Whistleblowing intentions of accounting students

An application of the theory of planned behaviour

Godfred Matthew Yaw Owusu, Rita Amoah Bekoe, Fred Kwasi Anokye and Festus Odotei Okoe Department of Accounting, University of Ghana Business School, Accra, Ghana Intentions of accounting students

477

Abstract

Purpose – This study aims to investigate the intentions of a section of Ghanaian university students towards whistleblowing and the factors that predict such intentions.

Design/methodology/approach — This study used the survey method of research, and data was gathered through the use of questionnaires. A total of 524 accounting students from the University of Ghana Business School participated in the survey. The structural equation modelling technique was used to analyse the data.

Findings – The findings of this study show that the sampled students have greater intentions to report wrongdoings when detected and that majority of the students would prefer to use internal mechanisms for reporting purposes than using external means. Further, the study found students' attitude towards whistleblowing and subjective norm to be key predictors of internal whistleblowing intentions whereas perceived behavioural control was found to have a positive influence on the intention to blow the whistle externally.

Research limitations/implications – Findings of this study have implications for policymakers who have a keen interest in enhancing whistleblowing activities and whistleblower protection.

Originality/value – This study provides some insights into the whistleblowing intentions of students. An understanding of the views of students towards whistleblowing and the factors driving their intentions should be useful to organisations that may use these students upon graduation.

Keywords Structural equation modelling, Whistleblowing, Fraud, Theory of planned behaviour, Wrongdoing

Paper type Research paper

Introduction

Following the series of business scandals especially those involving accountants that led to the collapse of many giant corporations including Enron and WorldCom, concerns over fraud and organizational wrongdoings have heightened within the last decade (Alleyne et al., 2017). Major stakeholders in the business community have emphasized the need to pay serious attention to the causes of these fraudulent practices within organizations and develop appropriate measures to reduce their occurrences. Lessons learnt from some of these corporate failures, notably the Enron and WorldCom cases, clearly demonstrate that the awareness of the employees and the commitment to report wrongdoings (whistleblowing) remains one of the most potent tools to curb the menace. In the field of accounting, in particular, the importance of whistleblowing in detecting and preventing accounting fraud and other forms of malpractices is well acknowledged.

The Association of Certified Fraud Examiners (ACFE) (2012), for instance, consider whistleblowing as the most common method of stopping internal accounting fraud.



Journal of Financial Crime Vol. 27 No. 2, 2020 pp. 477-492 © Emerald Publishing Limited 1359-0790 DOI 10.1108/JFC-01-2019-0007



Compared with other fraud detection mechanisms such as internal controls and auditing, whistleblowing has been found to be relatively more effective in fraud detection [Association of Certified Fraud Examiners (ACFE), 2010]. The Association of Certified Fraud Examiners (ACFE) (2008) report on occupational fraud and abuse indicated that 46.2 per cent of organizational frauds are initially detected by tips provided by employees with internal audit and internal controls detecting only 19.4 and 23.3 per cent, respectively. More recently, an analysis of over 2410 cases of occupational fraud in more than 114 countries by the ACFE revealed that close to 40 per cent of such cases were reported by whistleblowers (ACFE, 2016). The above statistics clearly underscores the relevance of whistleblowing in the fight against fraudulent practices in organizations.

Tips from these whistleblowers, according to Smaili and Arroyo (2017), have proven to be a more potent means of uncovering fraud than internal and external audits. This explains why studies (Alleyne *et al.*, 2017; Alleyne *et al.*, 2013; Miceli *et al.*, 2008; Hwang *et al.*, 2008; Trevino and Victor, 1992) have highlighted the need to focus on whistleblowing as an effective mechanism of exposing wrongdoings in organizations. Eaton and Akers (2007) opine that encouraging the act of whistleblowing should be viewed as one of the ways organizations exhibit good governance and has the potential to also improve corporate governance. Indeed, Nayır *et al.* (2016) surmised that whistleblowing should be deemed as the voice of conscience in an organization.

In reality, however, although a relatively large number of employees are exposed to fraud, majority of them usually remain silent for reasons such as fear of retaliation, harassment, reprisal attacks and the fear of being tagged as traitors or disloyal employees (Alleyne, 2010; Varelius, 2009; Chiu, 2003; Liyanarachchi and Adler, 2011; Hauserman, 1986). The decision to either blow or not blow the whistle presents a difficult and complex decision-making process for a potential whistleblower involving a careful analysis, much deliberations and considerations (Alleyne *et al.*, 2017). Consequently, studies investigating the factors that drive the whistleblowing intentions of individuals have been on the ascendency. Nonetheless, most research on whistleblowing have largely been conducted in advanced economies focusing on different professionals such as auditors (Taylor and Curtis, 2010; Kaplan and Whitecotton, 2001), accountants (Liyanarachchi and Adler, 2011), managers and executives (Nayır *et al.*, 2016; Keenan, 2002), nurses (Jackson *et al.*, 2011) and police officers (Park and Blenkinsopp, 2009; Rothwell and Baldwin, 2007).

The current study provides some evidence from an emerging economy characterized by collectivist and family-focused cultural norms. Unlike most existing studies that focused on employees from a different professional background, this study takes a proactive approach by focusing on the whistleblowing intentions of university students who will be captains of businesses in the future. An understanding of the disposition of the current crop of students towards whistleblowing and the factors driving their intentions should be useful to organizations that may employ these students upon graduation.

The remaining sections of the paper are structured as follows; the next section contains the theoretical, literature review and hypotheses development, followed by the methodology section. The subsequent sections discuss results followed by concluding remarks.

