



Does Moral Intensity Affect the Whistleblowing Intentions?

Waseem Yousaf¹, Raheel Jamil²¹ MS Scholar, Business & Management Sciences, Minhaj University Lahore, Pakistan., Email: m.waseem511@gmail.com² Associate Lawyer, House of Lawyers Lahore, Pakistan, Email: raheeljamilkhan@gmail.com

ARTICLE INFO	ABSTRACT
<p>Article History: Received: July 22, 2020 Revised: October 28, 2020 Accepted: November 22, 2020 Available Online: December 31, 2020</p> <p>Keywords: Whistle-blowing Triangle Whistle-blowing Intentions Perceived Moral Intensity Auditors Pakistan</p>	<p>The present study investigates the nexus between whistle-blowing triangle having components like Pressure/Financial Incentives, Opportunity, rationalization, and whistle-blowing intentions by focusing the moral intensity playing a moderating role in the Pakistani context to enhance the body of information on this subject by giving observational demonstrate. The sample in this research is taken from the Karachi Stock Exchange of Pakistan registered audit firms. PLS-PM method-based analysis results found a significant relationship between whistle-blowing triangle components, whistle-blowing intentions, and moral intensity. We found that the most significant predictor of the auditor's intentions to report the wrongdoing in Pakistan is an opportunity. Pressure/Financial Incentives and rationalization, the other components of the whistle-blowing triangle, also play a vital role in assisting the auditor's whistle-blowing intentions. These investigation findings proposed that an opportunity is the priority factor for enhancing the auditor's whistle-blowing intentions in Pakistan. Our results also concluded that the moral intensity significantly and positively moderates this relation among the whistle-blowing triangle and intentions to report the wrongdoing. This study also provides insights to the society in better understanding the whistle-blowing concept, an issue neglected by society.</p>

© 2020 The Authors, Published by iRASD. This is an Open Access article under the Creative Common Attribution Non-Commercial 4.0

Corresponding Author's Email: m.waseem511@gmail.com

1. INTRODUCTION

This work aims to strengthen some of the recent studies finding; First, moral intensity having a moderating effect (Alleyne, Hudaib, & Pike, 2013; Beu, Buckley, & Harvey, 2003; Latan, Ringle, & Jabbour, 2018; Yu, 2015) among the relationship of a recently developed concept of whistle-blowing triangle and auditors whistle-blowing intentions in the context of Pakistan. Second, replicate the proposed whistle-blowing triangle model (Smaili & Arroyo, 2019) in different societies to provide additional practical indications of the model by applying a quantitative approach (Latan, Jabbour, & de Sousa Jabbour, 2018). Finally, tested the model with various factors (Alleyne et al., 2013; Boyle, DeZoort, & Hermanson, 2015; Free, 2015), i.e., moral intensity.

This work is also moored in specific recent proposals regarding the adaption of fraud triangle elements to understanding whistle-blowing intentions (Brown, Hays, & Stuebs Jr, 2016), which has provoked the whistle-blowing triangle notion (Smaili & Arroyo, 2019). Existing literature has shown that whistle-blowing could be utilized as a useful apparatus to halt the wrongdoing and augment the organizational ethical values around the globe. It is pertinent to mention here that this study having its core focus on whistle-blowing intentions (Brown et al., 2016) rather than act to report the wrongdoing (Smaili & Arroyo, 2019).

The vital role of whistle-blowers in business can be acknowledged from the corporate financial embezzlements all-round the globe. In agreement with the Association of Certified Fraud Examiners, 2504 cases were reported in 125 countries during 2020. The median and average losses from these cases were 0.12 and 1.5 million (\$). Out of these 2504, 10% of cases belong to financial statements with a median loss of 0.95 million (\$). There were 127 and 103 cases were reported in the Middle East and South Asia, respectively. Out of those 103 cases in South Asia, 15 cases with a median loss of 0.117 million (\$) reported in Pakistan.

Further, there was a 60% increase in fraud cases from 2014 to 2016. The total loss from these frauds was 6.3 billion dollars. These statistics urge the demand to report the wrongdoing refers to disclosing questionable practices involving the organization or its members internally and externally.

In agreement with our content, that moral intensity moderates the relationship (Alleyne et al., 2013; Beu et al., 2003; Latan, Ringle, et al., 2018; Yu, 2015) between whistle-blowing intentions and whistle-blowing triangle (Smaili & Arroyo, 2019), a model derived from fraud triangle (Dorminey, Fleming, Kranacher, & Riley Jr, 2012; Free, 2015; Trompeter, Carpenter, Desai, Jones, & Riley Jr, 2012), the possibility of understanding the whistle-blowing intentions to report the wrongdoing might be based on components like; pressure / financial incentives, opportunity and also the rationalization. A sound understanding of the relationship between the whistle-blowing triangle (Smaili & Arroyo, 2019) proposed a model and intentions to report the wrongdoing (Brown et al., 2016; Culiberg & Mihelič, 2017; Gao & Brink, 2017) continues to exist. The prime aim of this investigation is to expand the literature regarding moderating effect of moral intensity (Latan, Ringle, et al., 2018) on a model adapted from fraud triangle elements (Brown et al., 2016; Smaili & Arroyo, 2019) to understand the intentions of whistle-blowing.

Due to accountants' access to accounting information, their role becomes crucial, and they often are in a better position to report the wrongdoing (Brown et al., 2016; Dellaportas, 2013; DeZoort & Harrison, 2018; Latan, Ringle, et al., 2018). While giving their opinion to clients, the accountants often disclosed material misstatements. However, auditors and clients work collectively to betray the public.

At this point, the accountant's role becomes crucial in the audit firms to blow the whistle (Boo, Ng, & Shankar, 2016), given the audit regulatory body's absence in Pakistan. However, the choice of whether to remain silent or to report the wrongdoing can absorb the effect thrown by various factors like opportunity, rationalization, and pressure / financial incentives, prior leading to intention to blow the whistle (Latan, Jabbour, et al., 2018; Murphy & Dacin, 2011; Schwartz, 2016).

Fraud triangle components like pressure can be adapted in this study to understand the whistle-blowing intentions. Whereas several positive or negative feelings can have associations with pressure, this investigation defines the pressure as the overburden of the feelings linked with fears belongs to the future as a sign of wrongdoing reporting. In comparison, financial incentive provision at large becomes an attraction for a whistle-blower to report the wrongdoing (Andon, Free, Jidin, Monroe, & Turner, 2018; Brown et al., 2016).

In agreement with findings of different studies, financial incentives reported one of the prime factors for accountants in reporting wrongdoing (Alleyne et al., 2013; Andon et al., 2018; Berger, Perreault, & Wainberg, 2017; Dyck, Morse, & Zingales, 2010; Guthrie & Taylor, 2017). Furthermore, an individual whistle-blowing intention also depends on the opportunity and rationalization. Furthermore, the existence of possible potential opportunities also throws their impact on whistle-blowing intentions. Professional accountants look for helpful resources like channels of reporting, firm support, and norms (Murphy & Free, 2015; Smaili & Arroyo, 2019).

