

Motivational Antecedents of Whistle-Blowing in Iranian Public Service Organizations

Mohammad Reza Jalilvand^{1*}, Simin Nasrolahi Vosta², Ali Yasini²

1. Faculty of Management, University of Tehran, Tehran, Iran

2. Department of Management, Faculty of Literature and Humanities, Ilam University, Ilam, Iran

(Received: August 28, 2016; Revised: April 14, 2017; Accepted: April 19, 2017)

Abstract

This paper empirically explores how whistle-blowers, as members of a collective or as individual actors, are motivated to report a wrongdoing in public service organizations of Iran. Whistle-blowing in the service organizations of public sector utilizes the mass media to call the attention of public to corruption activities that are associated to the misuse of public funding in a direct way. The current research provides the empirical evidence that whistle-blowing can be motivated with personal and cultural orientation regarding organizational corruption. Drawing on existing literature, this paper examines a structural model of whistle-blowing determinants. A paper-based survey was employed and the statistical population are the employees who work in three anonymous public service organizations in Tehran, Iran. The sample size was estimated at 287. A convenience sampling approach was utilized to collect the required sample. The results of structural analysis indicated that cultural orientation, personal traits and ethical position are significant antecedents of whistle-blowing behaviour. This research suggests that the whistle-blowers have contributed to the disclosure of illegitimate, immoral, and/or illegal practices under their employers' control that may affect action through their participation in the politicization of whistle-blowing and through their communal and personal transformations.

Keywords

Cultural issues, Ethical issues, Personal traits, Public sector, Whistle-blowing.

* Corresponding Author, Email: rezajalilvand@ut.ac.ir

Introduction

Whistle-blowing is an important method to deter and prevent waste, abuse and fraud (Hwang et al., 2008). Iranian public organizations lose a part of their assets to fraud. This loss asserts that Iranian organizations in public sector and their different stakeholders should control better those participating in white-collar crime and other unethical practices in public sector organizations. Miceli and Near (2005) asserted that the most effective stakeholders for declining the unethical behaviours occurrence in organizations are the personnel of the organizations. For example, in a survey performed by the Association of Certified Fraud Examiners (2006), it was found that tips, mainly originated from employees, are the most common tools by which fraud is detected. If employees that observe unethical practices non-report the practices, it may affect the happening of various crimes in the organization. It is obvious that we must understand better the determinants of whistle-blowing so that the members of organization are encouraged to take this effective mechanism of societal control over misdeeds in organization (Miceli & Near, 2005). It has been indicated that whistle-blowing decisions are fraught with cultural, ethical, professional and personal ramifications. Whistle-blowing can be specially affected by cultural contexts, as perceptions of justice, morality, right versus wrong, and loyalty in which may differ in various countries. Research has showed that culture affects whistle-blowing (Oktem & Shahbazi, 2012). An employee might become a whistle-blower, if he/she believes or feels that the wrongdoing or fraud might harm his/her organization and its employees, society, and maybe, national security in an eventual way, if the wrongdoing or fraud is continued without a whistle-blowing. An employee might become a whistle-blower to achieve attention, promotion, fame, and monetary reward for his/her whistle-blowing, although organizations may consider whistle-blowing as an effective mechanism for controlling and exposing organizational misconduct (Malek, 2010). On the other hand, a potential whistle-blower may be threatened with being fired or other types of retaliation. Colleagues who fear

retaliation from the criminal managers might avoid whistle-blowing, or think that the whistle-blowing betrays the trust with the organization, and for this reason, whistle-blowing may influence the feelings and perceptions about colleagues, reciprocal trust, and existing or potential relationships among employees in the organization. Furthermore, it is possible that failure to blow the whistle violates ethical precepts that are personally held. Chiu (2002), in his study of Chinese students, indicated that the locus of control of subjects moderate the linkage between ethical judgments and whistle-blowing intentions. According to such implications, it is of interest to evaluate the key motivations of a potential whistle-blower to disclose immoral, illegitimate, or illegal practices for various stakeholders of public organizations in Iran. This study emphasizes the importance of whistle-blowing behavior in controlling managers for the prevention of organizational resources abuse and the dissemination of corruption. This study makes two contributions to the body of knowledge in the organizational behavior literature. First, this study examines direct and simultaneous effects of personality traits, ethical position, and cultural orientation on whistle-blowing intention. Previous works have not considered all the three factors in association with whistle-blowing behavior. Second, the whistle-blowing behavior has been examined in the western societies but it has not been examined in the eastern countries such as Iran. In fact, there is no study in the field of whistle-blowing literature in Iranian context. The current research contributes to considering the existing research gaps. The remainder of the paper can be organized as following. Firstly, an extensive literature review on personality traits, ethical position and cultural orientation provides an overview of the key theoretical background to develop our hypotheses. We then discuss the design of research, data collection approach and data analysis procedures. Finally, the major results and critical discussions are presented followed by a conclusion and its practical implications for Iranian managers and human behavior scholars.