Literature review

The concept of whistleblowing

The term whistleblowing traces its roots from the world of sports where a referee usually blows a whistle to signify and halt an illegal or unfair play exhibited by a player (Qusqas and Kleiner, 2001). In the field of accounting, whistleblowing has been defined as the:



[...] the disclosure by an organization's members (former or current) of illegal, immoral, or illegitimate practices under the control of their employers to persons or organizations that may be able to effect action (Near and Miceli, 1985, p. 4).

It involves the process of reporting the wrongdoings of an organization or an individual in the organization to appropriate authorities with the ability to put a stop to the wrongdoing.

Although several meanings have been ascribed to the concept in the literature, Vandekerckhove and Tsahuridu (2010) points out that the act of whistleblowing involves a deliberate disclosure of privileged information by someone who has access to it, where the disclosure of information is premised on perceived malpractice or wrongdoing happening in an organization with the ultimate goal of the disclosure being to elicit measures to curb the malpractice or wrongdoing. Central to the definition of whistleblowing is the fact that it is done to bring to an end wrongdoings to promote public good (Near and Miceli, 1995). The whole act of blowing the whistle starts with committed individuals with knowledge about some illegal or illegitimate practices in an organization who have the will-power to report to an appropriate authority. Such individuals, referred to as whistleblowers, may either be internal (e.g. employees) or external workers to the organization (e.g. external auditors).

Also, the reporting mechanism could be either internal or external to an organization. The internal reporting mechanism refers to the disclosure of wrongdoings to superiors or via anonymous channels within an organization (Alleyne *et al.*, 2017). The external mechanisms include reporting channels outside the immediate organization such as regulators and the media that help to curb wrongdoings (Alleyne *et al.*, 2017). Ideally, the internal reporting mechanism should be the first option to the whistleblower but its effectiveness as a reporting channel according to Soni *et al.* (2015) depends on whether the whistleblower has trust in the system and believes the wrongdoing will be corrected.

From the perspective of the organization, the internal channel is preferred to the external as it usually results in minimal friction between the whistleblower and the wrongdoers and also reduces the possibility of a lawsuit (Alleyne *et al.*, 2017; Miceli *et al.*, 2008). Be it internal or external, existing studies (Brennan and Kelly, 2007; Erkmen *et al.*, 2014; Seifert *et al.*, 2010) document that an individual's intention to either blow the whistle or not is influenced by certain factors. To Dozier and Miceli (1985) whistleblowing is a "prosocial" behaviour[1] involving both selfish (egoistic) and unselfish (altruistic) motives. Individuals who blow the whistle for altruistic purposes do so to protect the interests of the public (Erkmen *et al.*, 2014; Seifert *et al.*, 2010). On the other hand, blowing the whistle can also be for selfish reasons when the intention is to seek revenge or satisfy one's ego (Miceli *et al.*, 2008; Brennan and Kelly, 2007).

From a theoretical perspective, a number of studies (Park and Blenkinsopp, 2009) have relied on the Theory of Planned Behaviour (TPB) to explain the motivation of individuals to blow the whistle. Using the TPB as the theoretical foundation of this study we discuss in the next section the dominant factors that influence the whistleblowing intentions of students.

Theoretical review and hypothesis development

Propounded by Ajzen (1991), the TPB has been used in the literature primarily to explain and predict human behaviour. TPB asserts that actual behaviour is influenced largely by intentions and that the likelihood of an individual performing a behaviour is dependent on how strong the intention is. Ajzen (1991) explains behavioural intention to mean a person's evaluation of the likelihood of whether he/she will pursue a given behavioural alternative. Although intentions should positively influence performance of the actual behaviour within the TPB framework, existing studies on whistleblowing (Alleyne *et al.*, 2017; Alleyne, 2016; Alleyne *et al.*, 2015; Chiu, 2003; Kaplan and Whitecotton, 2001) have often used intentions as



a proxy for actual behaviour because the difficulty in gaining access to actual whistle-blowers. From the perspective of the TPB, intentions are influenced by three factors: attitude, subjective norms and perceived behavioural control. The next section discusses these predictors of intentions and their relationship with intentions to engage in whistleblowing. Thus, the study draws on the TPB to investigate whether the intentions to blow the whistle may be associated with an individual's attitude towards whistleblowing, their perception of whistleblowing approval by prominent stakeholders (subjective norm) and the perception of their capacity to blow the whistle.

Attitudes towards whistleblowing and whistleblowing intentions

The TPB asserts that a relationship exists between a person's attitude towards behaviour and the intention to perform that particular behaviour (Fishbein and Ajzen, 1975; Ajzen, 1991). The attitude towards a behaviour is explained to mean the extent to which an individual either favourably or unfavourably evaluates that particular behaviour (Beck and Ajzen, 1991; Ajzen, 1991). Generally, a favourable attitude towards a behaviour influences a person's intention to perform the behaviour, whereas an unfavourable attitude limits one's intention to perform the behaviour (Turrisi and Jaccard, 1992; Ajzen, 1991; Fishbein and Ajzen, 1975). By implication, individuals with favourable attitude are more likely to blow the whistle than those with unfavourable attitude towards whistleblowing.

Empirically, several studies have found attitude to be an important predictor of ethical intentions in general (Harsanti *et al.*, 2016; Alleyne *et al.*, 2015; Park and Blenkinsopp, 2009; Fang, 2006; Carpenter and Reimers, 2005; Buchan, 2005; Bobek and Hatfield, 2003; Flannery and May, 2000; Chang, 1998). Specific to whistleblowing intentions, however, Alleyne *et al.* (2015) document that both internal and external whistleblowing intentions are significantly influenced by attitudes. Harsanti *et al.* (2016) found that attitude positively influences whistleblowing intentions of internal auditors whereas Latan *et al.* (2016) report of similar findings among public accountants. Also, Park and Blenkinsopp (2009) report that the whistleblowing intentions of police officers are influenced largely by their attitude.

