

Full Length Research Paper

The cascading effect of top management's ethical leadership: Supervisors or other lower-hierarchical level individuals?

Pablo Ruiz*, Carmen Ruiz and Ricardo Martínez

Department of Business Administration, Faculty of Social Sciences, University of Castilla-La Mancha, 44 Los Alfares Avenue, Cuenca, Zip Code: 16071, Spain.

Accepted 9 February, 2011

In the past two decades, both academics and practitioners have dedicated great efforts to successfully implementing organizational ethics. Nevertheless, the understanding of how ethical leadership of top management influences the average employee behaviour is still very elusive. Although it is expected that top management's ethical leadership will affect individuals when it is made perceptible, a cascading effect is thought to happen through mid-lower managers as they are the ones who usually take, interpret and filter top management's information. In reality, however, the process leading an individual to behave in an ethical/unethical way is much more complex and top management's influence may use other indirect ways. Authors of this paper defend that as the contact with peers is also usually very proximal, top management's influence on ethics may also use those people to become real. An empirical study was carried out in Spanish Banking companies to examine that idea and a partial cascading effect was found although not for supervisory levels but among peers. These findings support that contrary to popular belief, supervisory levels are not the ones which play a critical role but peers. Recommendations for successfully implementing ethics are finally proposed.

Key words: Cascading effect, ethics, ethical/unethical behaviour, ethics management.

INTRODUCTION

With the numerous ethical failures that have occurred over the past decade (for example WorldCom, Arthur Andersen, Health South Corp, and recently Countrywide), the scarce good that immorality produces not only in society but also in the organization has been demonstrated (Karakose and Kocabase, 2009). As a consequence, and with the purpose of resolving the problem of immorality, and also creating value for the organization (Kurt and Hacıoglu, 2010) considerable efforts in implementing ethics have come to the world business sphere in the last years (Weaver et al., 1999; Treviño and Nelson, 2004; IBE, 2008). Nevertheless, cases of unethical behaviour in

business (for example stealing company resources, falsifying reports, deceptive advertising, false information, etc.) continue to be uncovered and reported by the media demonstrating the necessity to move forward in this sphere, specifically in the study and understanding of ethical/unethical behaviour in organizations.

It is of great concern to practitioners and academics alike that most of the companies which have been reported as "rotten apples" had previously declared to have organizational procedures, mechanisms and systems on promoting ethics (Sims and Brinkman, 2003), which sheds doubts about the effectiveness of such practices. Nevertheless, the problem may not be the ethical management system implemented, and the use of all the organizational mechanisms derived from such system (code of conduct, training initiatives, role modelling, hot-lines, etc.). Rather, the problem may be, in reality, the way that ethics is communicated and implemented (Fontrodona and de los Santos, 2004), requiring further

*Corresponding author. E-mail: Pablo.Ruiz@uclm.es

Abbreviations: **TMEL**, Top manager's ethical leadership; **SEL**, supervisor's ethical leadership; **PEB**, peer ethical behaviour.

requiring further research in understanding how ethical/unethical behaviour is explained. In that sense, although much has been studied on factors influencing ethical/unethical behaviour (Collins, 2000; O'Fallon and Butterfield, 2005), little has been made on analyzing how top management's ethical leadership has an influence on the average employee behaviour. Traditionally, scholars agree that a cascading effect on ethics may happen from top to bottom (Bass, 1990) but little has been done on understanding the intensity of that mediating effect (Mayer et al., 2009). In addition, the role that other significant organizational referents as peers may play in acting as influential mediators on other employees has been obviated in research. As a consequence, in an attempt to shed light on how top management's ethical leadership influences the employees behaviour, this paper tries to understand the role played in that influential process by both supervisors and other lower-hierarchical level organizational members.

The main objective of this paper is to better understand which ways top management's ethical leadership uses to affect the employee ethical/unethical behaviour, thus the understanding of root causes of ethical/unethical behaviour in organizations may be achieved.

THEORETICAL BACKGROUND AND HYPOTHESES

Top management's ethical leadership and ethical intention

Much has been debated for years on the ways to promote and enhance morals in organizations, most of them of an organizational nature (Ford and Richardson, 1994; Collins, 2000; Loe et al., 2000, O'Fallon and Butterfield, 2005). However, if ethics is totally absent in top management levels, the purpose of getting an ethical workforce may fail (Gini, 1997; Shroeder, 2002; Weaver et al., 2005), as employees may perceive the message that ethics, in reality, is not so important in the organization. Thus top management's role played in terms of ethics is stated to be an important organizational factor in affecting the level of ethics among employees. Indeed, according to the role set theory perspective (Merton, 1957), it is deduced that the level of formal authority of the person selected as referent plays a crucial role when exerting such influence to a greater or lesser extent on the employee's behavior and attitudes. Thus, considering that the top manager has this formal authority to the highest extent, it can be deduced that he/she has an important influencing power through his/her beliefs, features, decisions or actions on the employee's moral behavior, especially if as suggested by Treviño et al. (2000), a morally good reputation, in which as for example, ethical behaviour is made perceptible to all the organizational members, is gained by the top

manager. Results obtained from previous research supports such statements as top management is found to be the most important influence on ethics when some other organizational factors have been considered (Zabid and Alsagoff, 1993; Vitell et al., 2000). As a consequence, top management is expected to strongly influence on the individual's ethical behaviour, reason for which the study can propose the following hypothesis:

H₁: "Top management's ethical leadership has a positive influence on the employee's ethical behaviour".

