63 to 27.05, demonstrating that broad variations exist in the scores of moral development. The mean score of each stage shows how much respondents use moral reasoning at each stage in making their judgments regarding the given dilemmas. The average P-score(%) was 35.15 (range = 0–83.30), indicating the importance the respondents give to post-conventional moral reasoning in Stages 5 and 6. The simple correlates show that both employees' Yes or No intent to report wrongdoing as well as the intents of whistleblowing EW and IW were negatively related with the P-score (standing for the highest level of Kohlberg's moral development), but not significant (respectively $r = -.071$, $p > .05$; $r = -.067$ and $r = -.117$, $p > .05$). More specifically, employees' Yes or No intent to report wrongdoing was positively related with Stages 1 and 4 (respectively $r = .124$ and $r = .124$, $p < .05$), but negatively with Stage 3 and 6 (respectively $r = -.171$, $p < .01$; $r = -.117$, $p < .05$). However IW and EW had no significant relationship in regard to their associations with Kohlberg's six stages of moral development.

TABLE 3
Descriptive Statistics and Correlations between Two Types of Employees' Intent to Report Wrongdoing and Kohlberg's Six Stages of Moral Development (N=290)

	MEAN	S.D.	Y/N	EW	IW	Stage 1	2	3	4	5A	5B	6	P	GN	AG	ED
Y/N	.58	.50	1.00													
EW	3.86	.77	NA	1.00												
IW	2.89	.90	NA	.102	1.00											
Stage1	11.70	10.50	.124*	-.054	.121	1.00										
2	2.63	4.79	.054	-.059	.020	.110	1.00									
3	23.47	11.67	-.171**	.029	-.122	-.242***	-.048	1.00								
4	27.05	13.32	.124*	.129	.140	.076	.014	-.410***	1.00							
5A	20.40	13.40	.017	-.067	-.088	-.441***	-.282***	-.230***	-.397***	1.00						
5B	5.10	5.06	-.095	.113	-.066	-.148*	-.142*	-.136*	-.090	-.020	1.00					
6	9.64	8.16	-.117*	-.102	-.063	-.315***	-.133*	.042	-.445***	.081	.026	1.00				
P	35.15	16.99	-.071	-.067	-.117	-.543***	-.328***	-.202***	-.553***	.821***	.295***	.552***	1.00			
GN	.52	.50	.065	.004	.162*	.096	.127*	.045	.143*	-.182**	-.089	-.141*	-.238***	1.00		
AG	2.76	.95	.091	.057	-.012	.169**	.246***	-.012	.176**	-.283***	-.102	-.103	-.303***	.343***	1.00	
ED	3.24	.69	.069	-.021	.191*	.097	-.051	-.074	-.013	.043	-.030	-.020	.016	-.092	.076	1.00

1) *p<.05.**p<.01.***p<.001; two tailed tests.

2) See Table 1 and 2 for abbreviations. The others are: Y/N= 'yes' (1) or 'no' (0) as a response to the questions "Would you report the wrongdoing?"; GN=gender; AG= age; and ED=education level. The responses of gender were coded as 1=male, 0=female; those of age as 1= less than 30, 2= 30-39, 3= 40-49, and 4= 50 or over; and levels of education as 1= less than a high school degree or equivalent, 2= junior college degree, 3= 4-year university degree, and 4= post graduate degree.

3) The range of raw stage scores is: stage 1 (0-46.70), stage 2 (0-23.30), stage 3 (0-56.70), stage 4 (0-70.00), stage 5A (0-60.00), stage 5B (0-13.30), stage 6 (0-36.70), and P (0-83.30).

4) NA=Not applicable.

Differences between the 'Yes' and 'No' Groups of Reporting Wrongdoing

One of the research questions used herein was: "do significant differences exist between employees who would report wrongdoing and those who would not, according to Kohlberg's six discrete stages of moral development?" To answer this question, we divided respondents into two groups based on whether they responded 'yes' or 'no' to the question "Would you report the wrongdoing?" We then calculated mean scores for the six stages and P-scores for moral development for each group. In order to test hypotheses H1a and H1b, we conducted an independent samples t-test to detect and characterize any mean differences between two groups of 'yes' and 'no.' In Levene's test for equality of variances, all stages were found to be statistically insignificant at $p < .05$. For all stages, therefore, equal variances were assumed. Table 4 shows the results of our analysis for the two hypotheses.