Based on the above, we hypothesize that:

H1. Attitude positively influences the whistleblowing intentions of individuals.

Subjective norm and whistleblowing intentions

Subjective norm is the perception of social influence that other important people in the life of an individual have on the person's decision to either perform or not to perform a particular behaviour (Ajzen, 1991). It is basically about the conformity of a person to the expectations of other important people in his/her life. Some significant people in the life of a person such as friends, family members, supervisors, co-workers and peers can exert influence on an individual to conform to their expectation of a particular behaviour (Beck and Ajzen, 1991). This means that the decision of an individual to either blow the whistle or not can be influenced by the perceived approval or disapproval by these important people in his/her life. Gundlach *et al.* (2003) assert that people do not just decide to blow the whistle in a vacuum and that they consult and seek the opinions of others to weigh the pros and cons of blowing the whistle (Johnson *et al.*, 2004). Results of some existing studies generally suggest subjective norms affect the whistleblowing intentions of individuals. Richardson *et al.* (2012) document that subjective norm predicts whistleblowing intentions of students whereas Harsanti *et al.* (2016)



found subjective norm to positively influence whistleblowing intentions of internal auditors. Therefore, this study hypothesizes that:

H2. Subjective norms positively influence whistleblowing intentions.

Perceived behavioural control and whistleblowing intentions

According to Ajzen (1991), perceived behavioural control refers to the ease or difficulty of performing the behaviour. To him, the intention to perform a particular behaviour is contingent on the opportunities, resources and obstacles in performing that behaviour. Within the context of whistleblowing, Park and Blenkinsopp (2009) argue that perceived behavioural control should be viewed from the perspective of control factors and an individual's assessment of their importance. These control factors include the beliefs that an individual has about hindrances within an organization such as thwarting or deliberate ignoring of the reporting. Again, it could also be the negative personal belief that the whistleblower has, such as his/her perception of how impossible it is for the wrongdoing reported to be corrected via the reporting as well as the fear of retaliation.

The fear of retaliation, in particular, has been acknowledged by existing studies to be very key in discouraging individuals from blowing the whistle (Mesmer-Magnus and Viswesyaran, 2005; Miceli and Near, 1992). Individuals, therefore, consider protective measures from retaliation very important in their decisions to blow the whistle (Gorta and Forell, 1995). In sum, an individual is more likely to blow the whistle where that person perceives that he/she can successfully overcome hindrances associated with the act of reporting wrongdoings (Park and Blenkinsopp, 2009). This, therefore, means that the greater a person's perceived behavioural control, the greater will be his/her intention to report wrongdoings in an organization. Some previous studies have found support for perceived behavioural control in predicting the intention to perform a particular behaviour. For instance, Harsanti et al. (2016) found that perceived behavioural control positively influences whistleblowing intentions of internal auditors. Also, Park and Blenkinsopp (2009) report that perceived behavioural control has a significant positive effect on internal whistleblowing intentions of police officers. Again, Alleyne et al. (2015) find a positive and significant relationship between internal and external whistleblowing intentions of public accountants and perceived behavioural control. This notwithstanding, Zakaria et al. (2016) find that perceived behavioural control does not affect whistleblowing intentions. As a result, this study hypothesizes that:

H3. Perceived behavioural control positively influences whistleblowing intentions.

Methodology

Research design, research instrument and data collection

This study used the survey method of research, and data was gathered through the use of questionnaires. The questionnaire contained two sections. The first section contained information on the essential demographic characteristics of the respondents such as age, gender and year of study. This section also captured information on students' awareness of the Whistleblower Act, 2006 (Act 720). The second section sought to measure respondents' intention to blow the whistle, either internally or externally and the factors that influence this intention. A total of eight indicators were used in measuring whistleblowing intentions, with four indicators each measuring internal and external whistleblowing intentions, respectively.



Based on the tenets of the TPB, three constructs: attitude, subjective norm and perceived behavioural control were considered to be relevant in predicting students' intentions to blow the whistle. Each of these constructs was measured on a seven-point Likert scale with multiple indicators describing each construct. Estimate for the construct "attitude" was obtained using the sum of the product of beliefs of consequences and evaluation of the importance of these consequences. Subjective norms were measured using the sum of the product of normative beliefs (ones thought of how referent others will approve or disapprove a behavior, e.g. whistleblowing) and the motivation to comply with the normative beliefs. Perceived behavioural control was measured by the sum of the product of beliefs in control factors and the evaluation of these control factors. The specific indicators used to measure each of the constructs were adapted from the works of Zakaria *et al.* (2016) and Park and Blenkinsopp (2009) details of which are provided in Table II.

The questionnaires were personally administered to both undergraduate and postgraduate accounting students from the University of Ghana Business School during the second semester of 2017/2018 academic year. The administration of the questionnaires took place after explaining to the students the purpose of the study. To ensure voluntary participation and honest responses from the students, the students were assured of confidentiality and that their responses were to be used solely for this research. Out of a total of 600 questionnaires administered, 524 valid responses were used for the analysis, representing a response rate of 87.33 per cent.

Data analysis and results

This study used the structural equation modelling (SEM) technique to investigate the relationship between attitude, subjective norm, perceived behavioural control and intention to blow the whistle. SEM-based techniques provide a platform to test and validate relationships as well as allowing researchers to effectively evaluate measurement models and structural paths that involve latent constructs with multi-item indicator variables (Hair et al., 2012; Astrachan et al., 2014). The Covariance-Based SEM (CB-SEM) technique was adopted for this study. Prior to testing the hypotheses of the study, the characteristics of the data set were explored using descriptive statistics.