We can understand the rationalization as a process applied to convince someone that acts done by his/her agree to withstand are not limited to ethical and professional criteria (Cooper, 2007; L Festinger, 1957; McGrath, 2017). In general, rationalization is usually applied for positive behavior, reasoning (like whistle-blowing), to reduce the pressure associated with that particular action (Morvan & O'Connor, 2017).

This work aims to strengthen some of the recent study's findings. First, the moral intensity has a moderation effect (Alleyne et al., 2013; Beu et al., 2003; Latan, Ringle, et al., 2018; Yu, 2015) among a recently developed relationship concept of whistleblowing triangle and auditors whistle-blowing intentions in the context of Pakistan. Second, replicate the proposed whistleblowing model in different societies to provide additional practical indications of the model by applying a quantitative approach (Latan, Jabbour, et al., 2018). Finally, tested the model with various factors (Boyle et al., 2015; Free, 2015) like moral intensity.

The critical studies conducted by (Free, 2015) provide researchers' conceptual directions to test the whistleblowing model with a variable factor. In addition, (Latan, Jabbour, et al., 2018) study directed the researchers to test the whistleblowing model in a different region. Finally, to concrete the Latan et al. 2016 study findings regarding moral intensity moderates the relationship between the whistleblowing triangle and intentions. Therefore, this work with the prime object to test the whistle-blowing model (Smaili & Arroyo, 2019) with the moderation effect (Latan, Ringle, et al., 2018), in a different region (Free, 2015) like Pakistan along with the addition of factors (Free, 2015) in the framework.

This investigation contributes to extend the literature available on whistle-blowing in different ways. First, In the Pakistani context, it's the primary investigation to test the recently developed whistle-blowing triangle model (Smaili & Arroyo, 2019), which will help the common man understand the whistle-blowing concept with its pros and cons. This will also help the Government in lawmaking and implementation to support and protect the whistle-blowers. Finally, this investigation spreads the contemporary literature on whistle-blowing by providing logical evidence from Pakistan.

2. THEORETICAL BACKGROUND AND HYPOTHESIS DEVELOPMENT

This work examined the model of a whistle-blowing triangle and whistleblowing intentions relationship with a moderating effect of moral intensity. Whistleblowing triangle model having its key variables like pressure/financial incentives, opportunity, rationalization, adapted from a model introduced by Cressey (1973) titled fraud triangle. The key variables of Whistleblowing triangles, pressure/financial incentives, opportunity, and rationalization inspired by past research (Andon et al., 2018; Berger et al., 2017; Boo et al., 2016; Brown et al., 2016; Rose, Brink, & Norman, 2018; Smaili & Arroyo, 2019).

The present investigation supports two of the underpinning theories, i.e., Theory of Planned Behaviour and Cognitive Dissonance as proposed by the Theory of Planned Behaviour (TPB) that individuals/whistle-blowers remain under personal and social pressure in the organizations (Kaplan & Whitecotton, 2001; Miceli, Near, Rehg, & Van Scotter, 2012). In addition to this, rationalization is the process of cognitive justification (Leon Festinger, 1957).

These questions have, as of now, gotten impressive individual attention in the research circle, with analysts analyzing the processors of whistle-blowing and proposing that individual situational and natural components affect whistle-blowing intentions (Latan, Jabbour, et al., 2018; Near & Miceli, 1995). Other scholars concentrated on the sort of whistle-blowing channel chosen by whistle-blowers, with their essential center being on insiders, even though several did incorporate outsiders as well (Culiberg & Mihelič, 2017).

2.1. WHISTLEBLOWING INTENTIONS

Numerous studies have been conducted on whistleblowing intentions (Alleyne & Phillips, 2011; Chiu, 2003; Curtis & Taylor, 2009). Several studies used the actual whistle-blowers. For instance, Sherron Watkinson blows Lucas and Koerner interviewed the whistle on Enrons executives. Despite the involvement of whistle-blowers in a few instances, whistleblowing intentions gain the prime focus of whistleblowing research. Access to actual whistle-blowers is quite severe for the sake of whistleblowing intentions measurement. That is why these investigations have questioned the respondents on their willingness to report the organizational setting's wrongdoing as proposed by TPB that individual elements like attitude and PBC throw

their impact on intentions. Argued by the theory of planned behavior that intentions are strongly associated with actual behavior.

2.2. WHISTLEBLOWING TRIANGLE

The fraud triangle, a model composed of factors pressure / financial incentives, opportunity, and finally the rationalization (Dellaportas, 2013; Free, 2015; Lokanan, 2015) were initially used to explain unethical practices within the organizations proposed by (Cressey, 1973) and can also be adapted to build the understanding of why people blow the whistle (Smaili & Arroyo, 2019). To provide solid evidence about this phenomenon, researchers have paid a little attention (Brown et al., 2016; Smaili & Arroyo, 2019). Furthermore, studies have focused on qualitative technique, which causes to ignore the quantitative section. These factors urge to quantitative deployment approach in this investigation. Whistle-blowing intentions are the blend of pressure in terms of threat; Financial Incentives presented, the reporting opportunity, and the readiness to rationalize.

With time whistle-blowing issue is getting more attention in Pakistan due to economic crises and government authorities' support. In 2018 Whistle-blower Act was introduced by the Government to protect the whistle-blower, shine the spotlight on the issue neglected by society, and control and improve the ethical standards, financial mechanism, and corporate governance.

The pressure is a bunch of hurdles that refers to overburdens of sentiments linked with future fears confronted by whistle-blowers. Lack of whistle-blower protection in Pakistan allows us to promote this particular pressure's negative aspect in this investigation. Second, the financial incentive is considered one of the motivational factors to report unlawful deeds. The existence of resources like reporting channels, employer support, SOPs, Norms, and Codes urge the whistle-blower to blow the whistle. Finally, rationalization is the willingness to legitimize whistle-blower as positive behavior, linking with moral and ethical standards.

2.3. PRESSURE

Pressure a term that contains negative essences and is ordinarily related to challenges that arise from the organization's environment. This causes a negative impact not only on life but also on the career of a whistle-blower. They were supported by TPB and O.J.'s conclusion that whistle-blower faces extreme personal, social, and organizational pressure (Kaplan & Whitecotton, 2001; Miceli et al., 2012). As pressure is a load of feeling linkage with future intimidations, this factor can meddle with enthusiastic whistle-blower motivations. These include psychological pressures like reputation loss and unfairness encountered that inspire the whistle-blowers in selection whether to remain silent and stay away to blow the whistle. The barriers of external pressure are (1) risk of being sacked; (2) to be mistreated; (3) retaliation; (4) loss of reputation.