Mediation: Supervisor and other lower-hierarchical individuals' behaviour

Although top management's ethical leadership is strongly thought to have an effect on the employees' ethics (Vitell et al., 2000), other significant referents may not only have such influence but also serve as influential mediators of top management's ethical leadership. Indeed, drawing on different theoretical approaches (that is social learning theory, role-set theory and differential association theory), it can be suggested that a cascading effect on ethics may occur in the organization.

On the one hand, according to the role-set theory (Merton, 1957; Miles, 1977), an individual by virtue of his/her status in an organization has a set of relationships with significant referent others who through authority, proximity, behaviour and attitudes provide clues for predicting his/her behaviour. On the other hand, the differential association theory (Sutherland and Cressey, 1970) suggests that the shorter the organizational distance, and the higher the interaction with the person of the referent, the more the influential power of the referent. Finally, according to social learning theory (Bandura, 1977), individuals are supposed to emulate role models in their work context in an attempt of faster learning the appropriate behaviour to develop in the organization. All in all, a cascading effect on ethics can easily happen in the organization in so far as proximal individuals are usually taken as significant referents.

One of those daily close individuals is the supervisor who entails the above commented aspects characterizing a significant referent other (that is formal authority, proximity, frequency of interaction). Whereas top management is thought to set the global tone for the organization, supervisors usually take that information and filter it for subordinates (Mayer et al., 2009). Since they are thought to represent top management in lower-level hierarchical positions, individuals tend to imitate and emulate their behaviour as the appropriate behaviour and attitude to practice in their own daily work (Fritzsche and Becker, 1983). Some research supports the influence that supervisors exert on the employee's ethical behaviour (Peterson, 2004; Schminke et al., 2005; Detert et al., 2007) and even recent studies (Mayer et al., 2009) support

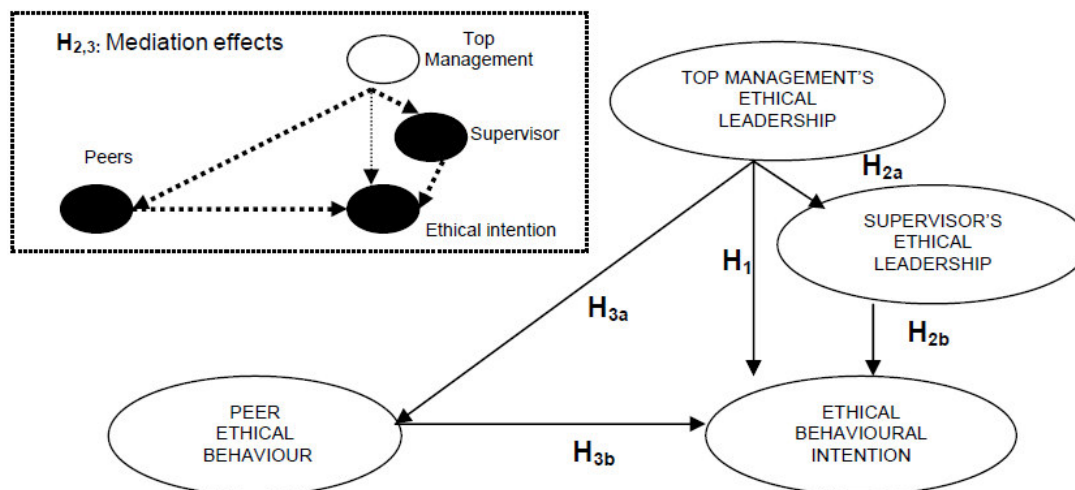


Figure 1. Cascading effect on ethics: a proposal.

support the existence of that suggested mediating role. However, as the study has established that top management's ethical leadership has an important effect on ethics, it is suggested that the mediating role which supervisors are thought to play is a partial one. A second hypothesis (H_2) is then proposed, which means adding two sub-hypotheses:

H_2 : "Supervisor's ethical leadership partially mediates the relationship between top management's ethical leadership and employee's ethical behaviour".

H_{2a} : "Top Management's ethical leadership has a positive influence on the supervisor's ethical leadership".

H_{2b} : "Supervisor's ethical leadership has a positive influence on the employee's ethical behaviour".

Finally, although research has mainly focused attention on formal leadership roles as suitable conductors of top management's influence on ethics (Mayer et al., 2009), literature also suggests that other lower-hierarchical organizational members may play an important role in that matter. Indeed, it is common to find that employees are engaged in social-relationship organizational networks (Brass et al., 1998). Then, because those relationships usually entail both short intra-organizational distances and high interaction levels between individuals (Merton, 1957; Sutherland and Cressey, 1970), behaviour of individuals may be easily influenced. As a consequence, other organizational members different from formal supervisors (for example peers) are thought to greatly affect the individual's behaviour (Jones and Cavanagh, 1996; Deshpande and Joseph, 2008). Bearing this in mind, a partial mediating effect is expected for peer behaviour on the relationship between Top management's ethical leadership and individual's ethical

behavioural intention, leading to propose a third hypothesis, and two additional sub-hypotheses:

H_3 : "Peer ethical behaviour mediates the relationship between top management's ethical leadership and employee's ethical behaviour".

H_{3a} : "Top management's ethical leadership has a positive influence on peer ethical behaviour".

H_{3b} : "Peer ethical behaviour has a positive influence on the employee's ethical behaviour".

All hypotheses previously described allow for the following model to be empirically contrasted which is shown in Figure 1.