Demographic characteristics of respondents

Table I presents the demographic characteristics of the respondents. The sample had an almost even distribution of male and female respondents though the male respondents had a higher proportion of 51.1 per cent. Majority of the respondents fall within the age category of 18-25 years (81.5 per cent), which suggests that the respondents belong to a youthful population. Also, students in the undergraduate level dominated the sample with a smaller percentage being master's students. Many of the respondents (54.2 per cent) interestingly are not aware of the whistleblower Act enacted to encourage whistleblowing and to protect whistleblowers in Ghana in spite of its existence for over 13 years.

Descriptive statistics on constructs

Table II presents the mean scores and standard deviations of the respondents' views on the study constructs. The attitude was measured using the beliefs about the consequences and the evaluation of the consequences of students towards whistleblowing. The overall means of the beliefs about the consequences and the evaluation of the consequences were 4.85 and 5.22, respectively, indicating students' favourable attitude towards whistleblowing. With respect to subjective norm, students' normative beliefs and their motivation to comply were



Variables	Frequency	(%)	Intentions of accounting
Age			students
Less than 18 years	9	1.7	Students
18-25 years	427	81.5	
26-30 years	49	9.4	
31-35 years	20	3.8	
36-40 years	15	2.9	483
41 years and above	4	0.8	
Gender			
Male	268	51.1	
Female	256	48.9	
Level			
Level 200	151	28.8	
Level 300	108	20.6	
Level 400	184	35.1	
Masters	81	15.5	Table I.
Whistleblower act awareness			Demographic
Yes	240	45.8	characteristics of
No	284	54.2	respondents
110	201	54.2	respondents

used to measure subjective norm. The overall means for normative beliefs and motivation to comply were 4.57 and 4.59, respectively, which shows that the opinions of other important people matter and that respondents generally believe these relevant individuals would be proud if they report wrongdoings. Perceived behavioural control was measured by students' beliefs of control factors and their evaluation of the control factors. The overall means of 3.88 and 4.12, respectively, are indicative that the respondents have a grave concern on how they can successfully overcome hindrances associated with whistleblowing. Finally, with regards to students' intention to blow the whistle, the overall mean for internal whistleblowing is 4.99 compared with external whistleblowing which was 2.96. This suggests that the respondents would prefer to report wrongdoing internally than resorting to other external channels.

Reliability and validity

Reliability and validity tests were conducted to assess the appropriateness of the inclusion of the constructs in the structural model analysis. The reliability of the constructs was measured using the Cronbach alpha (CA) and the composite reliability (CR) scores. The results of these tests as shown in Table IV indicate that the constructs are reliable because the CA and CR score for each construct is above 0.70 which satisfies the recommended threshold of 0.70 and above (Fornell and Larcker, 1981; Nunnally, 1978). The validity of the constructs was also measured using the convergent and discriminant tests. The convergent validity was measured using the average variance extracted (AVE). The AVE scores as shown in Table IV demonstrate that all the constructs meet the recommended threshold of 0.50 and above (Hair *et al.*, 2013). Also, the Fornell–Larcker criterion was used to conduct a discriminant validity test to determine how distinct and uncorrelated the constructs are. The results as depicted in Table V demonstrate that the discriminant validity of the constructs is assured because the AVE scores for the constructs are higher than the squared cross-correlations of the constructs (Tables III and IV).



IFC SD Constructs Mean Internal whistleblowing intentions I would report it to the appropriate people within the organization 5.05 1.812 I would let upper level of management know about it 4.86 1.765 I would tell my supervisor about it 5.31 1.680 I would report to ethics officer or disciplinary committee 4.74 1.819 484 Overall mean 4.99 External whistleblowing intentions I would report it to the appropriate authorities outside the organization 3.44 1.968 I would use reporting channels outside of the organization 3.12 1.955 I would provide information to outside agencies 2.71 1.860 I would inform the public of it. 2.56 1.893 2.96 Overall mean Attitude Behavioural beliefs Blowing the whistle would help prevent serious harm to an organization 4.89 1.950 Reporting wrong doing in the organization is helpful in controlling corruption 5.60 1.591 Whistleblowing enhances the public interest 4.61 1.825 Reporting wrongdoing in the organization is a way for an employee to do his or her duty 4.90 1.707 Whistleblowing is the moral thing to do 4.82 1.849 Whistleblowing enhances organization's sustainability 4.63 1.794 Whistleblowing is a way of exercising conscience 4.67 1.760 Whistleblowing is to enable employee to be a moral agent 4.81 1.764 Whistleblowing is the management tool to protect organization 1.807 4.68 4.91 1.786 Whistleblowing is to make people at work liable for their wrong doing Overall mean 4.85 Evaluation outcomes Prevention of harm to the organization 5.23 1.800 5.47 1.628 Control of corruption 5.15 Enhancement of one's duty to protect the public interest 1.645 Enhancement of one's duty as an employee 5.02 1.639 5.16 Moral satisfaction on one's part 1.745 5.16 1.607 Enhance sustainability of organization Enhancement of one's conscience 5.30 1.587 Enable employee to be a moral agent 5.21 1.622 5.20 Management tool to protect organization 1.659 People liable for their wrongdoing 5.33 1.657 Overall mean 5.22 Subjective norms Normative beliefs Members of one's family 4.56 1.920 Co-workers/Colleague 3.95 1.801 Immediate supervisor/lecturer 4.87 1.725 Subordinate/Junior 4.43 1.736 Top management/School management 5.05 1.920 Friends 4.18 1.728 Neighbours 4.19 1.720 Acquaintance 4.37 1723 Public 4.98 1.777 Table II. Government/policymakers 5.15 1.807 Descriptive statistics Overall mean 4.57



on constructs

(continued)