Furthermore, internal pressures having factors principles, morals, religious loyalty, and workstation satisfaction faced by the whistle-blower also complicate whistle-blowing intentions. Despite the Government's whistle-blower protection law, individuals conclude that the gravity of whistle-blower protection is relatively low. Thus, we proposed that acquiesce to positive pressure is low in comparison with a negative one. Past investigations strengthen that pressure on whistle-blowing intentions is negative (MacGregor & Stuebs, 2014a, 2014b). We argue that in some specific circumstances, the role of internal pressure to influence the whistle-blower's intention to report the illicit activities is high. When a whistle-blower concludes that the benefit offered is less than the threat associated with (Brown et al., 2016; Culiberg & Mihelič, 2017; Smaili & Arroyo, 2019), he prefers to remain silent. On the grounds of the above-discussed literature, we can develop the hypothesis:

H1: There is a negative association between pressure and whistleblowing intentions.

2.4. FINANCIAL INCENTIVES

Financial incentives are deliberated to empower the individuals to report the malpractices and wrongdoings like non-compliance, avoidance of tax, corruption, accounting fraud, and

embezzlement. An individual can go anonymous network and get a reward as regarded by regulations (Guthrie & Taylor, 2017).

In contrast with financial, social, or moral incentives (Brown et al., 2016), which usually are tough to calculate and having dependence on the norms of the society, standards of morality, culture, and also the available environment, are considered one of the strongest sources to provide personal benefits to whistle-blowers that's why are usually considered the main driver to whistle-blowing act. In high ethical behavior and strict law protection, the moral and social incentives will emphatically have more felt. In this manner, we contend that it is more suitable to apply financial incentives in this study, keeping Pakistan's whistle-blower protection measure. Recent research supports this statement that whistle-blowing intentions to report the illicit activities within the organization can be enhanced by providing a sound package of financial incentives (Andon et al., 2018; Guthrie & Taylor, 2017; Rose et al., 2018; Stikeleather, 2016). The whistle-blowers will revise their decision to the case it least the threshold (Berger et al., 2017; Brown et al., 2016). The whistle-blower may delay the decision to blow the whistle until the wrongdoing breeds and creates significant harm. Several past investigations the volume of benefit is also taken into consideration proposed that the financial incentives might cause enhance the whistle-blower intentions to blow the whistle (Andon et al., 2018; Berger et al., 2017; Boo et al., 2016; Brown et al., 2016; Rose et al., 2018; Stikeleather, 2016). On the grounds of the above-discussed literature, we can develop the hypothesis:

H2: There is a positive association between financial incentives and whistleblowing intentions.

2.5. OPPORTUNITY

Opportunity is another essential element of the whistle-blowing triangle (Smaili & Arroyo, 2019). Offense reporting allows the opportunity to be available to each individual when the ethical or legitimate commitment to report is backed by organizations and standard policies (Brown et al., 2016).

Support from the organization system, norms of the workplace and anonymous reporting channel are factors that cause to enhance the opportunity to blow the whistle, but it varies from organization to organization. If a whistle-blower faces an anonymous channel to report the wrongdoing, support from the organization and legislation can affect its whistle-blowing decision. Furthermore, norms practicing within the organization also cause to foster ethical awareness of wrongdoing reporting. Some studies compare such a disclosure opportunity as procedural justice (Seifert, Sweeney, Joireman, & Thornton, 2010; Soni, Maroun, & Padia, 2015). Whistleblowers' knowledge of work and Interpersonal skills and like technical capabilities and familiarity with modern technology can help the whistleblower report the wrongdoing (Boyle et al., 2015; Wolfe & Hermanson, 2004) also cause to increase the chances of opportunity. Opportunity and intentions of reporting the wrongdoing may affect observation drawn by the whistleblower from wrongdoing. For instance, less magnitude, fraud evidence persuasiveness, fraud preparatory proximity and fraud long term impact can throw the effect on whistle-blower decision making process (Brown et al., 2016; Latan, Jabbour, et al., 2018; Park & Blenkinsopp, 2009; Smaili & Arroyo, 2019). On the grounds of above discussed literature, we can develop the hypothesis:

H3: There is a positive association between opportunity and whistle-blowing intentions.

2.6. RATIONALIZATION

A portion of the inspiration of the wrongdoing is seen as rationalization. Since the fraudsters do not see himself as a criminal, he must legitimize his offense ever commits them. The rationalization is vital so the committer can comprehensibly prepare his illicit behavior and keep up the concept of himself as a trusted individual (L Festinger, 1957).

An internal process of whistleblower justification, while choosing a specific action, agrees with moral standards during any ethical problem (Brown et al., 2016; Dellaportas, 2013; Lokanan, 2015; Murphy & Dacin, 2011). It is a standard that helps the whistleblower determine his or her decision regarding reporting of wrongdoing. This rationalization process is easy for those whistle-blowers having high moral standards because it makes it easy for them to convince

themselves that reporting the wrongdoing is not legal or immoral to improve the organization's ethical standards. On the other hand, this rationalization process is challenging for those having low moral standards. Whistle-blowers were having low moral standards when exercise such a scenario prefer to remain silent. Some researchers proposed that it is quite challenging to understand this rationalization process (Free, 2015; Murphy & Dacin, 2011) because of different psychological components. For instance, seven categories are defined by Murphy and Dacin (2011) based on cognitive dissonance and moral disengagement theory. The Cognitive justification process behind the whistleblower choice to whistle-blowing is called rationalization. Our arguments are based on the theory of cognitive dissonance (Cooper, 2007; L Festinger, 1957) that on moral grounds, the justification of the whistleblower's choice to blow the whistle is difficult. Theory of cognitive-dissonance (Cooper, 2007; L Festinger, 1957) proposed that while making tough choices by a whistleblower, for instance, to report the wrongdoing or to remain silent, it's their need to rationalize their choice and consider a reduction in the gravity of threats soon they might face (Murphy, 2012; Smaili & Arroyo, 2019; Tsang, 2002). Rationalization can play a vital role in improving positive behavior (for instance, whistle-blowing) when ethical standards can be trusted. The indications given in some past investigations regarding rationalization proposed a significant positive effect on whistle-blowing intentions (Brown et al., 2016; Schwartz, 2016; Smaili & Arroyo, 2019). On the grounds of the above-discussed literature, we can develop the hypothesis:

H4: There is a positive association between rationalization and whistle-blowing intentions.

2.7. PERCEIVED MORAL INTENSITY

Moral intensity is another variable in this investigation, and it appears how fundamentally and chronically workers feel that the detailing of wrongdoing is essential—whistle-blowing postures moral predicaments for both the worker and the manager. There are rational, decency, dependability, and ethical obligation (Elliston, 1982).

Jones (1991) proposed model considered moral intensity as a predictor variable in the Ethical Decision-Making Process. We proposed a revised moral intensity role by inserting it as a moderating variable in agreement with (Schwartz, 2016) proposed E.D. model. Moral intensity is composed of six factors. However, in the views of (Curtis & Taylor, 2009), out of those six, the three factors like consequences magnitude, effect probability, and proximity are relevant in the context of an audit. The occurrence of error usually exists when a whistleblower faced such a scenario with deciding whether to blow the whistle or not. The only possibility that is considered all about that whether a mistake will cause harm in the future.