TABLE 4
Results of T-Test between the 'Yes' and 'No' Groups of Reporting
Wrongdoing by Kohlberg's Six Stages (N=290)

	Mean by Six Stages of Moral Development							P
	1	2	3	4	5A	5B	6	
YES (n=167)	12.81 (11.06)	2.85 (5.04)	21.76 (10.72)	28.46 (13.62)	20.60 (13.76)	4.69 (4.96)	8.83 (7.92)	34.12 (17.40)
NO (n=123)	10.19 (9.53)	2.33 (4.44)	25.80 (12.51)	25.12 (12.71)	20.13 (12.94)	5.66 (5.17)	10.76 (8.38)	36.56 (16.39)
M-differences	2.62	.52	-4.03	3.34	.47	-.97	-1.93	-2.44
t value	2.195*	.916	-2.948**	2.122*	.293	-1.618	-2.001*	-1.211

1) * $p < .05$; ** $p < .01$; *** $p < .001$; two-tailed tests.

2) The figures in parentheses are standard deviations.

Hypothesis H1a predicted that employees who would report wrongdoing will receive significantly different scores than those who would not, with respect to Kohlberg's six moral development stages. The t-test results show that the mean scores of Stage 1 and 4 for the 'yes' group are 12.81 and 28.46 (SD= 11.06; 13.62 respectively), thereby demonstrating that they are significantly higher than the mean scores of 10.19 (SD=9.53) and 25.12 (SD=12.71) for the 'no' group ($t = 2.195$,

$p < .05$; $t = 2.122$, $p < .05$). The mean scores of Stage 3 and 6 for the 'yes' group were 21.76 (SD=10.72) and 8.83 (SD=7.92), and those of Stages 3 and 6 for the 'no' group were 25.80 (SD=12.51) and 10.76 (SD=8.38), thereby indicating that significant differences exist between the two groups (respectively $t = -2.948$, $p < .01$; $t = -2.001$, $p < .05$). No significant differences were found in the other stages. Thus, Hypothesis H1a was partially supported. This indicates that each stage is independent from the others to a certain extent. As for Hypothesis 1b, the mean P-score (post-conventional) for respondents who would report wrongdoing was 34.12 (SD=17.40), relative to the mean P-Score of 36.56 (SD=16.39) for those who would not report, thereby demonstrating that no significant differences exist between the two groups in terms of the P-Score ($t = -1.211$, $p = .180$). Therefore, hypothesis H1b, that employees who would report wrongdoing will have higher P-scores than those who would not, was not supported. This result is inconsistent with the findings of previous studies. For example, Desplaces et al. (2007) found that the mean P-score of respondents who reported witnessing unethical behavior is significantly higher than those who did not report it. (In the next section, we shall discuss this point in depth.)

Another research question was "to what degree does moral development account for employees' Yes or No intent to report wrongdoing?" We measured the intent by a response 'yes (1)' or 'no (0)' to the question, "Would you report the wrongdoing?" As it is a dichotomous variable, we conducted binary logistic regression analysis to get the best answers possible to the question. The results are shown in Table 5.

The results reveal that the regression model to predict employees' intent of yes/no to report wrongdoing is significant (Chi-Square=18.757, $df=9$, Sig.=.027). The Pseudo R-Square Nagelkerke of all independent variables was .084. Only stage 3 of Kohlberg's theory however had a significant but negative impact on the intent to report ($B=-0.33$, Wald statistics=6.403, $p < .05$), showing that the higher the scores employees register at Stage 3, the more likely it is that they would not report wrongdoing. It implies that people who care about the norms, expectations, or interests of the group to which they affiliated themselves will seldom report their peers' wrongdoing. However, registering high scores at Stage 4 had no significant impact on employees' intent to report wrongdoing. The hypothesis H2 was "Stage 3 will have a significantly negative impact on employees' Yes intent to report wrongdoing, but that of Stage 4 will be positive." Therefore, we can conclude that the hypothesis is partially accepted.