Constructs	Mean	SD	Intentions of accounting
Motivation to comply			students
Members of one's family	4.57	1.974	
Co-workers/Colleague	4.17	1.775	
Immediate supervisor/Lecturer	4.70	1.817	
Subordinate/Junior	4.36	1.786	40=
Top management/School management	5.02	1.828	485
Friends	4.35	1.734	
Neighbours	4.30	1.701	
Acquaintance	4.38	1.741	
Public	4.90	1.808	
Government/policymakers	5.10	1.850	
Overall mean	4.59		
Perceived Behavioural Control Belief in control factors The organization will hinder/ignore my reporting and it will be too great for me to endure My reporting will not make any difference I will be subjected to harassment by the management I will be demoted/I will be isolated I will be terminated I will be closely monitored I will be charged of breaching loyalty duty Overall mean	3.96 3.69 3.90 3.82 3.60 4.31 3.90 3.88	1.898 1.872 1.825 1.859 1.874 1.975 1.977	
Evaluation of control factor The organization is hindering reporting (or ignoring it) Difficulties to correct wrong doing Management harassment Demotion/Isolation Termination Closely monitored Breach of loyalty duty Overall mean	4.02 4.06 4.18 4.03 3.84 4.49 4.20 4.12	1.799 1.769 1.795 1.832 1.843 1.820 1.919	Table II.

Construct	Average variance extracted	Composite reliability	Cronbach alpha	
Attitude	0.64	0.95	0.95	. T
Subjective norms	0.53	0.88	0.88	Average
Perceived behavioural control	0.55	0.90	0.90	extracted, co
Internal intentions	0.64	0.88	0.88	reliab
External intentions	0.66	0.88	0.86	Cronba

Structural model analysis

The structural model showing the relationship between the dependent and independent variables as depicted in Figure 1 was tested using AMOS version 21. Results from the structural model analysis are as shown in Tables V and VI.

Model fitness

The fit indices which give an indication of the fitness of the model are given in Table V. The indices that were tested included Chi-square/Degrees of Freedom, Goodness-of-Fit Index



JFC 27,2

(GFI), Comparative Fit Index, Tucker-Lewis Index, Adjusted GFI (AGFI), Root Mean Square Error of Approximation, Parsimony GFI and Parsimony Normed Fit. Overall, the various fit indices as displayed in Table V met the recommended threshold values for a good model except for GFI and AGFI which were marginally below the recommended threshold.

486

Discussion

The regression results as displayed in Table VI indicate a positive and a highly significant relationship between attitude towards whistleblowing and intentions to blow the whistle internally, but an insignificant relationship with external whistleblowing. This finding thus,

Constructs	IINT	EINT	AT	SN	PBC
IINT	1	0.000	0.283	0.112	0.025
EINT	0.016	1	0.000	0.004	0.009
AT	0.532	0.011	1	0.147	0.025
SN	0.334	0.066	0.384	1	0.017
PBC	0.157	0.096	0.158	0131	1

Table IV.

Notes: IINT – Internal intention; EINT – External intention; AT – Attitudes; SN – Subjective norm; PBC – Discriminant validity Perceived behavioural control

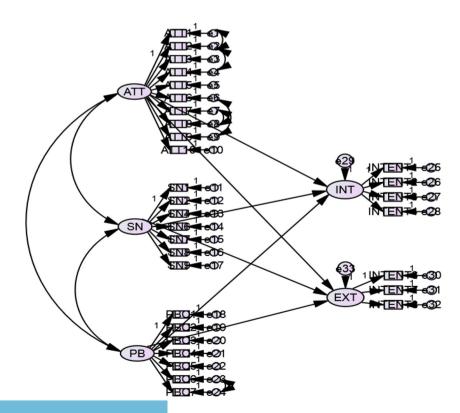


Figure 1. Structural model



suggests that individuals with a favourable attitude towards whistleblowing are more likely to report wrongdoing in the field of work. As pointed out by Ajzen (1991), within the TPB framework, a favourable attitude towards a behaviour influences a person's intention to perform the behaviour, whereas an unfavourable attitude limits one's intention to perform the behaviour. Empirically, findings of this study compare favourably with some studies (Harsanti et al., 2016; Latan et al., 2016; Alleyne et al., 2015; Park and Blenkinsopp, 2009) that found attitude towards whistleblowing to be good predictors of intentions to blow the whistle. The results, however, indicate that given the option, students will prefer to use internal mechanisms to report wrongdoing than blowing the whistle externally. This finding, however, is consistent with results of some existing studies (Alleyne et al., 2017; Miceli et al., 2008) that conclude that in the bid to reduce possible lawsuits and friction between whistleblowers and wrongdoers, internal whistleblowing is usually preferred to external whistleblowing.

The relationship between the construct subjective norms and whistleblowing intentions also yielded a positive and highly significant relationship. This finding demonstrates that the intentions of students to report wrongdoing in the field of work is also dependent on the extent to which students value the opinions of other important people in society in their decision-making. Students who have high regard for the views significant people in their life such as friends, family members, supervisors etc. are more likely to report wrongdoing when they perceive such an action would be approved by these important people in society. As argued by Ajzen (1991), the decision of an individual to either perform or not to perform a particular behaviour may be influenced by the expectations of other people in his life. This finding is in consonance with other prior studies that found subjective norms to be positively associated with whistleblowing intentions (Zakaria et al., 2016; Harsanti et al., 2016; Richardson et al., 2012). Although the above finding may mean the willingness of students to report wrongdoing in the field of work in part is shaped by the kind of expectation, they perceive the society has on them, the result, however, suggests that