An individual will make better ethical decision making when matched with high moral intensity and positively affect whistle-blower intentions to blow the whistle. In other words, if the perceived moral intensity of an issue is high, the person is more likely to blow the whistle.

Recent studies proposed that high moral intensity can affect auditors' (Yu, 2015) ethical decision-making and might positively affect whistle-blower intention to report the wrongdoing (Alleyne et al. Some other studies also proposed a significant relationship between moral intensity and whistle-blower intentions. (Beu et al., 2003) concluded that acts as a moderator in the relationship between different independent variables and intentions to report morally.

The previous investigation also proposed that moral judgment has a positive effect on intentions to blow the whistle (Chiu, 2003; Zhang, Chiu, & Wei, 2009), and moral intensity acts as a significant moderator (Alleyne et al., 2013; Latan, Ringle, et al., 2018). On the grounds of the above-discussed literature, we can develop the hypothesis;

H5: Moral intensity acts as a significant moderator in between the whistle-blowing triangle and Intentions.

3. THEORETICAL FRAMEWORK

The framework of the study is as under

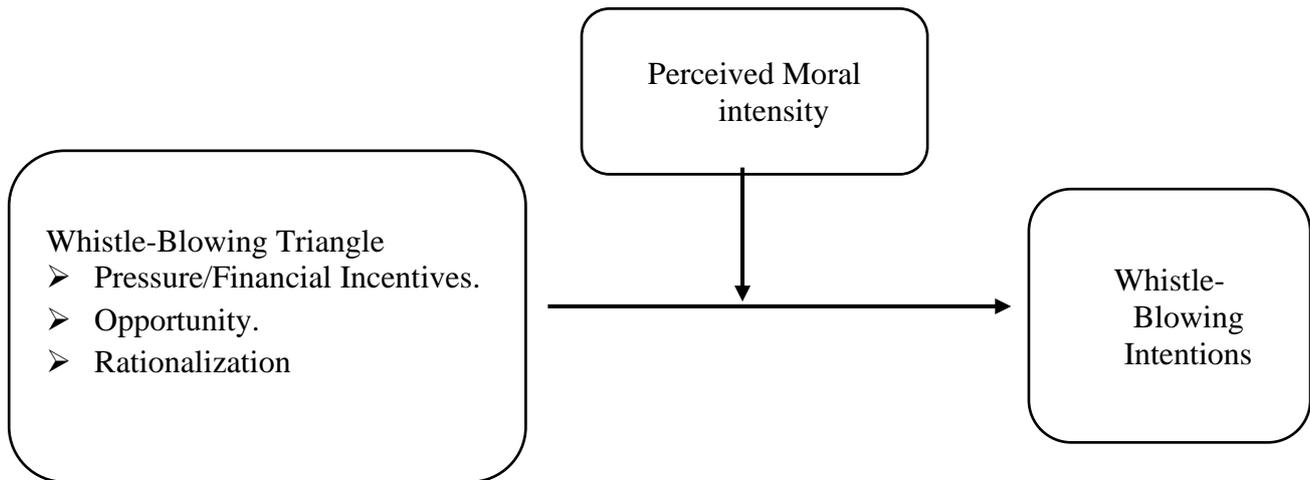


Figure 1: Theoretical model

3.1. SELECTION OF SAMPLE AND COLLECTION OF DATA

It is a cross-sectional, survey-based descriptive study with the hypothetical deductive method approach. A professional accountant-based sample was comprised, serving in the audit firms listed in Karachi Stock Exchange of Pakistan. Information was collected using a questionnaire-based survey by employing a self-administrative approach. For content validity assessment, a pre-test discussion with four experienced academic professionals regarding instrument draft was conducted to ensure that the accountants' questionnaires could easily be understood and unbiased. In addition to this, an amended version of this questionnaire was forwarded to five audit firms of the "A" category to collect preliminary findings up to validity and the reliability of variables indicators measurement. Pre-examined outcomes strengthen the past studies' reliance on this instrument, and we also believe that this instrument was reliable and feasible to be presented in the next step. By applying the Simple Random Sampling Technique, we forwarded the instrument to 247 audit firms representing 700 auditors—the detail of the firm's retrieved from the Institute of Chartered of Pakistan (ICAP) web-portal. To ensure confidentiality and anonymity response, we called the target audience.

The timeline provided for this survey completion was 3-4months for the sake of non-response bias resting (Dillman, Smyth, & Christian, 2014). The data collection was taken place between June to September, and we had received back 290 questionnaires, out of which 51 were incorrect, and 39 were not incomplete. Thus, the total number of valid questionnaires we received stands at 200 with an overall response rate of 41%.

3.2. MEASURES AND SCALES

Items of the questionnaires used in this work are adapted from the literature of past studies related to business ethics, assuming that items that have already been tested in the past about a good uni-dimensionality. There are three sections of this instrument. The first defines the study purpose, the second section is about the demographic of the respondents, and the third section provides the questions about the variables of this study (Andon et al., 2018; Berger et al., 2017; Boyle et al., 2015; Latan & Noonan, 2017; MacGregor & Stuebs, 2014a). The scenarios used in this work were adapted from whistleblowing triangle literature (Berger et al., 2017; MacGregor & Stuebs, 2014a, 2014b), which high point numerous fraud cases. Whistleblowing intentions were measured from (Park, Blenkinsopp, Oktem, & Omurgonulsen, 2008) instrument with some modifications containing 10 items. All the aspects of whistleblowing intentions were measured with the 5-point Likert scale, ranging from 1=strongly disagree to

5=strongly agree. Moreover, (Brown et al., 2016; Murphy, 2012; Murphy & Free, 2015) developed instruments adopted to measure whistleblowing triangle components consisting of a total of 15 items. Respondents were questioned about pressure / financial incentives, opportunity, rationalization, and perceived moral intensity experienced while reporting the wrongdoing. A 5-point-Likert Scale ranging from 1=strongly disagree to 5=strongly agree used for the measurement. The moral intensity was measured by adapting (Clements & Shawver, 2011) developed instrument composed of 6 items. Measurement of the items was taken place on a Likert scaling from 1=strongly disagree to 5=strongly agree.

3.3. DATA ANALYSIS

In this work, SEM component-based analysis approach with Partial Least Square (PLS) method was employed. The second-generation software for analysis allows the researchers to observe the relationship between variables simultaneously. PLS-PM method highlights are (1) Can test a complex model that contains multiple constructs and indicators; (2) At the early stage of model testing, PLS-PM is considered one of the useful tools to predict the variable's relationship. If the research focuses on predictions, complex model testing, or exploratory study, the PLS-PM is recommended. It is an exploratory study with a sample size of over 200. On the other hand, the PLS-PM algorithm required sample size to run is about 10 times the number of the structural path within the (Hair Jr, Hult, Ringle, & Sarstedt, 2016), this thumb rule allows the deployment of PLS-PM in the study due to fulfillment of the requirement.