Hypotheses Development

Near et al. (2004) defined whistle-blowing as “the disclosure by organization members (former or current) of illegal or illegitimate practices under the control of their employer to persons or organizations that may be able to effect action”. If whistle-blowing is considered as a process in the organization, then it contains three components: (1) the whistle-blower, (2) the organization that the disclosure is made against it, and (3) the assumption that the employee is ordered by someone higher in the formal hierarchy of authority not to make the disclosure. Since, whistle-blowers may be former or current members of organization (Avakian & Roberts, 2012), we need to understand both organizational and individual characteristics that cause to whistle-blowing. First, it should be clear that if there are any intrinsic motivational factors or personality traits common among whistle-blowers. Second, the organizational context should be examined to observe if there are any salient features such as maturity, public versus private, size, and so on (Nam & Lemak, 2007). More importantly, perhaps the nature of culture in an organization, and therefore its potential reaction to “bad news” may decrease or increase the whistle-blowing likelihood. Altogether, in this article, the whistle-blowing behaviour is examined through both the potential reaction of an organization and also by the employee’s behaviour. If an employee encounters with orders that run counter to his/her moral standard, for example, the logical reaction of this employee is to compute the benefits of staying employed to be weighed against the system of personal value. It is clear that the employees need to balance the inducements (both intrinsic and extrinsic) versus the likely sacrifices that should be made to decide to either leave or stay the organization (Wren, 2005). Similarly, contemporary researchers in ethics are describing whistle-blowing in terms of contributions and inducements. For example, it has been argued that whistle-blowing is a pro-social behavior that contains both altruistic and egoistic motivations. It can be claimed that the most significant implication of this point of view is that it causes one to expect the balancing of disadvantages and

advantages (Maroun & Gowar, 2013). Prior researchers have addressed whistle-blowing in various contexts. For example, Maroun and Atkins (2014) revealed that whistle-blowing on irregularities helps, not only to enhance the existing information for stakeholders, but to establish a credible expectation of auditors serving the public interest by enhancing a tendency of accountability and transparency. Tseng (2014) investigated the intention of service employees to report the “customer harasses colleague” and “colleague harasses customer” problems, and how the intention is affected by the service employees’ conflict perception, integrity of company and criminal evidence. Francalanza and Buttigieg (2016) indicated that personality traits of conscientiousness, extraversion and openness to experience and the situational factors of ethical considerations and professional requirements are significant for the potential Maltese accountant whistle-blower.

Personality Traits

Personality traits are the focus of numerous studies on organizational behaviour. The basic markers of components of personalities are based on conscientiousness, agreeableness, emotional stability (neuroticism), intellect (openness to experience), and surgency (extroversion). The unique combination of higher and lower levels of each trait denotes the individual’s personality. The meta-analysis conducted by Barrick and Mount considered studies that used the attributes as predictive indices of future behaviour. An important contribution of the markers established by Goldberg is their refinement as a predictive tool for the expected behaviour of an individual. Salgado (2002) examined the relation between the Big Five (openness to experience, conscientiousness, extroversion, agreeableness, and neuroticism/psychoticism) and certain counterproductive or anti-social behaviours, including absenteeism, accidents, deviant behaviours, and employee turnover. Salgado’s results indicated conscientiousness is predictive of both deviant behaviours and employee turnover, while extroversion, openness to experience, agreeableness, and neuroticism are predictive of employee

turnover. Similarly, current study uses the Big Five traits as a means of collecting information about the respondents. Brown et al. (2010) explored the personality traits of narcissism and empathy to specify if these traits affect the process of ethical decision making of the employee. They used different business majors including finance, management, marketing, and accounting to test whether a specific major is significantly more or less ethical in the decision making process. The results indicate that empathy and narcissism are significant predictors of ethical behaviours and that finance majors are less empathic and more narcissistic than other business majors. Conversely, Coleman and Mahaffey (2000) found that business students are no more likely to tolerate cheating than any other major. Because business students are consistent in their ethical behaviours with others in their own cohort group, this study uses only those students enrolled in an upper level accounting course. Harland et al. (2007) found a significant association between personality traits and social norms. Social responsibility is the ability to look beyond the benefit of self and behave in a manner which will benefit others in society. Thus, employees who have higher levels of social responsibility are more possible to report an incident. An individual's sense of social concern or responsibility may be impacted by his personality traits. For example, Miller and Lynam (2003) found that lower levels of agreeableness combined with a higher level of neuroticism will serve as potential predictors of criminal behaviour. Loyens (2013) examined various types of peer reporting and described why labour inspectors and police officers (do not) report misconduct of their peers. He revealed that the individualistic kind of being silent is usually preferred when faced with misbehaviour of colleagues, but in exceptional circumstances employees make the decision to report misbehaviour of colleagues to their supervisors in an individualistic or fatalistic way. Digman (1997) also developed a simplified model, based on the Big Five personality traits, which has reduced the uncertain correlation between the personality traits and the sense of social responsibility. Personality traits are both positively related to the general sense of belonging to the society and are theorized to be

positively related to social responsibility. For example, emotional stability has a positive relationship to social responsibility while the lack of emotional stability, also known as neuroticism, has a negative relationship. Hence, it is expected that personality traits (Big Five) serve as accurate predictors of whistle-blowing behaviour. Therefore, it is hypothesized that:

- H1.** Personality traits of employees are significant antecedents of whistle-blowing behaviour.