Fit Indices	Recommended value	Results	Remarks	
Chi-square/degree of freedom	< 5.00	2.590	Good	
Goodness-of-Fit Index (GFI) Comparative Fit Index	≥0.90 >0.90	0.877 0.937	Marginal Good	
Tucker-Lewis Index	≥0.90 ≥0.90	0.930	Good	
Adjusted GFI	≥0.90	0.854	Marginal	T 11 W
Root Mean Square Error of Approximation	< 0.08	0.056	Good	Table V.
Parsimony GFI	≥0.5	0.742	Good	Fit indices for
Parsimonious Normed Fit Index	≥0.5	0.814	Good	structural model

Constructs	Standardized coefficients	p-values
Attitude → Internal whistleblowing intention	0.060	0.000
Attitude → External whistleblowing intention	-0.004	0.523
Subjective norms → Internal whistleblowing intention	0.024	0.002
Subjective norms → External whistleblowing intention	0.010	0.258
Perceived behavioural control → Internal whistleblowing intention	0.011	0.180
Perceived behavioural control → External whistleblowing intention	0.017	0.056



regardless of the extent of influence students will mostly prefer to blow the whistle internally. As shown in Table VI, the relationship between subjective norms and external whistleblowing intentions though positive but was statistically insignificant. Culturally, this finding is not surprising given that the average Ghanaian would always seek to have matters resolved in the quiet than doing so openly.

Finally, the results show a positive but weakly (at 10 per cent) significant relationship between perceived behavioural control and intentions to engage in external whistleblowing and an insignificant relationship with internal whistleblowing intentions. Given that the construct perceived behavioural control captures the belief an individual has about hindrances within an organization and the fact that respondents generally have serious reservations on how hindrances associated with the act of reporting wrongdoings could be handled (see the mean score for perceived behavioural control in Table II), it is not surprising that an insignificant relationship was found between the two constructs. Taken together, these findings indicate that the intentions of students to report wrongdoings in the field of work is dependent largely on their own attitude towards whistleblowing and the importance they attach to the views of certain important people in society. Moreover, these factors largely affect the intentions to report wrongdoings internally and not externally.

Conclusion

The study investigated the intentions of a section of Ghanaian university students towards whistleblowing and the factors that predict such intentions. Based on the tenets of the TPB, the study explored the influence of the attitudes of students towards whistleblowing, their perception of perceived behavioural control and subjective norm on their intentions to engage in whistleblowing. The findings of this study suggest that the sampled students have greater intentions to report wrongdoings when detected and that majority of the students would prefer to use internal mechanisms for reporting purposes than using external means. In terms of awareness of the existence of whistleblowing Act in Ghana, more than half of the students seem not to be aware of such an important Act.

Based on the results of the structural model, the study found that students' attitude towards whistleblowing positively influences their intention to blow the whistle internally but not externally. Further, the subjective norm was found to have a significant influence on internal whistleblowing intentions but not on external whistleblowing intentions of students. It was also found that students' perceived behavioural control significantly predicts their intention to blow the whistle externally but has no significant effect on internal whistleblowing intentions.

Findings of this study have implications for policymakers who have a keen interest in enhancing whistleblowing activities and whistleblower protection. Given that most respondents prefer to blow the whistle internally, there is a need for organizations to improve their internal structures for reporting wrongdoing. For example, organizational support structures such as having an open-door policy, activating anonymous hotlines and designating someone as an ethics manager can create a favourable environment for reporting wrongdoing. Organizations should also be interested in ensuring a supportive ethical culture to spur on potential whistleblowers to report deviant cases internally. This will encourage internal whistleblowing and reduce the tendency to report wrongdoings externally which can negatively affect the reputation of the organization. Encouraging internal whistleblowing helps to manage risk better by making it more likely for deviant practices to be detected. Moreover, given that the attitude of an individual is an important predictor of his/her whistleblowing intentions, providing training in ethics will be useful in shaping the attitudes of employees positively towards whistleblowing.

Specific to the context of Ghana, the findings show that more than half of the respondents had no knowledge of the whistleblower legislation in Ghana. This calls for policymakers to deepen awareness and understanding of the legislation which seeks to offer protection for whistleblowers. This will ignite in individuals a feeling of protection and propel them to report wrongdoing where necessary.

In spite of the contributions from this study, the study has some limitations. First, the study used data from only accounting students from a single public university which may limit the extent of generalization of the findings of the study. Second, the study investigated the whistleblowing intentions of students and not actual whistleblowing. One must therefore be cautious when interpreting the results because people's intentions are likely to change over time.