MATERIALS AND METHODS

Sample and procedure

A survey instrument was used to gather data to test the relationships reflected in the research model, having decided to choose the Spanish banking industry. Surveys were handed to a sample of 4,164 employees and confidentiality was assured, both in individual and corporate terms. Due to the fact that organizational variables are included in the questionnaire and with the aim of receiving trustworthy information, all respondents who only had a temporal contract and had been working less than one year for the company at the time of receiving the questionnaire, were not accepted for the present study. In the end, 436 usable surveys were received, which implies a response rate of 10.5%, very reasonable in organizational behaviour when employees from different organizations are surveyed (Valentine et al., 2006a).

Under the assumption, late respondents are similar to non respondents and early respondents to non respondents (Armstrong and Overton, 1977), two-sample t-tests and chi-square tests on dependent variables were performed. Both of them indicated that

early and late respondents do not differ from one another at the 5% significance level, suggesting that non response bias is not a concern. Furthermore, not only were some practical suggestions to avoid common method bias considered (Podsakoff et al., 2003) but also a one-factor Harman test was conducted in order to assess the possible existence of this problem (Scott and Bruce, 1994) and results obtained support the idea that common method bias is not a problem in the present study.

Measures

When measures are used to examine a latent construct that is unobservable, a choice between reflective or formative indicators must be done (MacKenzie et al., 2005; Podsakoff et al., 2006). Indicators may be caused by the latent construct and all of them highly correlate between them (reflective measures) or indicators may determine the construct, not being necessarily correlated (formative measures) (Hulland, 1999). Hence, following Mackenzie et al.'s (2005) recommendations for distinguishing between reflective and formative constructs, it can be stated that the survey has a combination of both measures. Previously developed measures were utilized for reflective measures (top management's and supervisor's ethical leadership) and all measures were rated with a five-point scale anchored by 1 (strongly disagree) and 5 (strongly agree) except for the formative measurement model of PEB. In this last case, the level of perception of their unethical actions was assessed and rated from 1 (never) to 5 (very often). Next, the study establishes the content, source and measurement nature for the constructs implied in the empirical analysis.

Top management's ethical leadership

Top management's ethical leadership (TMEL) was measured by a reflective four-item scale which is in reality an adaptation of the corporate ethical values (CEV) scale (Vitell and Davis, 1990; Koh and Boo, 2001). To be precise, and as emphasis on measuring the moral good reputation acquired by the Top Manager was desired to be paid, those items of the CEV scale which were related to the role modelling behaviour of top management remained in the scale used in the present study, and new items reflecting the same dimension were incorporated (Treviño et al., 1998; Treviño and Weaver, 2001) (for example, top manager in my organization is a model of ethical behaviour).

Supervisor's ethical leadership

Supervisor's ethical leadership (SEL) was measured by a reflective ten-item scale from Brown et al. (2005) which has been used in different studies on ethics and leadership (Mayer et al., 2009; Ponnu and Tennakoon, 2009). Reflective indicators absorb both personal aspects related to an ethical person who is not only role modelling his/her ethicality in a private and organizational context but also communicating ethical values and their importance in working life among subordinates.

Peer ethical behaviour

With regards to peer ethical behaviour (PEB), a selection of three formative observable indicators (misusing of company resources, stealing from the company, deceiving to customers) adopted from some other previous studies (Akaah, 1992; Treviño and Weaver, 2001; E.R.C., 2005) was included in the survey. Although in an ultimate case, respondents were permitted to assess the level of frequency of those actions by workmates positioned in lower

managerial levels, in general, respondents assessed the ethicality of those considered equals as they were really, and initially forced to make an effort in these terms.

Employee's ethical behavioural intention

Finally, due to the fact that problems related to measure real ethical behaviour are so many, difficult and complex, ethical behavioural intention, as commonly done in literature (Fritzsche and Oz, 2007) was used as a close step to real behaviour (Azjen and Fishbein, 1980). Vignettes representing acts were used, and an adaptation of the study of Peterson (2004) of three common moral dilemmas at work (Barnett and Karson, 1987; Treviño et al., 1998) issuing similar matters as in the immediate previously mentioned case (misusing of company resources, stealing from the company, deceiving to customers), was included in the questionnaire. Each vignette described a hypothetical employee who had committed a questionable moral act, and ethical behavioural intention was measured with the next single five-point agree-disagree type statement: "I would be likely to act similarly in that situation".

Data analysis

The data was analyzed using partial least squares (PLS) analysis since it is adequate in developing and constructing theory (Wold, 1979). In addition, PLS is a powerful method of analysis (Chin et al., 2003) which develops a flexible modelling through rigorous and robust statistical procedures (Wold, 1979), and is the only structural equation modelling technique which allows the inclusion of both reflective and formative measures in a single analysis (Chin, 1998; Tenenhaus et al., 2005). Accordingly, the PLS via PLS-Graph 3.00 (Chin, 2003) was used for hypothesis testing and the stability of the estimates was tested via a bootstrap re-sampling procedure (500 re-samples) as recommended in literature (Chin, 1998; Tenenhaus et al., 2005).

RESULTS

Measurement model

With regard to the measurement model for all the reflective latent constructs, only some problems were found with individual reliability of 1 item of the scale of SEL. As suggested by Barclay et al. (1995) and Chin (1998), a trimming process for this item then took place so no further problems in terms of individual reliability were found. Moreover, additional analysis did not find problems with construct reliability, convergent and discriminant validity so the measurement model for reflective constructs was satisfactory (Tables 1 and 2).