Ethical Position

Ethics research has examined a wide range of topics. Armstrong et al. (2003) suggested that ethical sensitivity of the individual as well as ethical motivation and character should be studied to help identify and understand the ethical dilemma that actors face. An important aspect which may cause a person to behave in a manner which would not normally be considered ethical would be the organizational factors including the group dynamics, authority figures, and socialization processes. Jones (1991) found that in certain circumstances, individuals do not accept responsibility for their actions. Instead, the ethical decisions are based upon the authority structure of the organization. This indicates that the ethical position of the individual within an organization is determined at least in part by the formalized beliefs of the group. Jackling et al. (2007) examined the causes of ethical failures in the accounting profession. Interest conflicts, earnings behaviours of management, and whistle-blowing activities are among the most common areas of concern for accountants. McDevitt and Van Hise (2002) argued that, when examining an ethical issue scenario with increasing materiality levels, an individual rates the importance of the subsystems such as family, religion, workplace, profession, legal system, and community, which affect the process of ethical decision making at different levels. According to Chan and Leung (2006), the vividness of a moral concern or dilemma will increase an employee's ability to diagnose a moral (ethical) issue. Thus, the materiality of the ethical dilemma can be seen to impact the process of ethical decision making of the employee. Other studies

examine the relationship between ethical position and whistle-blowing actions. Ames et al. (2015) examined the effect of religious social identity on whistle-blowing. They indicated that individuals are less likely to perceive others in their religious group as being behaving unethically. However, we show that once individuals perceive wrongdoing, they are incrementally more possible to whistle-blow when the perpetrator is a member of their religious group. Brabeck (1984) examined the levels of moral reasoning as a predictor of whistle-blowing behaviour. The results showed that employees with a higher level of moral reasoning tend more possibly to report an unacceptable situation. Chiu (2003) found a positive linkage between ethical judgment and intention to whistle-blow as moderated by locus of control in a sample of Chinese nationals. Shawver and Clements (2007) presented numerous reasons why a person may or may not want to engage in a whistle-blowing activity, including social and workplace repercussions of such actions. The study focused more on situational ethics and decisions based upon a variety of whistle-blowing scenarios including concerns about product liability, adjusting bad debt estimates, and unfair loan practices and management earning behaviors. Findings supported the claim that ethical behavior is a determinant of whistle-blowing behavior. As a result, ethical position can be considered as an antecedent of such behavior. However, there are numerous situations which can impact a person's ethical behaviors including the materiality of an issue, the societal norms, and organizational support. It is expected that ethical position of the individual can affect the intention to engage in whistle-blowing behavior. Thus, it can be suggested that:

H2. Ethical position of employees is a significant antecedent of whistle-blowing behaviour.

Cultural Orientation

The most extensively kinds of cultural orientation that have been studied in the literature are collectivism and individualism, which are characterized by how much an employee implies on his or her own objectives, or the objectives of his/her social group (Park et al., 2008).

Triandis and Gelfand (1998) added a vertical/horizontal dimension to collectivism/individualism that refers to whether an employee considers his/her role mainly as part of a hierarchy or as similar to others. The authors proposed four categories of cultural orientation: Vertical individualism, vertical collectivism, horizontal individualism, and horizontal collectivism. Horizontal individualism can be defined as the willingness to be unique, distinctive from groups, and self-reliant, and to view the employee as being equal to all colleagues. Vertical individualism is defined as the willingness to be distinguished from others and moving up in the organizational hierarchy as an outcome of competition with others. Horizontal collectivism is the willingness to view oneself as being similar to other colleagues and to highlight common objectives, sociability, and interdependence. Finally, vertical collectivism can be defined as the tendency to imply loyalty to one's social group and adherence to hierarchical relationships with colleagues, both of which cause a tendency to sacrifice individual objectives for the objective of a group and to submit to authority. Societies vary extensively in their emphasis on collectivism or individualism, and verticalism or horizontalism. Prior works suggested that there is a significant linkage between cultural orientation and attitudes towards different manners that an employee could blow the whistle (Park et al., 2008). It is therefore suggested that (Fig. 1):

H3. Cultural orientation of employees is a significant antecedent of whistle-blowing behaviour.