Note

1. Positive social behaviour intended to benefit other persons.

References

- Ajzen, I. (1991), "The theory of planned behavior", Organizational Behavior and Human Decision Processes, Vol. 50 No. 2, pp. 179-211.
- Alleyne, P. (2010), "The influence of individual, situational and team factors on auditors' whistle-blowing intentions", Unpublished PhD Thesis, University of Bradford, Bradford.
- Alleyne, P. (2016), "The influence of organisational commitment and corporate ethical values on non-public accountants' whistle-blowing intentions in Barbados", *Journal of Applied Accounting Research*, Vol. 17 No. 2, pp. 190-210.
- Alleyne, P., Hudaib, M. and Pike, R. (2013), "Towards a conceptual model of whistle-blowing intentions among external auditors", *The British Accounting Review*, Vol. 45 No. 1, pp. 10-23.
- Alleyne, P., Hudaib, M. and Haniffa, R. (2015), "The moderating role of perceived organisational support in breaking the silence of public accountants", *Journal of Business Ethics*, Vol. 147 No. 3, pp. 509-527.
- Alleyne, P., Charles-Soverall, W., Broome, T. and Pierce, A. (2017), "Perceptions, predictors and consequences of whistleblowing among accounting employees in Barbados", *Meditari Accountancy Research*, Vol. 25 No. 2, pp. 241-267.
- Association of Certified Fraud Examiners (ACFE) (2008), Report to the nation on occupational fraud and abuse. ACFE, Austin, TX.
- Association of Certified Fraud Examiners (ACFE) (2010), "Report to the nations on occupational fraud and abuse", available at: www.acfe.com/rttn2016.aspx (accessed 20 October 2017).
- Association of Certified Fraud Examiners (ACFE) (2012), "Association of Certified Fraud Examiners (ACFE)", available at: http://acfe.it/
- Association of Certified Fraud Examiners (ACFE) (2016), "Report to the nations on occupational fraud and abuse", available at: www.acfe.com/rttn2016/docs/2016-report-to-the-nations.pdf (accessed 31 September 2019).
- Astrachan, C.B., Patel, V.K. and Wanzenried, G. (2014), "A comparative study of CB-SEM and PLS-SEM for theory development in family firm research", *Journal of Family Business Strategy*, Vol. 5 No. 1, pp. 116-128.
- Beck, L. and Ajzen, I. (1991), "Predicting dishonest actions using the theory of planned behavior", Journal of Research in Personality, Vol. 25 No. 3, pp. 285-301.
- Bobek, D.D. and Hatfield, R.C. (2003), "An investigation of the theory of planned behavior and the role of moral obligation in tax compliance", Behavioral Research in Accounting, Vol. 15 No. 1, pp. 13-38.



- Brennan, N. and Kelly, J. (2007), "A study of whistleblowing among trainee auditors", The British Accounting Review, Vol. 39 No. 1, pp. 61-87.
- Buchan, H.F. (2005), "Ethical decision making in the public accounting profession: an extension of Ajzen's theory of planned behavior", *Journal of Business Ethics*, Vol. 61 No. 2, pp. 165-181.
- Carpenter, T.D. and Reimers, J.L. (2005), "Unethical and fraudulent financial reporting: applying the theory of planned behavior", *Journal of Business Ethics*, Vol. 60 No. 2, pp. 115-129.
- Chang, M.K. (1998), "Predicting unethical behavior: a comparison of the theory of reasoned action and the theory of planned behavior", *Journal of Business Ethics*, Vol. 17 No. 16, pp. 1825-1834.
- Chiu, R.K. (2003), "Ethical judgment and whistleblowing intention: examining the moderating role of locus of control", *Journal of Business Ethics*, Vol. 43 Nos 1/2, pp. 65-74.
- Dozier, J.B. and Miceli, M.P. (1985), "Potential predictors of whistle-blowing: a prosocial behavior perspective", *The Academy of Management Review*, Vol. 10 No. 4, pp. 823-836.
- Eaton, T.V. and Akers, M.D. (2007), "Whistleblowing and good governance", *The CPA Journal*, Vol. 77 No. 6, pp. 66-71.
- Erkmen, T., Özsözgün Çalışkan, A. and Esen, E. (2014), "An empirical research about whistleblowing behavior in accounting context", Journal of Accounting and Organizational Change, Vol. 10 No. 2, pp. 229-243.
- Fang, M.L. (2006), "Examining ethical intentions of individual employees of Taiwan from theory of planned behavior", The Business Review, Cambridge, Vol. 6 No. 1, pp. 257-264.
- Fishbein, M. and Ajzen, I. (1975), "Belief, attitude, intention and behavior: an introduction to theory and research, Addison-Wesley, Reading, MA.
- Flannery, B.L. and May, D.R. (2000), "Environmental ethical decision making in the US metal-finishing industry", *Academy of Management Journal*, Vol. 43 No. 4, pp. 642-662.
- Fornell, C. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol. 18 No. 1, pp. 39-50.
- Gorta, A. and Forell, S. (1995), "Layers of decision: linking social definitions of corruption and willingness to take action", Crime, Law and Social Change, Vol. 23 No. 4, pp. 315-343.
- Gundlach, M.J., Douglas, S.C. and Martinko, M.J. (2003), "The decision to blow the whistle: a social information processing framework", The Academy of Management Review, Vol. 28 No. 1, pp. 107-123.
- Hair, J.F., Hult, G.T.M., Ringle, C.M. and Sarstedt, M. (2013), A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM), SAGE Publications, Thousand Oaks, CA.
- Hair, J.F., Sarstedt, M., Ringle, C.M. and Mena, J.A. (2012), "An assessment of the use of partial least squares structural equation modeling in marketing research", *Journal of the Academy of Marketing Science*, Vol. 40 No. 3, pp. 414-433.
- Harsanti, P., Ghozali, I. and Chariri, A. (2016), "Determinants of internal auditors behavior in whistle blowing with formal retaliation and structural anonymity line as moderating variables (empirical study at state-owned enterprises in Indonesia)", International Journal of Applied Business and Economic Research, Vol. 14 No. 3, pp. 1531-1546.
- Hauserman, N.R. (1986), "Whistle-blowing: individual morality in a corporate society", Business Horizons, Vol. 29 No. 2, pp. 4-9.
- Hwang, D., Staley, B., Te Chen, Y. and Lan, J.S. (2008), "Confucian culture and whistle-blowing by professional accountants: an exploratory study", *Managerial Auditing Journal*, Vol. 23 No. 5, pp. 504-526.
- Jackson, D., Peters, K., Hutchinson, M., Edenborough, M., Luck, L. and Wilkes, L. (2011), "Exploring confidentiality in the context of nurse whistle blowing: issues for nurse managers", *Journal of Nursing Management*, Vol. 19 No. 5, pp. 655-663.