TABLE 5
Kohlberg's Six Stages' Effects on Employees' Intent to Report
Wrongdoing (N=290)

Predictors	Dependent Variable: Y/N				
	B	S.E	Wald	Sig	Exp(B)
Stage1	.004	.014	.080	.777	1.004
Stage2	.000	.028	.000	.996	1.000
Stage3	-.033*	.013	6.403	.011	.967
Stage4	-.003	.012	.056	.814	.997
Stage5b	-.045	.026	2.971	.085	.956
Stage6	-.025	.019	1.804	.179	.975
GN	.162	.266	.370	.543	1.176
AG	.114	.144	.627	.428	1.121
ED	.150	.180	.691	.406	1.162
Constant	.732	1.026	.509	.475	2.079
Chi-square statistics/ D.F.			18.757/9		
Significance			.027		
Overall statistics =18.267, Sig=.032					

1) *p<.05;**p<.01;***p<.001;2-tailedtests.

2) Stage5a was removed from our regression analysis due to multi-collinearity (Collinearity statistics: Tolerance= 1.929E-5, VIF=51840.0).

The Effects of Moral Development on Employees' Intent to Blow the Whistle

Do the effects of moral development on employees' intent to report wrongdoing differ depending on various types of whistleblowing? And what are the effects on Kohlberg's six stages? To answer these questions, we conducted multiple regression analyses, while restricting the analysis to those respondents answering 'yes' to the question, "Would you report the wrongdoing?" Kohlberg's theory of cognitive moral development in itself assumes a significant relationship between moral reasoning and age since as people grow older they advance toward a higher level of moral reasoning. Research into cognitive moral development has also shown that moral reasoning scores have significant associations with age, gender (female=0 and male=1), and years of formal education (Trevino, 1992; Dawson,

2002; Block, 2003; Desplaces et al., 2007; Liyanarachchi & Newdick, 2009; Stansbury & Victor, 2009). In performing regression analysis, we controlled the demographic variables in order to eliminate any differences that might be attributable to them. To test hypothesis H3a, we first conducted a regression analysis, focusing on the effects of P scores on the intent to report wrongdoing for both internal and external whistleblowing. Table 6 shows the results.

TABLE 6
The P-Score's Effects on Employees' Intent to Report
Wrongdoing (N=167)

Predictors	Dependent Variables			
	EW		IW	
P	-.003	(-.057)	-.006	(-.122)
GN	-.052	(-.034)	.378**	(.209)
AG	.042	(.054)	-.146*	(-.157)
ED	-.032	(-.028)	.303***	(.226)
Constant	3.958***		2.325***	
Adj. R square	-.017		.071	
F value	.301		4.167	
Significance	.877		.003	

1) *p<.10;**p<.05;*** p<.01;2-tailedtests.

2) The figures in parentheses are standardized regression coefficients.

The results demonstrate that the IW regression model was statistically significant ($F=4.167$, $p=.003$), but the EW model was not ($F=0.301$, $p=.877$). Previously, we hypothesized that the P-score (Kohlberg's highest level, e.g. percent of Stage 5 and 6 scores) will be a significant predictor of employees' intent to internally or externally blow the whistle in an organization. However, the results indicate that the P-score was not a significant predictor in either of the regression models. Therefore, H3a was not accepted. To test the hypothesis H3b, "the impact of moral development on employees' intent to internally or externally blow the whistle will be different, depending on Kohlberg's six stages," we conducted regression analysis. The results of that analysis are shown in Table 7.

TABLE 7
Kohlberg's Six Stages Effects on Employees' Intent to Report
Wrongdoing (N=167)

Predictors	Dependent Variables			
	EW		IW	
Stage1	-.003	(-.041)	.007	(.091)
Stage2	-.011	(-.074)	.010	(.058)
Stage3	.007	(.094)	-.003	(-.033)
Stage4	.008	(.148)	.009	(.137)
Stage5b	.019	(.124)	-.002	(-.012)
Stage6	-.005	(-.047)	.004	(.033)
GN	-.015	(-.010)	.370**	(.205)
AG	.061	(.077)	-.151*	(-.163)
ED	-.028	(-.024)	.295***	(.220)
Constant	3.420***		1.808**	
Adj. R square	-.002		.060	
F value	.955		2.186	
Significance	.480		.026	

1) * $p < .10$; ** $p < .05$; *** $p < .01$; 2-tailed tests.