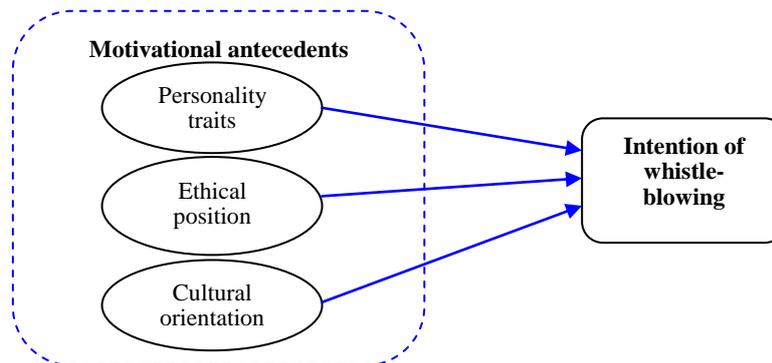


Fig. 1. Conceptual model of whistle-blowing behavior

Methodology

Data Collection

Statistical population was the employees who were enrolled in the public organizations in Tehran, Iran. Public organizations were selected as recent whistle-blowing behaviours in Iran have been happening in public sector. Researchers contacted the directors of 10 anonymous large public organizations, but only three of the public organizations allowed the team of research to survey their employees. The common characteristics of the three organizations were the occurrence of whistle-blowing behaviour in them during recent years, the similarity of activities and operations in their defined missions, and their importance in serving public. The on-site paper-based survey was sent to and completed by the employees using a convenience sampling technique. The self-administrated questionnaire was originated from the items of original English questionnaires. Then, it was translated into Persian (Farsi). All respondents were asked to sign a consent letter. All respondents were asked to recall his/her recent experience with an intention to whistle-blow. 300 questionnaires were distributed among three organizations (100 surveys for each organization). Out of the 300 collected survey, 13 questionnaires were either incomplete or the answers were unreliable. Consequently, 287 questionnaires were maintained for further data analysis. Male employees made up 68% of the selected sample, and 32% were female. The most common age groups of respondents were 30-to-40-year olds (45% of employees) and 41-to-50-year olds (38% of employees). The survey instrument was a 40-item questionnaire. Eighteen items were used to assess the personality traits. Eight items were used to identify the ethical position. Five items were employed to evaluate the intention of whistle-blowing. The final nine items were related to cultural orientation.

Construct Measurements

Multiple scales were employed to assess each construct in this research. Validated scales from prior literature were used after some modifications. The questionnaire includes four major parts. The first

part contains questions associated with the personality traits of respondents which have been adopted from the framework of Big Five (conscientiousness, openness to experience, extroversion, agreeableness, and neuroticism/ psychoticism). As shown in Table 1, the personality traits were measured by an eighteen-item scale adopted from John et al. (2008). The second part was used to assess the respondent’s ethical position. To evaluate the construct of ethical position, we employed an eight-item scale derived from Menk’s (2011) work. The third part was to recognize the features that show cultural orientation of respondents. Nine items were adopted from the study of Park et al. (2008). The final part was devoted to measure respondents’ intention of whistle-blowing. The five-item scale for intention of whistle-blowing was derived from Park et al. (2008). All scale items for personality traits, ethical position, cultural orientation, and intention of whistle-blowing were assessed by a 5-point Likert scale, with 1 showing strongly disagree and 5 showing strongly agree. 40 items were employed to capture the various latent variables (Table 1). A pilot study was conducted to evaluate how well the research instrument captured the variables it was proposed to measure, and to examine the reliability and internal consistency of questionnaire items. The first draft of the research instrument was distributed among 20 randomly selected respondents who worked at one of the targeted public organizations. According to the results of the pilot study and the received feedback from respondents, the final version of instrument was modified considering questionnaire wording, design, and measurement scale.

Table 1. Research instrument and its resources

Variables	Items	Source
Personality traits	(PT1) I am someone who is talkative (extroversion)	John et al. (2008)
	(PT2) I am someone who tends to find fault with others (extroversion)	
	(PT3) I am someone who does a thorough job (conscientiousness)	
	(PT4) I am someone who is helpful and unselfish with others (conscientiousness)	
	(PT5) I am someone who is curious about many different things (openness to experience)	

Continue Table 1. Research instrument and its resources

Variables	Items	Source
	(PT6) I am someone who is a reliable worker (conscientiousness)	
	(PT7) I am someone who is ingenious, a deep thinker (openness to experience)	
	(PT8) I am someone who has a forgiving nature (agreeableness)	
	(PT9) I am someone who tends to be disorganized (neuroticism)	
	(PT10) I am someone who has an active imagination (extroversion)	
	(PT11) I am someone who is emotionally stable, not easily upset (agreeableness)	
	(PT12) I am someone who is inventive (openness to experience)	
	(PT13) I am someone who values artistic, aesthetic experiences (openness to experience)	
	(PT14) I am someone who does things efficiently	
	(PT15) I am someone who is sometimes rude to others (neuroticism)	
	(PT16) I am someone who likes to reflect, play with ideas (openness to experience)	
	(PT17) I am someone who likes to cooperate with others (extroversion)	
	(PT18) I am someone who is easily distracted (neuroticism)	
Ethical position	(EP1) People should make certain that their actions never intentionally harm another even to a small degree. (EP2) Risks to another should be never be tolerated, irrespective of how small the risks might be (EP3)The existence of potential harm to others is always wrong, irrespective of the benefits to be gained (EP4) One should not perform an action which might in any way threaten the dignity and welfare of another individual (EP5) Deciding whether or not to perform an act by balancing the positive consequences of the act against the negative consequences is immoral (EP6) The dignity and welfare of the people should be the most important concern in any society (EP7) Moral standards are simply personal rules that indicate how a person should behave, and are not to be applied in making judgments of others (EP8) No rule concerning lying can be formulated; whether a lie is permissible or not permissible totally depends on the situation	Menk (2011)
Cultural orientation	(CO1) My personal identity, independent of others, is very important to me (individualism) (CO2) I rely on myself most of the time; I rarely rely on	Park et al. (2008)

Continue Table 1. Research instrument and its resources

Variables	Items	Source
	others (individualism).	
	(CO3) When another person does better than I do, I get tense and aroused (individualism)	
	(CO4) It annoys me when other people perform better than I do (individualism).	
	(CO5) To me, pleasure is spending time with others (collectivism).	
	(CO6) My happiness depends very much on the happiness of those around me (collectivism).	
	(CO7) It is my duty to take care of my family, even when I have to sacrifice what I want (collectivism).	
	(CO8) I do what would please my family, even if I detest the activity (collectivism).	
	(CO9) Family members should stick together, no matter what sacrifices are required (collectivism).	
Intention of whistle-blowing	(IW1) I report the wrongdoing to the appropriate persons within the workplace	Park et al. (2008)
	(IW2) I report the wrongdoing by giving detailed information about himself	
	(IW3) I report the wrongdoing to the appropriate authorities outside of the workplace	
	(IW4) I informally report the wrongdoing to someone he trusts who is in charge of correcting it	
	(IW5) I report the wrongdoing by means of procedures already in place	