With regard to formative measures, suggestions recommended by MacKenzie et al. (2005) were considered to see if a formative approach was adequate for them. Prior to that, however, a collinearity test using SPSS statistical software was conducted in order to see if overlapping among indicators and unstable estimates existed. Results showed minimal collinearity with the variance inflation factor (VIF) of all items far below the common cut-off threshold of 5 to 10 (Kleinbaum et al., 1988) (Table 1). Therefore, different contributions and relative importance

Table 1. Measurement model assessment.

Construct/dimension/indicator	VIF	t-value	Weight	Loading	Composite reliability	R ² average
Reflective						
Top management's ethical leadership (TMEL)					0.892	0.674
TMEL1		29.350		0.785		
TMEL 2		33.290		0.799		
TMEL 3		58.258		0.870		
TMEL 4		40.243		0.825		
Supervisor's ethical leadership (SEL)					0.946	0.663
SEL1		17.484		0.678		
SEL 2		24.908		0.761		
SEL 3		37.267		0.811		
SEL 5		68.602		0.859		
SEL 6		52.880		0.840		
SEL 7		28.111		0.764		
SEL 8		57.131		0.863		
SEL 9		72.579		0.874		
SEL 10		54.247		0.851		
Formative						
Peer ethical behaviour (PEB)						
PEB1	1.228	3.100	0.573			
PEB 2	1.372	3.659	0.539			
PEB 3	1.189	0.800	0.157			
Ethical intention						
Vignette1	1.080	3.946	0.626			
Vignette2	1.187	2.954	0.389			
Vignette3	1.229	1.832	0.349			

*** p < 0.001, ** p < 0.01, *p < 0.05 (based on a Student t₍₄₉₉₎ one-tailed test): t_(0.001; 499) = 3.106644601; t_(0.01; 499) = 2.333843952 and t_(0.05; 499) = 1.64791345.

in the formation of the constructs (PEB and ethical behavioural intention) can be clearly observed for all the formative indicators. Only one of the formative indicators used for measuring PEB was non significant (Table 1) but was forced to remain, since as suggested by Chin (1998), although little, it provides information in the formation of the construct. Regarding the rest of indicators, no problems related to significance were reported, thus finally leading to conclude that a satisfactory assessment of the measurement model for formative constructs was obtained.

Structural model: Hypothesis testing

By conducting a descriptive analysis of the data, the study observed high levels of ethicality in banking

individuals surveyed in the present study with the only exception of top managers who in average terms showed a slightly low ethical leadership (Mean = 2.765; S.D. = 0.835) (Table 2). In addition, correlation levels among all the latent variables were so high, and the highest correlation level with the dependent variable of the present study was for PEB ($r = .411$) (Table 2).

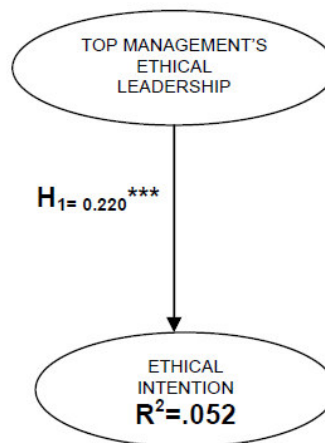
Figure 2 reflects that the proposed model is supported although only in a partial way. On the one hand, in relation to the influence of TMEL on employee ethical behavioural intention, the study found a positive and significant relation in support of H1 ($\beta = 0.152$; $p < 0.01$). However, on the other hand, regarding the partial mediating effects which were expected for other organizational members, only the effect for peers was found. Indeed by comparing a mediation model that embodies the mediator variables SEL and PEB with another competing model

Table 2. Mean, typical deviations and correlation matrix.

	Mean	S.D.	1	2	3	4
TM's ethical leadership	2.765	0.835	0.820*			
Supervisor's ethical leadership	3.104	0.895	0.516	0.814*		
Peer ethical behaviour	3.814	0.722	0.190	0.254	n.a.*	
Ethical behavioural intention	3.800	0.727	0.209	0.144	0.411	n.a.*

All the correlations are significant at $p < 0.01$ (two-tailed) when SPSS v. 17.0 was performed. Diagonal elements (*) are the square root of the variance shared between the constructs and their measures. Off-diagonal elements are the correlations among the constructs. For discriminant validity, diagonal elements should be larger than off-diagonal elements in the same row and column. n.a.: Non applicable because those constructs are formatively approximated

A) Structural model with direct effect



B) Structural model with direct and mediating effects

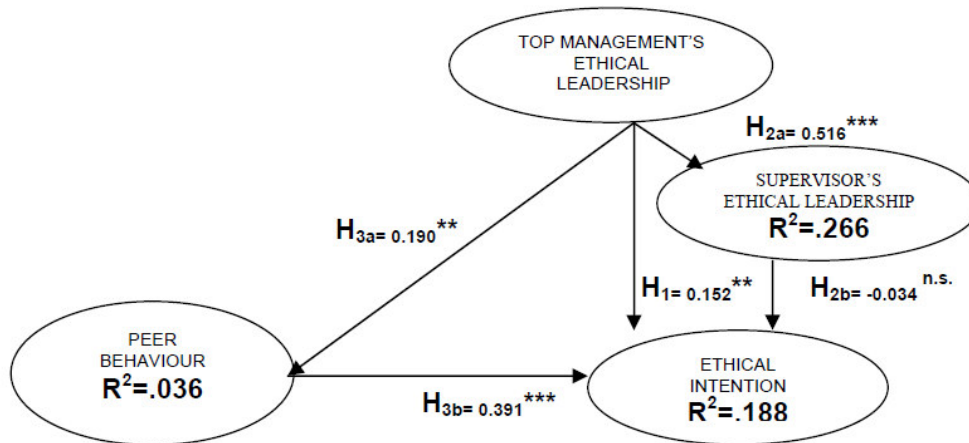


Figure 2. Mediating effect: Comparative analysis of models. *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$ (based on a student $t_{(499)}$ one tailed test).