4. RESULTS AND DISCUSSION

The smart PLS-3 program is used to analyze the data (Ringle, Wende, & Becker, 2015) with the selection of scheme (path); 300 is the maximum iterations of the number on the PLS-algorithm. We select a bias-corrected and accelerated [BCa] at the bootstrapping stage, with 5000 subsamples and 5% significance (One-tailed). The results we have are given below.

4.1. ASSESSMENT OF MEASUREMENT MODEL

For evaluation of the measurement model, we focused on loading factor values and convergent validity, average-variance-extracted (AVE). The value of loading factor > 0.7 and the AVE > 0.5 for each variable in the model is acceptable. Though, value > 0.5 of loading factor was still lies in the acceptable range, as long as the AVE value to strengthen the content validity achieves the requirement (Hair Jr et al., 2016; Latan & Noonan, 2017).

Our analysis results in Tables 1 and 2 confirm that all the variable indicators (Whistleblowing triangle, intentions, and perceived moral intensity) encountered the convergent validity, which concludes that the indicators demonstrate consistency and pertain to the capability of constructs explanation. Additionally, construct reliability was accessed using α values above 0.07 which expresses good consistency of the model's indicators (Bandalos, 2018).

Table 1 and 2 results endorse that variables, indicators have qualified the reliability and convergent validity, which confirms that variables validate consistency are capable of constructs explanations. Moreover, HTMT was employed for the assessment of discriminant validity. If the AVE square root is higher than the correlation between the constructs, it indicates that variables in the model satisfy discriminant validity. It can be seen from Table 1, and 2 results that the AVE square root on the diagonal line is above the model constructs correlation, which is an indicator of no high correlation between constructs or good discriminant validity.

Table 1
Convergent validity

Constructs	Items	Loadings	Alpha	CR	AVE
Financial Incentives	FI1	0.998	0.996	0.998	0.996
	FI2	0.998			
Opportunity	OPP1	0.977	0.970	0.978	0.919
	OPP2	0.884			
	OPP3	0.983			
	OPP4	0.985			
Perceived Moral Intensity	PMI1	0.848	0.932	0.946	0.745
	PMI2	0.859			
	PMI3	0.862			
	PMI4	0.872			
	PMI5	0.875			
	PMI6	0.864			
Pressure	PRS1	0.817	0.876	0.914	0.728
	PRS2	0.906			
	PRS3	0.767			
	PRS4	0.914			
Rationalization	RNL1	0.931	0.921	0.941	0.761
	RNL2	0.934			
	RNL3	0.846			
	RNL4	0.844			
	RNL5	0.800			
Whistleblowing Intentions	WBI1.	0.572	0.920	0.934	0.588
	WBI10.	0.787			
	WBI2.	0.770			
	WBI3.	0.842			
	WBI4.	0.645			
	WBI5.	0.810			
	WBI6.	0.797			
	WBI7.	0.784			
	WBI8.	0.814			
	WBI9.	0.803			

Table 2
Discriminant validity

	FI	OPP	PMI	PRS	RNL	WBI
FI						
OPP	0.442					
PMI	0.398	0.448				
PRS	0.038	0.133	0.093			
RNL	0.830	0.475	0.455	0.087		
WBI	0.486	0.471	0.444	0.172	0.556	

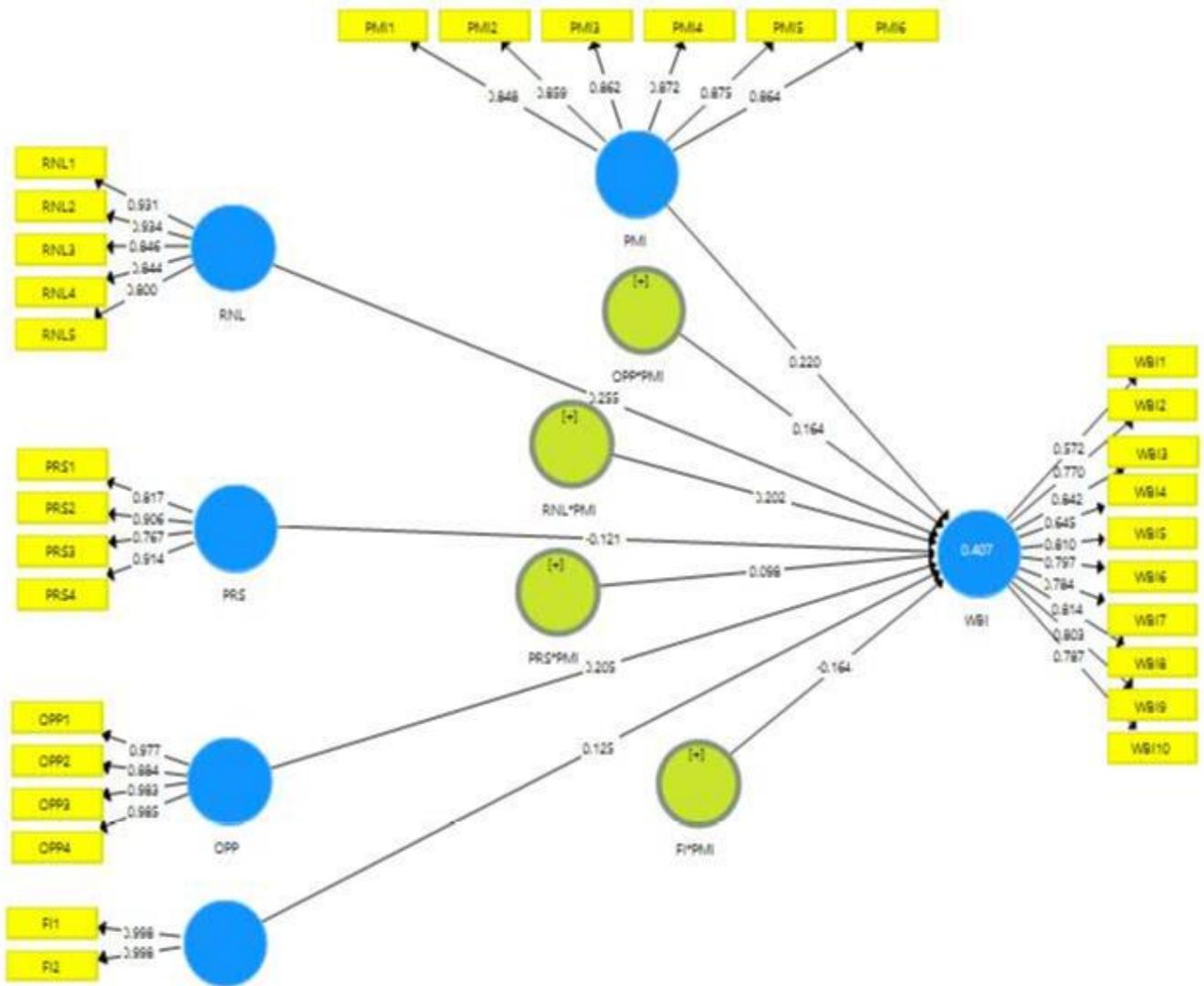


Figure 2: Measurement Model Assessment

4.2. STRUCTURAL MODEL ASSESSMENT

Once we successfully measured the assessment model and confirmed the reliability and validity of all the indicators, the next stage was measuring the structural model and testing hypotheses. Its iteration technique used by the PLS-PM algorithm by following multiple regression series, in PLS-PM path coefficient interpretation is equal to the regression coefficient standardization. Moreover, adjusted R-square, VIF-variance inflation factor, F2-effect size, and Q2-Predictive relevance interpretation is followed by the recommended values in agreement with PLM-PS literature (Hair, Ringle, & Sarstedt, 2013; Hair Jr et al., 2016; Latan & Noonan, 2017).