Statistical Analysis

The measurement model was proposed and analyzed with Iranian employees and tested simultaneously utilizing SPSS 22 and AMOS 8.54. The measurement model was computed using summed indicators for each variable. Three kinds of information were focused in evaluating model fit: measurement error, fit indices, and chi-square. As chi-square is sensitive to size of selected sample and possibly is significant if a large dataset is used, the chi-square is not an absolute criterion in assessing model fit. Second type of information that is evaluated is measurement error. The Root Mean-square Residual (RMR) and Root-Mean-Square Error of Approximation (RMSEA) were both utilized. The final type of evaluated information was fit indices. The Incremental Fit Index (IFI), Comparative Fit Index (CFI), and Normed Fit Index (NFI) are the most important indices to assess and report. Further analysis was performed to evaluate the relative

predicting power of the 40 items including the three independent variables.

Results

Reliability and Validity

Cronbach's alpha was employed to confirm the internal consistency and reliability. It was demonstrated that all measurement scales have high internal reliability, with alpha values ranging from 0.75 to 0.83. The coefficients for personality traits, ethical position, cultural orientation, and whistle-blowing behaviour were 0.75, 0.85, 0.80, and 0.76, respectively. All Cronbach's alpha coefficients were greater than 0.7, indicating acceptable reliability. We performed a Confirmatory Factor Analysis (CFA) to examine the instrument validity, which contains convergent validity. Convergent validity examines whether questionnaire items can reflect their corresponding factor in an effective way, whereas discriminant validity examines whether two factors are different statistically. The results for evaluating model fit are illustrated in Table 2. The chi-square value of 1075 was significant at 388 degrees of freedom; but chi-square is usually significant with a sample size of more than 200 (Kenny, 2003). Other fit indices all showed a good fit of model. The fit indices of IFI, CFI, and NNFI were all high at 0.95, 0.96, and 0.94, respectively. Additionally, the RMRs and the RMSEA were both relatively lower than 0.07. Thus, the measurement model was accepted and valid.

Table 2. AMOS results

Model	Chi-square	DF	Ratio	Sig.	RMSEA	RMR	CFI	IFI	NFI	Decision
Measurement	1075	388	2.77	.000	0.07	0.07	0.96	0.95	0.94	Accept

Notes: RMR, root-mean-square residual; RMSEA, root-mean-square error of approximation; IFI, incremental fit index; CFI, comparative fit index; NNFI, non-normed fit index

Table 3 illustrates the standardised loadings, Cronbach's alpha values and the composite reliability (CR). As indicated in the table all factor loadings are greater than 0.5 and t-values indicate that these loadings are significant at the level of 0.001. All CRs exceed 0.7. Thus, the instrument showed good convergent validity.

Table 3. Standardized loadings, Cronbach's Alpha and CR values

Factors/variables	Standardized loading	t-value	α	CR
Personality traits			0.75	0.82
PT1	0.53	10.04*		
PT2	0.69	13.68*		
PT3	0.68	13.58*		
PT4	0.68	13.48*		
PT5	.085	19.67*		
PT6	0.79	17.98*		
PT7	0.73	16.15*		
PT8	0.70	15.32*		
PT9	0.86	20.41*		
PT10	0.77	17.45*		
PT11	0.70	15.29*		
PT12	0.79	17.20*		
PT13	0.65	13.41*		
PT14	0.58	11.74*		
PT15	0.76	16.56*		
PT16	0.77	17.29*		
PT17	0.47	9.49*		
PT18	0.78	17.68*		
Ethical position			0.85	0.90
EP1	0.76	17.04*		
EP2	0.81	18.60*		
EP3	0.78	17.57*		
EP4	0.62	12.93*		
EP5	0.88	20.73*		
EP6	0.75	16.57*		
EP7	0.66	13.01*		
EP8	0.71	16.23*		
Cultural orientation			0.80	0.76
CO1	0.82	18.36*		
CO2	0.79	16.45*		
CO3	0.74	16.08*		
CO4	0.68	14.26*		
CO5	0.82	15.38*		
CO6	0.71	16.40*		
CO7	0.64	12.58*		
CO8	0.58	10.02*		
CO9	0.76	16.78*		
Whistle-blowing behaviour			0.76	0.70
IW1	0.69	14.28*		
IW2	0.77	15.12*		
IW3	0.70	14.52*		
IW4	0.65	13.88*		
IW5	0.82	15.97*		

*Significant at 0.001

Assessing Statistical Assumptions

One-sample t-test

The one-sample t-test was employed to show whether a sample originated from a population with a certain mean. The mean of population is not often known, but is often hypothesized. One sample t-test with test value of 3 was used to investigate the status of research variables (cultural orientation, ethical position, personality traits, and whistle-blowing behaviour) in the organizations under study. Table 4 represents a summary of the results. The results indicate that all variable have an average above the value of 3 that means that the research variables had enough importance for the respondents regarding whistle-blowing behaviour.