(the direct one), the existence of the aforementioned mediating effects was showed only for the latter variable. As can be seen in Figure 2, conditions proposed by Tippins and Sohi (2003) for supporting a partial mediation effect of PEB were accomplished: There was a significant relationship between TMEL and PEB (H_{3a} ; $\beta = 0.190$; $p <$

0.01); there was also a significant relationship between PEB and employee's ethical behavioural intention (H_{3b} ; $\beta = 0.391$; $p < 0.001$); a significant effect for TMEL on employee's ethical behavioural intention (as observed in the direct model) was greatly diminished in the partial mediation model ($\beta_{\text{direct}} = 0.220$, $p < 0.001$; $\beta_{\text{mediation}} =$

Table 3. Direct and mediation model: Variance explained and Goodness of fit (GOF).

Dependent variable explained	Variance explained			Strength of mediation effect	Goodness of fit (GOF)	
	Direct model	Mediated model	Δ Variance explained	(f^2)	Direct model	Mediated model
Ethical intention	0.052	0.188	0.136	0.167 (moderate)	0.187	0.331

$f^2 = (R^2_{\text{included}} - R^2_{\text{excluded}})/(1 - R^2_{\text{included}})$; Effect sizes of $f^2 \leq 0.02$, ≤ 0.15 and ≤ 0.35 are regarded as weak, moderate and strong, respectively (Cohen, 1988; Chin, 1998). GoF = $\sqrt{\text{average}}$; with values ranging between 0 and 1. GoF refers to the geometric mean of the average communality for all the reflective constructs and the average R^2 for all the endogenous constructs.

0.152; $p < 0.01$); and last, the partial mediation model explained more variance in employee's ethical behavioural intention ($R^2_{\text{direct}} = 0.052$; $R^2_{\text{mediation}} = 0.188$) (Figure 2 and Table 3). However, the same cannot be said about the expected partial mediating effect for SEL since although there was a significant relationship between TMEL and SEL in support of H_{2a} ($\beta = 0.516$; $p < 0.001$); one of the necessary conditions was not found: The one referring to the significant relationship between SEL and employee's ethical behavioural intention, which fails to support H_{2b} ($\beta = -0.034$, non significant), and as a consequence H_2 .

All in all, the partial mediating proposed model was only accepted for PEB which however, represented a better explanation of causes for organizational ethical/unethical behaviour than the direct one. Firstly, once calculated f^2 for mediating effects size in agreement with Chin's (1998) criteria, PEB mediated moderately the relationship between TMEL and employee's ethical behavioural intention ($f^2 = 0.167$) (Table 3). Secondly, in reference to Tenenhaus et al.'s (2005) global fit index of measure for PLS, the mediating model reached a better fit to the data than the direct model since the goodness of fit (GoF) value for the former model was higher (GoF = 0.331) than the value for the latter model (GoF = 0.187) (Table 3). Finally, to conclude, that value represented in general is a good fit to the data for the model since it was very close to 0.36, a value indicating a large effect size for GoF when considering a cut-off value of 0.5 for the average communality (Fornell and Larcker, 1981) and effect sizes for R^2 proposed by Cohen (1988) (small 0.02; medium, 0.13 and large 0.26).

DISCUSSION AND CONCLUSIONS

The purpose of this study was to explore how top management's ethical leadership influences the employee's ethical behaviour and if, in reality, top management's role modelling on ethics has an effect on the employee's behaviour directly or, on the contrary, only by means of other organizational members. Based on theoretical approaches supporting the critical roles that organizational social relationships play in explaining employees' behaviour and attitudes (that is role-set theory, differential association theory and social learning

theory), the present study explored the relationship between top management's ethical leadership and the individual's ethical behavioural intention. Specifically, the study analyzed if top management's influence on ethics, in addition to having a direct effect on the individual's behaviour, uses other more indirect ways such as those ones entailing the behavioural leadership of supervisors and behaviour displayed by peers. Overall, the results confirm the research model proposed but only for peers as partial mediators, failing to accept that supervisors, the more formally positioned organizational members, serve as influential mediators of top management's ethical leadership.

As hypothesized in the research model proposed, top management's ethical leadership has a direct effect on the employees' ethical behaviour. This is the major finding of the paper since it sheds light on the existing controversy about whether top management's influence on ethics rests (or not) entirely upon other formal organizational individuals. Although a large intra-organizational distance separates top management levels from lower-level employees, evidence of a direct effect for top management ethical leadership on the employee's ethical behaviour was observed. Findings of this research support that top management's efforts in making ethics perceptible to everybody in the organization is enough to impact on the average employee's behaviour. For that purpose, words must be accompanied by deeds (Treviño et al., 2000) so the message is made a reality in daily organizational behaviour.