Intentions of

accounting

students

- Johnson, C.E., Sellnow, T.L., Seeger, M.W., Barrett, M.S. and Hasbargen, K.C. (2004), "Blowing the whistle on Fen-Phen: an exploration of MeritCare's reporting of linkages between Fen-Phen and valvular heart disease", *Journal of Business Communication*), Vol. 41 No. 4, pp. 350-369.
- Kaplan, S.E. and Whitecotton, S.M. (2001), "An examination of auditors' reporting intentions when another auditor is offered client employment", Auditing: A Journal of Practice and Theory, Vol. 20 No. 1, pp. 45-63.
- Keenan, J.P. (2002), "Comparing Indian and American managers on whistleblowing", Employee Responsibilities and Rights Journal, Vol. 14 Nos 2/3, pp. 79-89.
- Latan, H., Ringle, C.M. and Jabbour, C.J.C. (2016), "Whistleblowing intentions among public accountants in Indonesia: testing for the moderation effects", *Journal of Business Ethics*, Vol. 152 No. 2, pp. 573-588.
- Liyanarachchi, G.A. and Adler, R. (2011), "Accountants' whistle-blowing intentions: the impact of retaliation, age, and gender", *Australian Accounting Review*, Vol. 21 No. 2, pp. 167-182.
- Mesmer-Magnus, J.R. and Viswesvaran, C. (2005), "Whistleblowing in organizations: an examination of correlates of whistleblowing intentions, actions, and retaliation", *Journal of Business Ethics*, Vol. 62 No. 3, pp. 277-297.
- Miceli, M.P. and Near, J.P. (1992), Blowing the Whistle: The Organizational and Legal Implications for Companies and Employees, Lexington Books, Washington, DC.
- Miceli, M.P., Near, J.P. and Dworkin, T.M. (2008), Whistle-Blowing in Organizations, Taylor and Francis, New York, NY.
- Nayır, D.Z., Rehg, M.T. and Asa, Y. (2016), "Influence of ethical position on whistleblowing behaviour: do preferred channels in private and public sectors differ?", *Journal of Business Ethics*, Vol. 149 No. 1, pp. 147-167.
- Near, J.P. and Miceli, M.P. (1985), "Organizational dissidence: the case of whistle-blowing", *Journal of Business Ethics*, Vol. 4 No. 1, pp. 1-16.
- Near, J.P. and Miceli, M.P. (1995), "Effective-whistle blowing", *The Academy of Management Review*, Vol. 20 No. 3, pp. 679-708.
- Nunnally, J.C. (1978), Psychometric Theory, McGraw-Hill, New York, NY.
- Park, H. and Blenkinsopp, J. (2009), "Whistleblowing as planned behavior a survey of South Korean police officers", *Journal of Business Ethics*, Vol. 85 No. 4, pp. 545-556.
- Qusqas, F. and Kleiner, B.H. (2001), "The difficulties of whistleblowers finding employment", Management Research News, Vol. 24 Nos 3/4, pp. 97-100.
- Richardson, B.K., Wang, Z. and Hall, C.A. (2012), "Blowing the whistle against Greek hazing: the theory of reasoned action as a framework for reporting intentions", *Communication Studies*, Vol. 63 No. 2, pp. 172-193.
- Rothwell, G.R. and Baldwin, J.N. (2007), "Ethical climate theory, whistle-blowing, and the code of silence in police agencies in the state of Georgia", *Journal of Business Ethics*, Vol. 70 No. 4, pp. 341-361.
- Seifert, D.L., Sweeney, J.T., Joireman, J. and Thornton, J.M. (2010), "The influence of organizational justice on accountant whistleblowing", Accounting, Organizations and Society, Vol. 35 No. 7, pp. 707-717.
- Smaili, N. and Arroyo, P. (2017), "Categorization of whistleblowers using the whistleblowing triangle", Journal of Business Ethics, Vol. 157 No. 1, pp. 1-23.
- Soni, F., Maroun, W. and Padia, N. (2015), "Perceptions of justice as a catalyst for whistle-blowing by trainee auditors in South Africa", *Meditari Accountancy Research*, Vol. 23 No. 1, pp. 118-140.



- Taylor, E.Z. and Curtis, M.B. (2010), "An examination of the layers of workplace influences in ethical judgments: whistleblowing likelihood and perseverance in public accounting", *Journal of Business Ethics*, Vol. 93 No. 1, pp. 21-37.
- Trevino, L.K. and Victor, B. (1992), "Peer reporting of unethical behavior: a social context perspective", Academy of Management Journal, Vol. 35 No. 1, pp. 38-64.
- Turrisi, R. and Jaccard, J. (1992), "Cognitive and attitudinal factors in the analysis of alternatives to drunk driving", *Journal of Studies on Alcohol*, Vol. 53 No. 5, pp. 405-414.
- Vandekerckhove, W. and Tsahuridu, E.E. (2010), "Risky rescues and the duty to blow the whistle", Journal of Business Ethics, Vol. 97 No. 3, pp. 365-380.
- Varelius, J. (2009), "Is whistle-blowing compatible with employee loyalty?", Journal of Business Ethics, Vol. 85 No. 2, pp. 263-275.
- Zakaria, M., Razak, S.N.A.A. and Noor, W.N.B.W.M. (2016), "Effects of planned behaviour on whistle blowing intention: evidence from Malaysian police department", *Middle-East Journal of Scientific Research*, Vol. 24 No. 7, pp. 2352-2365.

Further reading

Bowen, R.M., Call, A.C. and Rajgopal, S. (2010), "Whistle-blowing: target firm characteristics and economic consequences", *The Accounting Review*, Vol. 85 No. 4, pp. 1239-1271.

Corresponding author

Fred Kwasi Anokye can be contacted at: fredizzo4u@gmail.com

For instructions on how to order reprints of this article, please visit our website: www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: permissions@emeraldinsight.com



Reproduced with permission of copyright owner. Further reproduction prohibited without permission.