Table 4. Summary of the results of t-test.

Variables	Mean	St. dev.	T-statistics	P-value
Cultural orientation	3.26r	0.93	5.61	0.000*
Ethical position	3.23	1.21	4.72	0.014*
Personality traits	3.14	0.96	3.21	0.008*
Whistle-blowing behaviour	3.51	0.92	6.16	0.023

Structural equation modeling.

After establishing an acceptable measurement model, the structural model was estimated using AMOS 22. As illustrated in Figure 2, the overall fit indices show an adequate fit for the measurement model. Our main results are presented in Figure 2 where we display the relationship between our four constructs.

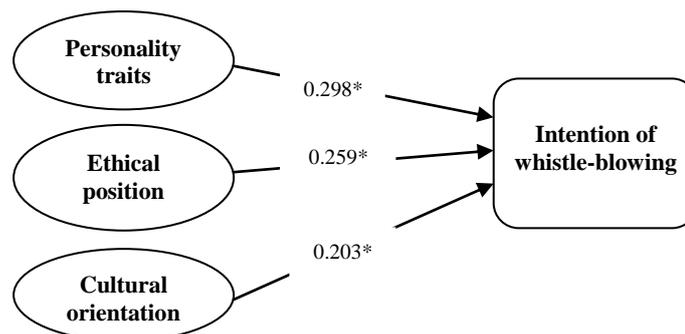


Fig. 2. Standardized path coefficients of the structural equation model

Notes: Structural model goodness-of-fit indexes: ($\chi^2=147.99$; comparative fit index (CFI)=0.940; normed fit index (NFI)=0.900; non-normed fit index (NNFI)=0.928; root mean square of approximation (RMSEA)=0.073; 90 per cent confidence of RMSEA (0.057; 0.090), *, *P<0.01

According to the results, the cultural orientation had the significant influence on whistle-blowing behaviour ($\beta=0.298$, $t=4.578$, $P<0.001$). As predicted, ethical position was a significant predictor of whistle-blowing behaviour ($\beta=0.259$, $t=4.366$, $P<0.001$). Finally, personality traits was also very important with respect to whistle-blowing behaviour ($\beta=0.203$, $t=3.550$, $P<0.001$). As shown in Table 5, cultural orientation appears to be the strongest predictor of whistle-blowing behaviour ($\beta=0.298$), followed closely by ethical position ($\beta=0.259$). The weakest, yet still significant, predictor of whistle-blowing behaviour is personality traits ($\beta=0.203$).

Table 5. Individual item predictors of whistle-blowing behavior

Independent variable	Dependent variable	Standardized beta coefficient	Critical ratio	p-value
Cultural orientation	whistle-blowing behaviour	0.298	4.578	0.000*
Ethical position	whistle-blowing behaviour	0.259	4.366	0.000*
Personality traits	whistle-blowing behaviour	0.203	3.550	0.000*

Conclusion and Managerial Implications

The goal of this research was to identify the major motivational antecedents of whistle-blowing behaviour in the context of Iranian public service organizations. Structural analysis confirms that the proposed predictors of whistle-blowing behaviour identified in the current research were valid for Iranian organizations.

It was revealed that personality traits positively influence whistle-blowing behaviour in Iranian public service organizations, supporting H1. Personality traits were measured and utilized as antecedents of either antisocial or pro-social behaviors. Socially responsible or pro-social behaviors are those that can be beneficial to a society (MacCann et al., 2009). Anti-social behaviors are those that are harmful to a certain society or miss the preservation of the self. Previous researches have explored the relationship between anti-social and/or criminal behaviors and personality traits (Salgado, 2002; Miller & Lynam, 2003). However, they were unable to determine which

combinations of the Big-Five personality traits were truly predictive of high levels of social responsibility (Harland et al., 2007).

Individual item analysis also shows that the ethical position is an important antecedent of whistle-blowing behaviour in Iranian public service organizations, supporting H2. A person who is considering blowing the whistle will be influenced by his ethical position. An employee with a more idealistic ethical position would expect a positive outcome which causes no harm irrespective of the decision and action taken. Since decisions made by an individual are impacted in part by his/her ethical position, whistle-blowing behavior will be a function of the individual's ethical position. Engaging in whistle-blowing activities is described as an ethical choice (Elias, 2008). In theory, individuals who are more idealistic will report the inappropriate behavior regardless of the situation (Menk, 2011), particularly those who are required to do so through the procedural requirements of their profession as described by justice theory. Justice theory helps to explain why a person who is more pro-social or socially responsible would also be motivated to report a problem. The procedural requirements and societal expectations to report a problem would encourage a socially responsible person to behave in a manner supportive of those rules and norms (Jecker, 2007). In this study, the employees were asked to determine their intentions to engage in whistle-blowing. A more socially responsible person should be one who, according to justice theory, would want to comply with the reporting requirements and ensure that all individuals received fair and equitable treatment.