On the other hand, consistent with the hypothesis, top management's influence on ethics seems to use, in addition to direct ways, indirect mechanisms in order to be made manifest. Firstly, in consistency with the aforementioned findings, top management's ethical leadership was positively related to both supervisor's ethical leadership and peer ethical behaviour which is also in agreement with previous discussions on the important role of top management in having an impact on all the employees' behaviour (Alderson and Kakabadse, 1994; Vitell et al., 2000; Schroeder, 2002). Secondly, although only in a partial way, findings reveal that top management's influence on ethics flows down the organization through other important referents in immediate work environment, specifically those with no formal authority. Indeed, while no support was found for the mediating role

of supervisors, findings reflect that peer behavioural practices partially mediated the relationship between top management and the average employee's behaviour, which suggests the important role that informal people may play in influencing on ethics. As already stated in literature (Schein, 1992; Falkenberg and Herremans, 1995), informal messages and deeds may be more influential in most situations since it is on informality where the truly influential power of individuals usually rests upon. Hence, because peers represent informality in a strict sense, individuals seem to be better influenced by those considered equals in the organization. Indeed, although empirical evidence in the present study suggests that supervisors may play a role in having an effect on the employee's ethical behaviour ($r = 0.144$; $p < 0.01$) (Table 2), this influence is down-played in comparison with the one exercised by peers. Regarding social-relationship networks, individuals seem to look up more to those considered "equals" -or at least "not superiors"- when the type of behaviour which is appropriate in the organization is wanted to be known by them.

In summary, findings obtained in this research support previous views that top management always matters in promoting organizational ethics (Gini, 1997; Schroeder, 2002). However, contrary to popular belief, supervisors are not so important in helping top management to affect employees' ethical behaviour. Rather, more informal ways are needed, at least in the European business context, traditionally characterized by the use of informal mechanisms to promote ethics (Guillén et al., 2002).

Contributions and developmental implications for management

Findings of this study have significant implications to business management in terms of enhancing ethical behaviour in organizations. While much has been discussed on which people in the organization plays a more important role in having an effect on the employees' ethics, little or nothing has empirically been done to the present in order to resolve such controversy. What is more, although much has been speculated about the existence of a vertical cascade effect (Bass, 1990) through diverse hierarchical managerial levels, little research has been conducted in that matter (Mayer et al., 2009) and nothing on considering other lower-level organizational members to test how top management's ethics influences on the average employee's behaviour. The present research does it and adds value to the study of ethical/unethical decision making literature by firstly demonstrating that top management is a stronger influence than supervisors in having a direct effect on ethics, and secondly that, although in partial terms, top management's ethical leadership and its influence on ethics is partially filtered down the organization not

through supervisory levels, as found in some studies (Mayer et al., 2009) but through other more informal individuals: Peers.

Hence, a primary contribution of this study is that business strategies in promoting ethics must start and be perceptible at the top of the organization. Indeed, what people perceive about top management's way of doing things will likely influence the morals of individuals (Blanchard and Peale, 1990). If employees have negative feelings about top management's morals, ethics cannot be expected to be reflected by them. Ethical obligation is usually understood as a mutual or reciprocal obligation (Schroeder, 2002) and if ethics is absent in top management, the same may be expected at the bottom.

Another important contribution is that supervisors may not play the so commonly thought important role in influencing on ethics from the top but peers may, for this reason, informal messages may be needed in a greater extent to make a difference in ethics. Indeed, an important aspect of the organization's moral environment that must not be obviated is the informal cultural system (Treviño and Nelson, 2004; Valentine et al., 2006b) since its importance in affecting the individual's ethical behaviour is so high that the impact of some other organizational mechanisms on the individual's ethical behaviour is thought to be contingent on the aforementioned system (Leigh and Murphy, 1999). Hence, in so far as ethical behaviour may extend not only top-bottom vertically but also laterally across an organization, critical attention must be paid to informal mechanisms such as fostering conversations on ethics among employees, implementing informal norms on ethics, spreading organizational life stories about ethical employees, and finally coaching new employees by ethically exemplifying peers, among others.

LIMITATIONS AND FUTURE DIRECTIONS

One limitation of the present investigation is that values governing minds of individuals have not been considered, when as suggested by literature (Treviño, 1986), together with contextual factors, they could play interactive roles in explaining ethical/unethical behaviour, and then intervene in the way that the individual is influenced by top management's ethical leadership. In addition, another limitation is that, although informality may have a significant influence on the employee's behaviour as some previous research seems to reflect (Falkenberg and Herremans, 1995) only an informal measure related to the behaviour of other equals in the organization was considered. Therefore, in terms of additional future research, and in relation to the cascade effect on ethics, future research, both quantitative and qualitative, will be needed to test if a mediating effect for supervisory levels and/or other lower hierarchical level individuals is contingent on other either organizational, individual or,

especially cultural factors. Previous research exists supporting a total mediating effect for supervisory levels but in a North-American context (Mayer et al., 2009) with significant cultural differences on the treatment of ethics in comparison with the European cultural context (Guillén et al., 2002). Hence it could be suggested that depending on certain cultural values (for example power-distance, individualism/collectivism, etc.), individuals may look more at superiors or equals when looking for role models to emulate. Finally, future research assessing cascading effects should include more informal mechanisms different from those used here, with the purpose of testing if as suggested by Leigh and Murphy (1999), top management's influence on ethics is contingent on them.