The recommended value for VIF values is < 5 is yet acceptable for all variable predictors within the model (Field, 2016; Henseler, 2017). The evaluation of the structural model is taken into place by looking at the determination coefficient (Adjusted R² or R²), f², and Q². We can see from Table 3 that R² and adjusted R² range from 0.380 to 0.407 (Table 3). Additionally, the value of the effect size generated by each variable within the model ranges from 0.009 – 0.057. It's an indication of existence in between the small-medium category. The value of Q² > 0 proposed the model predictive relevance.

Table 3
R Square – Structural Assessment

	R Square	R Square Adjusted
WBI	0.407	0.388

Table 4
F Square – Structural Assessment

	WBI
FI	0.009
OPP	0.046
PMI	0.057
PRS	0.023
RNL	0.035
WBI	

Table 5
Blindfolding – Structural Assessment

	Q² (=1-SSE/SSO)
WBI	0.216

Table 6
Variance Inflation Factor (VIF) – Structural Assessment

	WBI
FI	2.877
OPP	1.529
PMI	1.419
PRS	1.061
RNL	3.113
WBI	

4.3. HYPOTHESES TESTING (WITH DIRECT EFFECT)

We examined our study hypothesis on the grounds of coefficient parameters and generated a significant value at 95 confidence intervals of each independent variable. In Table 7, as listed, the provided significant values of path coefficients ($p < 0.05$). We are proposed after looking at the analysis given in Table 7 that pressure negatively affects whistle-blowing intentions. Coefficient value (β) obtained from the analysis of the pressure and whistle-blowing intentions PRS \rightarrow WB is -0.121 with a p -value < 0.05 and t value > 1.96 . These received values support our (H1) hypothesis. Additionally, proposed based on the analysis given in Table 7 Financial Incentives and opportunity having a positive significant effect on whistleblowing intentions. Coefficient value (β) obtained from the analysis of the financial incentives and opportunity and whistleblowing intentions FNI \rightarrow WB is 0.163, OPP \rightarrow WB is 0.205 and with p -value < 0.05 and t value > 1.96 . These received values support our 2 and 3 hypotheses (H2 and H3). At last, rationalization having a significant positive effect on whistleblowing. In agreement with the coefficient value (β) reflecting in the analysis table, RNL \rightarrow WB is 0.255 with a p -value < 0.05 and t value > 1.96 . These received values support our (H4) hypothesis.

Table 7
Relationship between variables (Direct effect)

	Beta	S.D.	t-statistics	P-values	L.L	U.L
FI -> WBI	0.163	0.083	1.954	0.046	0.022	0.249
OPP -> WBI	0.205	0.066	3.093	0.001	0.101	0.316
PMI -> WBI	0.220	0.064	3.439	0.000	0.112	0.321
PRS -> WBI	-0.121	0.042	2.888	0.002	-0.189	-0.060
RNL -> WBI	0.255	0.093	2.758	0.003	0.106	0.418

4.4. HYPOTHESES TESTING (WITH INTERACTION EFFECT)

We examined the interaction between hypotheses with the lens of the orthogonalization approach. One of the reasons to select this approach is its highly reliable estimation and predictive accuracy. The results are reflected in Table 8. It can be seen from the table that moral intensity positively and significantly moderates the relation between the whistleblowing triangle

components like Pressure / Financial Incentives, Opportunity and rationalization, and whistleblowing intentions in the context of an under developing country, Pakistan.

The coefficient value (β) obtained from the analysis of the perceived moral intensity between pressure and whistle-blowing intentions PRS*PMI \rightarrow WBI is 0.098 with a p -value $<$ 0.05 and t value $>$ 1.96. Thus, we argue that it causes weaker the relationship. Positive coefficient value (β) of the perceived moral intensity between rationalization, opportunity and whistle-blowing intentions RNL*PMI \rightarrow WBI is 0.202, OPP*PMI \rightarrow WBI is 0.164 with p -value $<$ 0.05 and t value $>$ 1.96 concludes that PMI further strengthens the relationship. Finally, the coefficient value (β) of the perceived moral intensity between opportunity and whistle-blowing intentions F.I.*PMI \rightarrow WBI is 0.192 with p -value $<$ 0.05, and t value $>$ 1.96 is also an indicator of strengthening the relationship.

Table 8
Relationship between variables (Interaction effect)

	Beta	S.D.	t-statistics	P-values	L.L	U.L
PRS*PMI \rightarrow WBI	0.098	0.048	2.058	0.020	0.020	0.175
RNL*PMI \rightarrow WBI	0.202	0.098	2.073	0.019	0.037	0.359
OPP*PMI \rightarrow WBI	0.164	0.057	2.870	0.002	0.076	0.264
FI*PMI \rightarrow WBI	0.192	0.098	1.962	0.049	0.325	0.004