Finally, it was found that cultural orientation has a positive influence on whistle-blowing behaviour in Iranian public service organizations, supporting H3. In addition, further analysis indicated that cultural orientation has the strongest impact on whistle-blowing behaviour. Given evidence of the effect of culture on business ethics (Thomas & Au, 2002; Smith & Hume, 2005), researchers in the field of whistle-blowing have developed their research interests in examining cultural differences in attitudes towards whistle-blowing. Culture can be considered as an important element in describing

individual ethical preferences. Culture has also been found to be closely associated with ethical decision making through its impact on reasoning, attitudes, valuations, and individual preferences (Su, 2006).

Our findings have provided managers of Iranian public service organizations with insights and practical implications. First, given the evidence of the effect of cultural orientation on whistle-blowing behaviour in Iranian public service organization, it is possible that the collectivism culture of the country leads to employees' tendency towards reporting the wrongdoing to an appropriate authority within or outside of the organization. Hence, it was obvious that intention of whistle-blowing varies by cultural orientation. Organizational systems for dealing with the response of an employee to wrongdoing need to be based on the understanding of the effect of cultural orientation on the preferred ways of employees to blow the whistle. We assert that culture may affect what considered as wrongdoing and what is viewed as the most appropriate reaction (e.g., inaction versus confrontation or reporting). Second, the findings of the study support the hypothesis that there is a positive and significant linkage between personality traits and whistle-blowing behaviours. An individual possessing higher social concerns, as evidenced by the reported personality traits, is more likely to report a problem than individuals who are less socially responsible. In fact, an employee's personality traits serve as an indicator of future behaviours or as a reason for prior actions. Third, the findings also support the predicted linkage between the ethical position and the whistle-blowing intentions of the employees. An employee who is considering blowing the whistle will be influenced by his/her ethical position. An employee with a more idealistic ethical position will expect a positive outcome which causes no harm irrespective of the decision and action taken. This type of person does not anticipate his/her decisions to be a combination of positive and negative results. A more relativistic employee is likely to accept certain negative outcomes based on the circumstances. This type of person will likely have no permanently defined standards of behaviour; rather, they allow the situation to determine their decision.

Limitations and Further Research

A limitation of this research is associated with the sampling approach. A convenience sampling approach was used, and thus generalizing the results to the public must be done with care. Second limitation relates to the study scope. Evaluating and predicting the behaviour of whistle-blowing is a complicated issue. The current study provides limited insights into the importance of antecedents of whistle-blowing behaviour in Iranian organizations since only a small percentage of the antecedents were evaluated. Final limitation bears to the sample size. The sample size accredits stout statistical analysis but cautions against overstated claims. Replication improves the confidence with that observations may be made and allows more finely grained analysis, remarkably considering contradicting ownership arrangements. Two implications are suggested for future research. Firstly, a homologous survey needs to be conducted using the items recognized above. Such research would ideally embrace several public organizations. Secondly, conducting a detailed qualitative case study assessing the complexity of whistle-blowing behaviour is advocated.

References

- Ames, D., Seifert, D. L., & Rich, J. (2015). Religious social identity and whistle-blowing. In C. Jeffrey (Ed.), *Research on professional responsibility and ethics in accounting* (pp. 181-207). Emerald Group Publishing Limited.
- Armstrong, M., Ketz, J. E., & Owsen, D. (2003). Ethics education in accounting: Moving toward ethical motivation and ethical behavior. *Journal of Accounting Education, 21*(1), 1-16.
- Association of Certified Fraud Examiners. (2006). *Report to the nation on occupational fraud and abuse*. Austin, TX.
- Avakian, S., & Roberts, J. (2012). Whistleblowers in organizations: Prophets at Work? *Journal of Business Ethics, 110*(1), 71-84.
- Barrick, M. R., & Mount, M. K. (1991). The Big Five personality dimensions and job performance: A meta-analysis. *Personnel Psychology, 44*(1), 1-26.
- Brabeck, M. (1984). Ethical characteristics of whistle blowers. *Journal of Research in Personality, 18*(1), 41-53.
- Brown, T., Sautter, J., Littvay, L., Sautter, A., & Bearnese, B. (2010). Ethics and personality: Empathy and narcissism as moderators of ethical decision making in business students. *Journal of Education for Business, 85*(4), 203-208.
- Chan, S.Y.S., & Leung, P. (2006). The effects of accounting students' ethical reasoning and personal factors on their ethical sensitivity. *Managerial Auditing Journal, 21*(4), 436-457.
- Chiu, R. K. (2003). Ethical judgment and whistle-blowing intention: Examining the moderating role of locus of control. *Journal of Business Ethics, 43*(1&2), 65-74.
- Chiu, R. K. (2002). Ethical judgment, locus of control, and whistle-blowing intention: A case study of mainland Chinese MBA students. *Managerial Auditing Journal, 17*(9), 581-8.
- Coleman, N., & Mahaffey, T. (2000). Business student ethics: Selected predictors of attributes toward cheating. *Teaching Business Ethics, 4*(2), 121-136.
- Digman, J. M. (1997). Higher-order factors of the Big Five. *Journal of Personality and Social Psychology, 73*(6), 1246-1256.
- Elias, R. (2008). Auditing students' professional commitment and anticipatory socialization and their relationship to whistle-blowing. *Managerial Auditing Journal, 23*(3), 283-294.
- Francalanza, C., & Buttigieg, E. (2016). Maltese certified public accountants