REFERENCES

- Akaah IP (1992). Social inclusion as a marketing ethics correlate. *J. Bus. Ethics*, 11: 599-608.
- Alderson S, Kakabadse A (1994). Business ethics and Irish management: a cross-cultural study. *Eur. Manage. J.*, 12 (4): 432-441.
- Armstrong JS, Overton TS (1977). Estimating non response bias in mail surveys. *J. Mark. Res.*, 14 (3): 396-403.
- Azjen I, Fishbein M (1980). *Understanding Attitudes and Predicting Social Behaviour*. Prentice Hall Inc. Englewood Cliffs, NJ.
- Bandura A (1977). *Social Learning Theory*. Prentice Hall Inc. Englewood Cliffs, NJ.
- Barclay D, Higgins C, Thompson R (1995). The Partial Least Squares (PLS) approach to causal modelling: personal computer adoption and use as an illustration. *Technol. Stud. (Special Issue on Research Methodology)*, 2 (2): 285-309.
- Barnett JH, Karson, MJ (1987). Personal values and business decisions: an exploratory investigation. *J. Bus. Ethics*, 6: 371-382.
- Bass, BM (1990). From transactional to transformational leadership: learning to share the vision. *Organ. Dyn.*, 18: 19-31.
- Blanchard K, Peale NV (1990). *The Power of Ethical Management. You Don't Have to Cheat to Win*. Cedar Books. London.
- Brass DJ, Butterfield KD, Skaggs BC (1998). Relationships and unethical behaviour: a social network perspective. *Acad. Manage. Rev.*, 23: 14-31.
- Brown ME, Treviño LK, Harrison DA (2005). Ethical leadership: a social learning perspective for construct development and testing. *Organ. Behav. Hum. Decis. Process.*, 97 (2): 117-134.
- Chin WW (1998). The Partial Least Squares approach to structural equation modelling. In Marcoulides GA, editor. *Modern Methods for Business Research*. Lawrence Erlbaum Associates. New York, pp. 295-336.
- Chin WW (2003). PLS-Graph, Version 3.00 (Build 1130), University of Houston. Houston. TX.
- Chin, WW, Marcolin BL, Newsted PR (2003). A Partial Least Squares latent variable modelling approach for measuring interaction effects: results from a Monte Carlo simulation study and an electronic mail emotion/adoption study. *Info. Syst. Res.*, 14 (2): 189-217.
- Cohen J (1988). *Statistical Power Analysis for the Behavioural Sciences*, 2nd edition. Lawrence Earlbaum Associates. Hillsdale, NJ.
- Collins D (2000). The quest to improve the human condition. *J. Bus. Ethics*, 26 (1): 1-73.
- Deshpande SP, Joseph J (2008). Impact of emotional intelligence, ethical climate and behaviour of peers on ethical behaviour of nurses. *J. Bus Ethics*, 85 (3): 403-410.
- Detert JR, Treviño LK, Burris ER, Andiappen M (2007). Managerial models of influence and counterproductivity in organizations: a longitudinal business unit-level investigation. *J. Appl. Psychol.*, 92 (4): 993-1005.
- E.R.C. (Ethics Resource Center) (2005). The 2005 National Business Ethics Survey. Available at: www.ethics.org/nbes/nbes2005/release.html [Accessed on August 3, 2006].
- Falkenberg L, Herremans I (1995). Ethical behaviours in organizations: directed by the formal or informal systems? *J. Bus. Ethics*, 14: 133-143.
- Ford RC, Richardson WD (1994). Ethical decision making: a review of the empirical literature. *J. Bus. Ethics*, 13 (3): 205-221.
- Fornell C, Larcker DF (1981). Evaluating structural equation models with unobservable variables and measurement error. *J. Mark. Res.*, 18(1): 39-50.
- Fritzsche DJ, Becker H (1983). Ethical behaviour of marketing managers. *J. Bus. Ethics*, 2 (4): 291-299.
- Fritzsche D, Oz E (2007). Personal values' influence on the ethical dimension of decision making. *J. Bus. Ethics*, 75 (4): 335-343.
- Fontrudona J, de los Santos J (2004). *Clima Ético de la Empresa Española: Grado de Implantación de Prácticas Éticas*. Working Paper 538, Pamplona, IESE Business School, University of Navarra.
- Gini A (1997). Moral leadership and business ethics. *J. Leadersh. Organ. Stud.*, 4 (4): 64-81.
- Guillén M, Melé D, Murphy P (2002). European vs. American approaches to institutionalisation of business ethics: the Spanish case. *Bus. Ethics Eur. Rev.*, 11 (2): 167-178.
- Hulland J. (1999). Use of partial least square (PLS) in strategic management research: a review of four recent studies. *Strategic Management J.*, 20: 195-204.
- I.B.E. (Institute of Business Ethics) (2008). The 2008 National Survey: Employee Views of Ethics at Work. Available at: <http://www.ibe.org.uk/publications/listofpublications.htm> [Accessed on November 20, 2009].
- Jones GE, Cavanagh MJ (1996). An experimental examination of the effects of individual and situational factors on unethical behavioural intentions in the workplace. *J. Bus. Ethics*, 15 (5): 511-523.
- Karakose T, Kocabase I (2009). An investigation of ethical culture in educational organizations. *Afr. J. Bus. Manage.*, 3 (10): 504-510.
- Kleinbaum DG, Kupper LL, Muller KE (1988). *Applied regression analysis and other multivariate analysis methods*. PWS-Kent Publishing Company. Boston. MA.
- Koh Ch, Boo EHY (2001). The link between organizational ethics and job satisfaction: a study of managers in Singapore. *J. Bus. Ethics*, 29 (4): 309-324.
- Kurt G, Hacıoglu G. (2010). Ethics as a customer perceived value driver in the context of online retailing. *Afr. J. Bus. Manage.*, 4 (5): 672-677.
- Leigh JH, Murphy PE (1999). The role of formal policies and informal culture on ethical decision making by marketing managers. In Vitell SJ, Robin DP, editors. *Theoretical Foundations in Marketing Ethics*, JAI Press. Stamford, pp. 69-99.
- Loe TW, Ferrell L, Mansfield P (2000). A relationship of empirical studies assessing ethical decision making in business. *J. Bus. Ethics*, 25 (3): 185-204.
- MacKenzie SB, Podsakoff PM, Jarvis CB (2005). The problem of measurement model misspecification in behavioural and organizational research and some recommended solutions. *J. Appl. Psychol.*, 90: 710-730.
- Mayer D, Kuenzi M, Greenbaum R, Bardes M, Salvador R (2009). How low does ethical leadership flow? test of a trickle-down model. *Organ. Behav. Hum. Decis. Process.*, 108(1): 1-13.
- Merton RK (1957). The role set: problems in sociological theory. *Br. J. Sociol.*, 8 (2): 106-120.
- Miles RH (1977). Role-set configuration as a predictor of role conflict and ambiguity in complex organizations. *Sociometry*, 40 (1): 21-34.
- O'Fallon MJ, Butterfield KD (2005). A review of the empirical ethical decision-making literature: 1996-2003. *J. Bus. Ethics*, 59 (4): 375-413.
- Peterson D (2004). Perceived leader integrity and ethical intentions of subordinates. *Leadersh. Organ. Dev. J.*, 25(1): 7-23.
- Podsakoff PM, MacKenzie SB, Lee JY, Podsakoff NP (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *J. App. Psychol.*, 88(5): 879-903.
- Podsakoff NP, Shen W, Podsakoff PM (2006). The role of formative measurement models in strategic management research: review, critique and implications for future research. In Ketchen, D, Bergh, D