2) The figures in parentheses are standardized regression coefficients.

3) See Tables 1 and 2 for abbreviations.

Of the two regression models of employees' intent to blow the whistle in which moral development was proposed as a predictor, only IW was statistically significant ($F=2.186$, $p=.026$). The scores at any stage from 1 to 6 were not significant in any of the models. This result shows that the Stage score of employees is not a significant predictor of the likelihood that they would either internally or externally report perceived wrongdoing in an organization. As for the demographic variables, GN, AG, and ED significantly contributed only to EW. This finding implies that moral development measured by Kohlberg's six stages is not a reliable predictor of employees' intent to blow the whistle either internally or externally.

DISCUSSION

This study has some important findings, all of which may provide us with greater insight into the development of ethics programs in any organization. Above all, we found that there are significant differences between employees who would report wrongdoing and those who would not, according to Kohlberg's six discrete stages of moral development. However, we should interpret this result with some caution.

Even though two groups of 'yes' and 'no' showed no significant differences in terms of the P-Score, the 'yes' group reporting wrongdoing had significantly lower scores at Stage 3 and 6, but higher scores at Stages 1 and 4, relative to the 'no' group. This suggests that when an ethics program intends to facilitate employees' intent to report wrongdoing, it should aim to nurture the moral characteristics of Stage 1 or 4, which make a positive contribution to an increase in employees' intent to blow the whistle. For example, if an organization wishes employees not to ignore wrongdoing, then it may prove advisable for the organization to emphasize the moral considerations of Kohlberg's moral Stage 4, which focuses primarily on employees' compliance with its ethical guidelines, codes, standards, and laws rather than on the interpersonal feelings between employees that characterize Stage 3. Miceli et al. (1991), who previously assessed the effects of a variety of variables on the intentions of internal auditing directors to report wrongdoing, mentioned that the directors are more likely to report wrongdoing "when they (feel) compelled morally or by role prescription to do so."

We also found that P scores are not a potential predictor of employees' intent to report wrongdoing. This was an unexpected result because it is inconsistent with previous studies. Several explanations for this result seem possible. First, it might be due to the different kinds of violation that we used to measure employees' intent to report. Violations of the law are much more concerned with the moral codes of Stage 4 rather than those of Stages 5 or 6. Our study let employees read cases describing serious violations of the law committed by coworkers and then ask them whether they would report that wrongdoing. Instead, previous studies frequently measured a behavior of whistleblowing by students' reportage of professors' errors or classmates' cheating (Desplaces et al., 2007; Brabeck, 1984). For example, Desplaces et al. (2007) found that the P-Score of students who did report their classmates' unethical behavior was higher than that of those who did not report it. To measure a behavior of blowing the whistle, they simply asked

participants "if you witnessed cheating in high school and in college." Brabeck (1984) also measured whistleblowing behavior by observing whether they ignored or reported a professor's predesigned errors in a question on a multiple choice test

A second explanation of our result may be that the P-score of respondents' moral reasoning represents universal ethical principles, such as human rights, justice, conscience, etc., rather than violations of the law. For example, Block (2003) found that an individual's level of moral reasoning is positively related to their belief in animal rights in terms of Kohlberg's cognitive theory of moral development. The P-score may be suitable to evaluate broadly defined unethical behavior rather than specific violations of laws, codes of ethics, ethical standards, etc. in an organization.

Thirdly, the moderating role of such as managerial or situational factors may affect the relationship between moral development and the intent to report wrongdoing. Bernardi et al. (2004) stated that situational factors were a significant variable moderating between students' moral judgment and their reportage of peers' cheating. In previous studies, such situational factors as the likelihood of being caught, retaliation, etc. have been reported as a variable suppressing the effect of respondents' moral development (Liyanarachchi & Newdick, 2009; Desplaces et al., 2007; Milliken, Morrison & Hewlin, 2003). Employees' intentions to report wrongdoing might be more related to situational variables than to an individual's moral development in an organizational setting. In other words, situational factors may nullify some aspects of moral development.