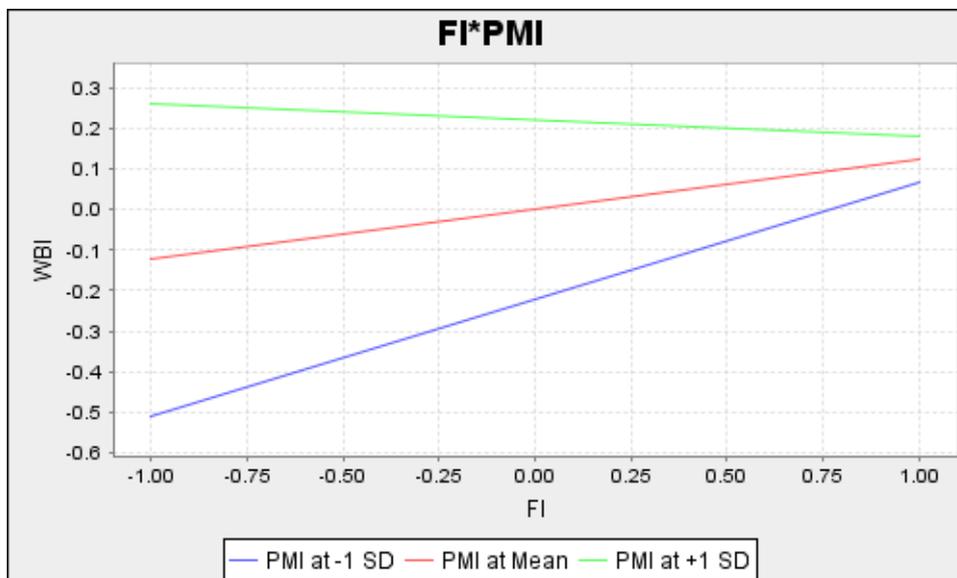


Figure 3: F.I.*PMI

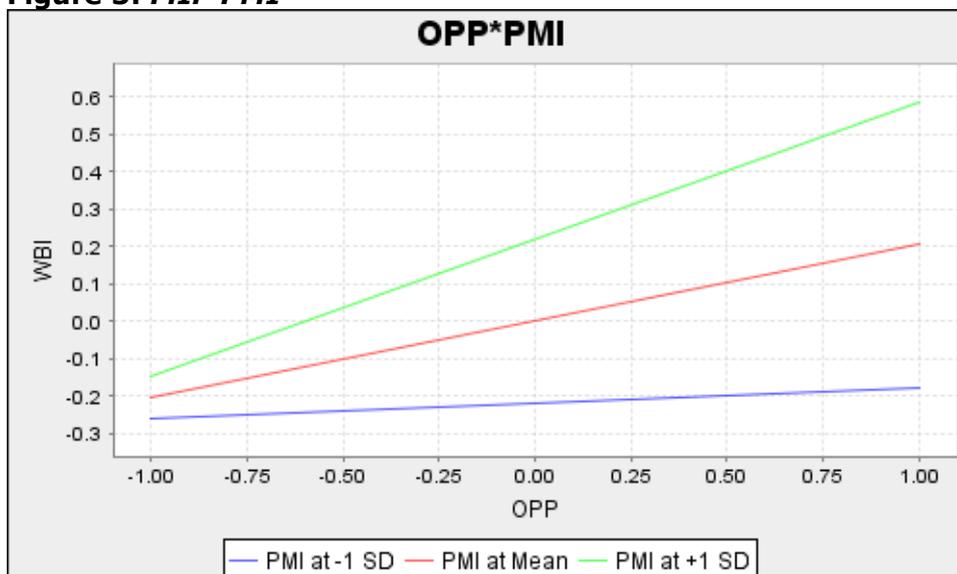


Figure 4: OPP*PMI

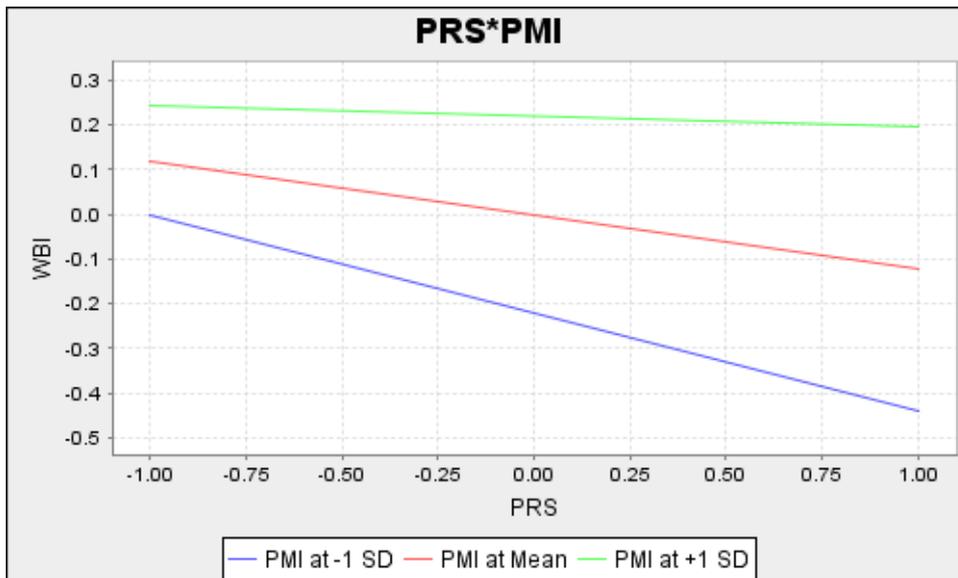


Figure 5: *PRS*PMI*

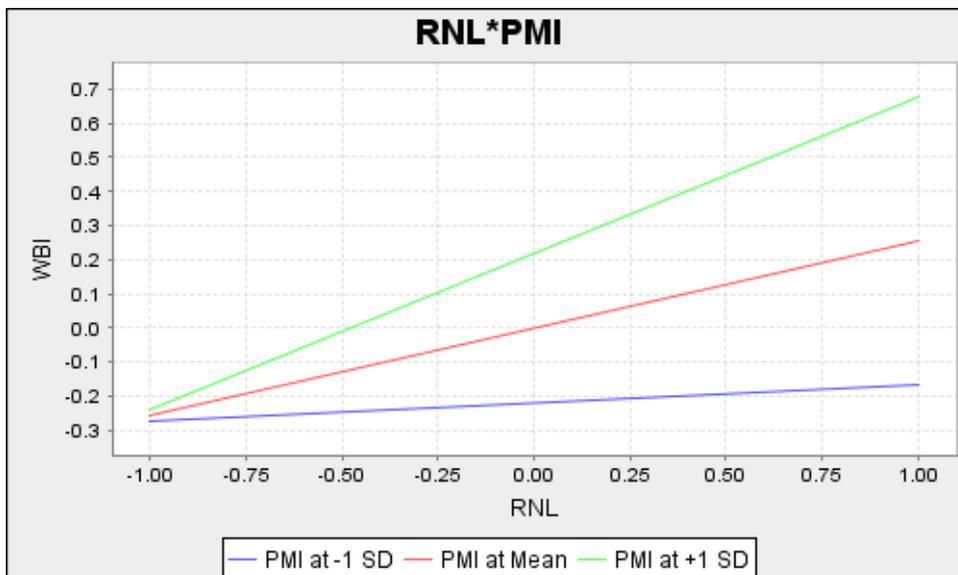


Figure 6: *RNL*PMI*

5. CONCLUSION

This study's contribution provides new insights into the relationship between the whistle-blowing triangle and intentions with the moderating effect of moral intensity. In this work, we answered; (1) Latan et al. (2018) call about replication of the studies in other countries and also future research to provide additional practical indications of the whistle-blowing triangle by applying quantitative approach; (2) and Free (2015) to test the model with the addition of various factors.

We argue that replicating the study in a different society affects the results like Latan et al. 2018 study proposed that pressure is the primary factor that genuinely affects the whistle-blowing intentions. However, in the Pakistani context, facts create a different opinion like the opportunity is the prime factor having the most substantial effect on whistle-blowing intentions when moral intensity acts as moderator. The literature concludes that there is a negative relation between pressure and whistle-blowing intentions, which become weaker in the presence of moderators like moral intensity might. Financial incentives and opportunity positively relate to whistle-blowing intentions, which become more assertive when moral intensity acts as a

moderator. Finally, the positive relation between rationalization and intentions to blow the whistle becomes more vital in moderating moral intensity.