- editors, *Res. Methodology Strat. Manage.*, 3: 201-256.
- Ponnu CH, Tennakoon G (2009): The association between ethical leadership and employee outcomes-the Malaysian Case. *Electron. J. Bus. Ethics Organ. Stud.*, 14(1): 21-31.
- Schein EH (1992). *Organizational Culture and Leadership*, 2nd edition. Jossey-Bass. San Francisco, CA.
- Schminke M, Ambrose ML, Neubaum DO (2005). The effect of leader moral development on ethical climate and employee attitudes. *Organ. Behav. Hum. Decis. Process.*, 97: 135-151.
- Schroeder D. (2002). Ethics from the top: Top Management and ethical business. *Bus. Ethics Eur. Rev.*, 11: 260-267.
- Scott SG, Bruce RA (1994). Determinants of innovative behaviour: a path model of individual innovation in the workplace. *Acad. Manage. J.*, 37(3): 580-607.
- Sims RR, Brinkman J (2003). Enron ethics (or: culture matters more than codes). *J. Bus. Ethics*, 45: 243-256.
- Sutherland E., Cressey DR (1970). *Principles of Criminology*. 8th edition. Lippincott. Chicago. IL.
- Tenenhaus M, Vinzi VE, Chatelin Y-M, Lauro CL (2005). PLS Path Modelling. *Comput. Stat. Data Anal.*, 48 (1): 159-205.
- Tippins MJ, Sohi RS (2003). IT competency and firm performance: is organizational learning a missing link?. *Strateg. Manage. J.*, 24 (8): 745-761.
- Treviño LK (1986). Ethical decision making in organizations: a person-situation interactionist model. *Acad. Manage. Rev.*, 11(3): 601-617.
- Treviño LK, Butterfield KD, McCabe DL (1998). The ethical context in organizations: influences on employee attitudes and behaviours. *Bus. Ethics Q.*, 8(3): 447-476.
- Treviño LK, Hartman LP, Brown M (2000). Moral person and moral manager: how executives develop a reputation for ethical leadership. *Calif. Manage. Rev.*, 42 (4): 128-142.
- Treviño LK, Weaver G (2001). Organizational justice and ethics program "follow through": influences on employees harmful and helpful behaviour. *Bus. Ethics Q.*, 11 (4): 651-671.
- Treviño LK, Nelson KA (2004). *Managing Business Ethics: Straight Talk about How to do it Right*. John Wiley & Sons. New York. NY.
- Valentine S, Greller MM, Richtermeyer S (2006a). Employee job response as a function of ethical context and perceived organization support. *J. Bus. Res.*, 59(5): 582-588.
- Valentine S, Godkin L, Cyrson E, Fleischman G (2006b). Perceived ethical values and small business problems in Poland. *Bus. Ethics Eur. Rev.*, 15 (1): 76-85.
- Vitell SJ, Davis DL (1990). The Relationship between Ethics and Job Satisfaction: an Empirical Investigation. *J. Bus. Ethics*. 9 (6): 489-494.
- Vitell SJ, Dickerson EB, Festervand TA (2000). Ethical problems, conflicts and beliefs of small business professionals. *J. Bus. Ethics*, 28 (1): 15-24.
- Weaver GR, Treviño LK, Cochran PL (1999). Corporate ethics practices in the mid-1990's: an empirical study of the fortune 1000. *J. Bus. Ethics*, 18 (3): 283-294.
- Weaver GR, Treviño LK, Agle B (2005). Somebody I look up to: ethical role models in organizations. *Organ. Dyn.*, 34: 313-330.
- Wold H (1979). Model construction and evaluation when theoretical knowledge is scarce: An example of the use of Partial Least Squares. Working Paper, Department of Econometrics, University of Geneva, Geneva.
- Zabid ARM, Alsagoff SK (1993). Perceived ethical values of Malaysian managers. *J. Bus. Ethics*, 12 (4): 331-337.