Lastly, Stages 5 and 6 may be too abstract and vague. It is possible that subjects may have found them too difficult to digest. Furthermore, Kohlberg's stages 5 and 6 assume Western-oriented structure of moral development and may not necessarily transfer effectively to Asian cultures. For example, animal rights may be perceived as ideals in many Western societies while they may not be so in non-Western societies.

Although there were significant differences between employees who would report wrongdoing and those who would not, Kohlberg's DIT P and the scores of the six stages were hardly significant in affecting employees' intent of EW and IW. This result might be due to the questioning methodology that we used to examine employees' intent to blow the whistle: Given the scenario regarding violations of the law, we asked, would you report the wrongdoing? The answer requested was simply either "yes" or "no." However, employees' intent to internally or externally blow the whistle was more elaborately questioned by means of a sub-question

offered only to the respondents who answered 'yes.' They were specifically asked to report to IRS, police, or prosecutors in case of EW and inspector or management in case of IW. When they were asked this specific question, they had to think of specific method of implementing whistleblowing. Then they probably became afraid of being perceived as betrayer by co-workers and employers and possible retaliation afterwards. This moderating effect made them reluctant to take whistleblowing or furthermore, its specific method. Henik (2008) offered a complementary rationale to explain whistleblowing. She claimed that emotion and value conflict often had to be accompanied for potential whistleblowers actually to speak out. When we asked the specific question, we could not effectively materialize those subjective factors like emotion and value conflict. Therefore, our finding complements Henik (2008) that moral reasoning alone may not be the sufficient condition for whistleblowing to take place.

The intrinsic characteristics of Kohlberg's moral development bear why no difference exists. It has been argued that Kohlberg's moral stages and DIT scores concern development of cognitive reasoning, and that fact results in a lack of connection with moral intentions or behaviors. Furthermore, many critics hold that morality is not hierarchically separated into the six disparate stages of a sequence. Finally, Pritchard (1999) stated that various kinds of feelings must be also considered an important component of moral development.

CONCLUSION

This study was motivated to explore the relationship between employees' intent to report wrongdoing and Kohlberg's six stages of moral development. Specifically, we aimed to determine whether there exist significant differences between employees who would report wrongdoing and those who would not, according to the six stages. Moreover, this study also analyzed the effects of moral development on employees' intent to report wrongdoing that may distinguish across different types of whistleblowing. Using the sample whose size is 290 who are public officials in education agencies in South Korea, we found that Kohlberg's P-score of moral development had no significant effect on reporting wrongdoing. Another interesting result is that the relationship between moral development and an employee's intent to report wrongdoing differed according to particular aspects of Kohlberg's six stages. The potential contributions of this study can be described

as follows: one is to increase our understanding of the relationship between the six stages of Kohlberg's moral development and employees' intent to engage in ethical responses to wrongdoing. The other is to provide some insights into a method of creating a plausible solution that can elicit employees' moral responses to wrongdoing. Some specific stages of Kohlberg's moral development were significantly correlated with the group of employees who would report wrongdoing while the others were not. However, P scores and scores of the six stages of moral development as presented by Kohlberg's theory were not a significant predictor of employees' intent to internally or externally report wrongdoing, although the Stage 3 score was a significant predictor of employees' not to report wrongdoing.

This study, however, was not without its limitations. First, the data generated in this study were obtained from public officials in education agencies in South Korea. Chiu (2003) stated in a previous work that "cross-cultural differences in perceptions of the ethicality of whistleblowing affect the judgment of whistleblowing intention." For example, Kohlberg's Stage 3 values focus on maintaining social relationships. One is unlikely to blow the whistle if he or she cares to maintain good social relationships. This may be especially so under Korean (or similar Asian) culture. Finally, respondents may also be influenced by social desirability response bias when they were asked questions regarding their intent to disclose wrongdoing, even though their responses were anonymous and most of survey studies are subject to this bias. These considerations may limit the generalization of our findings to other countries and cultures.

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