- and whistle-blowing: Traits, influences and propensity. *Journal of Applied Accounting Research*, 17(3), 262-284.
- Harland, P., Staats, H., & Wilke, H. A. M. (2007). Situational and personality factors as direct or personal norm mediated predictors of pro-environmental behavior: Questions derived from norm-activation theory. *Basic and Applied Social Psychology*, 29(4), 323-334.
- Hwang, D., Staley, B., Chen, Y. T., & Lan, J. S. (2008). Confucian culture and whistle-blowing by professional accountants: An exploratory study. *Managerial Auditing Journal*, 23(5), 504-526.
- Jackling, B., Cooper, B. J., Leung, P., & Dellaportas, S. (2007). Professional accounting bodies' perceptions of ethical issues, causes of ethical failure and ethics education. *Managerial Auditing Journal*, 22(9), 928-944.
- Jecker, N. S. (2007). The role of standpoint in justice theory. *The Journal of Value Inquiry*, 41, 165-182.
- John, O. P., Naumann, L. P., & Soto, J. (2008). Paradigm shift to the integrative big five trait taxonomy: History, measurement, and conceptual issues. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 114-158). New York, NY: Guilford Press.
- Jones, T. M. (1991). Ethical decision making by individuals in organizations: An issue-contingent model. *Academy of Management Review*, 16(2), 366-395.
- Kenny, D. A. (2003, October 26). *Measuring model fit in SEM*. Retrieved from <http://davidakenny.net/cm/fit.htm>.
- Loyens, K. (2013). Why police officers and labor inspectors (do not) blow the whistle. *Policing: An International Journal of Police Strategies & Management*, 36(1), 27-50.
- MacCann, C., Duckworth, A. L., & Roberts, R. D. (2009). Empirical identification of the major facets of conscientiousness. *Learning and Individual Differences*, 19(Issue 4), 451-458. doi:10.1016/j.lindif.2009.03.007.
- Malek, J. (2010). To tell or not to tell? The ethical dilemma of the would-be whistle blower. *Accountability in Research*, 17, 115-129.
- Maroun, W., & Atkins, J. (2014). Whistle-blowing by external auditors in South Africa. *Accounting, Auditing & Accountability Journal*, 27(5), 834-862.
- Maroun, W., & Gowar, C. (2013). South African auditors blowing the whistle without protection: A challenge for trust and legitimacy. *International Journal of Auditing*, 17(2), 177-189.

- McDevitt, R., & Van Hise, J. (2002). Influences in ethical dilemmas of increasing intensity. *Journal of Business Ethics*, 40(3), 261-274.
- Menk, K. B. (2011). *The impact of materiality, personality traits, and ethical position on whistle-blowing intentions* (Doctoral dissertation). Virginia Commonwealth University.
- Miceli, M. P., & Near, J. P. (2005). Standing up or standing by: What predicts blowing the whistle on organizational wrongdoing? *Research in Personnel and Human Resources Management*, 24, 95-136.
- Miller, J. D., & Lynam, D. R. (2003). Psychopathy and the five-factor model of personality: A replication and extension. *Journal of Personality Assessment*, 81(2), 168-178.
- Nam, D., & Lemak, D. J. (2007). The whistle-blowing zone: Applying Barnard's insights to a modern ethical dilemma. *Journal of Management History*, 13(1), 33-42.
- Near, J. P., Rehg, M. T., Van Scotter, R. R., & Miceli, M. P. (2004). Does type of wrongdoing affect the whistle-blowing process?. *Business Ethics Quarterly*, 14(2), 219-42.
- Oktem, M. K., & Shahbazi, G. (2012). Attitudes toward different forms of whistleblowing in Turkey and Iran. *Middle-East Journal of Scientific Research*, 12(7), 945-951.
- Park, H., Blenkinsopp, J., Oktem, M. K., & Omurgonulsen, U. (2008). Cultural orientation and attitudes toward different forms of whistleblowing: A comparison of South Korea, Turkey, and the UK. *Journal of Business Ethics*, 82, 929-939.
- Salgado, J. F. (2002). The big five personality dimensions and counterproductive behaviors. *International Journal of Selection and Assessment*, 10(1), 117-125.
- Shawver, T. J., & Clements, L. H. (2007). The intention of accounting students to whistle-blow in situations of questionable ethical dilemmas. *Research on Professional Responsibility and Ethics in Accounting*, 11, 177-191.
- Smith, A., & Hume, E. C. (2005). Linking culture and ethics: A comparison of accountants' ethical belief systems in the individualism/collectivism and power distance context. *Journal of Business Ethics*, 62, 209-220.
- Su, S. (2006). Cultural differences in determining the ethical perception and decision making of future accounting professionals: A comparison between accounting students from Taiwan and the United States. *Journal of American Academy of Business*, 9(1), 147-158.
- Thomas, D. C., & Au, K. (2002). The effect of cultural differences on

- behavioral responses to low job satisfaction. *Journal of International Business Studies*, 33(2), 309-326.
- Triandis, H. C., & Gelfand, M. J. (1998). Converging measurement of horizontal and vertical individualism and collectivism. *Journal of Personality & Social Psychology*, 74(1), 118-128.
- Tseng, L. M. (2014). Blowing the whistle on workplace sexual harassment. *Equality, Diversity and Inclusion: An International Journal*, 33(6), 510-522.
- Wren, D. A. (2005). *The history of management thought* (5th ed.). New York, NY: Wiley.