This study provides an in-depth understanding to audit firms regarding how they can improve the firms' ethical standards by promoting the concept of whistle-blowing. In addition to this audit firm also provide such an environment to its team member in which they got an opportunity to report the wrongdoing fearlessly. In addition to this, the implementation of feasible and sound strategies is the core need of auditing firms to improve their employee's/auditors' whistle-blowing intentions. It might help the Government in and implementation of whistleblowing legislation.

5.1. STUDY LIMITATIONS & FUTURE DIRECTIONS

Some of the limitations attached with the present investigation are; First, this investigation only examined the intentions to blow the whistle by ignoring the actual behavior. Second, some factor like the pressure is tested only from a negative point view. Third, social or moral incentives are not considered; Fourth, this investigation employed a single variable as a moderator in the model, but there are many other relevant variables (moderation and mediation) to be considered and tested.

First, directions for future researchers are a replication of this model in a different region at different sectors to concrete the findings. Second, applying the model to internal and also public auditors. Third, check the model with additional moderation factor-like Team Norms, Organizational Politics, Moral Attentiveness, and mediation effect.

REFERENCES

- Alleyne, P., Hudaib, M., & Pike, R. (2013). Towards a conceptual model of whistle-blowing intentions among external auditors. *The British Accounting Review*, 45(1), 10-23.
- Alleyne, P., & Phillips, K. (2011). Exploring academic dishonesty among university students in Barbados: An extension to the theory of planned behaviour. *Journal of Academic Ethics*, 9(4), 323.
- Andon, P., Free, C., Jidin, R., Monroe, G. S., & Turner, M. J. (2018). The impact of financial incentives and perceptions of seriousness on whistleblowing intention. *Journal of business ethics*, 151(1), 165-178.
- Bandalos, D. L. (2018). *Measurement theory and applications for the social sciences*: Guilford Publications.
- Berger, L., Perreault, S., & Wainberg, J. (2017). Hijacking the moral imperative: How financial incentives can discourage whistleblower reporting. *Auditing: A Journal of Practice & Theory*, 36(3), 1-14.
- Beu, D. S., Buckley, M. R., & Harvey, M. G. (2003). Ethical decision-making: A multidimensional construct. *Business ethics: A European review*, 12(1), 88-107.
- Boo, E. f., Ng, T. B.-P., & Shankar, P. G. (2016). Effects of incentive scheme and working relationship on whistle-blowing in an audit setting. *Auditing: A Journal of Practice & Theory*, 35(4), 23-38.
- Boyle, D. M., DeZoort, F. T., & Hermanson, D. R. (2015). The effect of alternative fraud model use on auditors' fraud risk judgments. *Journal of Accounting and Public Policy*, 34(6), 578-596.
- Brown, J. O., Hays, J., & Stuebs Jr, M. T. (2016). Modeling accountant whistleblowing intentions: Applying the theory of planned behavior and the fraud triangle. *Accounting and the Public Interest*, 16(1), 28-56. doi:<https://doi.org/10.2308/apin-51675>
- Chiu, R. K. (2003). Ethical judgment and whistleblowing intention: Examining the moderating role of locus of control. *Journal of Business Ethics*, 43(1-2), 65-74.
- Clements, L. H., & Shawver, T. (2011). Moral intensity and intentions of accounting professionals to whistleblow internally. *Journal of Forensic Studies in Accounting & Business*, 3(1).
- Cooper, J. (2007). *Cognitive dissonance: 50 years of a classic theory*: Sage.
- Cressey, D. R. (1973). Other peoples' money: A study in the social psychology of embezzlement (2nd ed.). *New Jersey: Patterson Smith*.
- Culiberg, B., & Mihelič, K. K. (2017). The evolution of whistleblowing studies: A critical review and research agenda. *Journal of Business Ethics*, 146(4), 787-803.

- Curtis, M. B., & Taylor, E. Z. (2009). Whistleblowing in public accounting: Influence of identity disclosure, situational context, and personal characteristics. *Accounting and the Public Interest*, 9(1), 191-220.
- Dellaportas, S. (2013). Conversations with inmate accountants: Motivation, opportunity and the fraud triangle. *Accounting forum*, 37(1), 29-39.
- DeZoort, F. T., & Harrison, P. D. (2018). Understanding auditors' sense of responsibility for detecting fraud within organizations. *Journal of business ethics*, 149(4), 857-874.
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). *Internet, phone, mail, and mixed-mode surveys: the tailored design method*: John Wiley & Sons.
- Dorminey, J., Fleming, A. S., Kranacher, M.-J., & Riley Jr, R. A. (2012). The evolution of fraud theory. *Issues in accounting education*, 27(2), 555-579.
- Dyck, A., Morse, A., & Zingales, L. (2010). Who blows the whistle on corporate fraud? *The Journal of Finance*, 65(6), 2213-2253.
- Elliston, F. A. (1982). Anonymity and whistleblowing. *Journal of business ethics*, 1(3), 167-177.
- Festinger, L. (1957). 1957 A Theory of Cognitive Dissonance. Stanford, Calif.: Stanford University Press."
- Festinger, L. (1957). *A theory of cognitive dissonance* (Vol. 2): Stanford university press.
- Field, A. (2016). *An adventure in statistics: The reality enigma*: Sage.
- Free, C. (2015). Looking through the fraud triangle: A review and call for new directions. *Meditari Accountancy Research*, 23(2), 175-196.
- Gao, L., & Brink, A. G. (2017). Whistleblowing studies in accounting research: A review of experimental studies on the determinants of whistleblowing. *Journal of Accounting Literature*, 38, 1-13. doi:<https://doi.org/10.1016/j.acclit.2017.05.001>
- Guthrie, C. P., & Taylor, E. Z. (2017). Whistleblowing on fraud for pay: Can I trust you? *Journal of Forensic Accounting Research*, 2(1), A1-A19.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long range planning*, 46(1-2), 1-12.
- Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)*: Sage publications.
- Henseler, J. (2017). Partial least squares path modeling. In *Advanced methods for modeling markets* (pp. 361-381): Springer.
- Jones, T. M. (1991). Ethical decision making by individuals in organizations: An issue-contingent model. *Academy of management review*, 16(2), 366-395.
- Kaplan, S. E., & Whitecotton, S. M. (2001). An examination of auditors' reporting intentions when another auditor is offered client employment. *Auditing: A Journal of Practice & Theory*, 20(1), 45-63.
- Latan, H., Jabbour, C. J. C., & de Sousa Jabbour, A. B. L. (2018). 'Whistleblowing Triangle': Framework and Empirical Evidence. *Journal of Business Ethics*, 1-16.
- Latan, H., & Noonan, R. (2017). *Partial least squares path modeling: Basic concepts, methodological issues and applications*: Springer.
- Latan, H., Ringle, C. M., & Jabbour, C. J. C. (2018). Whistleblowing intentions among public accountants in Indonesia: testing for the moderation effects. *Journal of business ethics*, 152(2), 573-588.
- Lokanan, M. E. (2015). *Challenges to the fraud triangle: Questions on its usefulness*. Paper presented at the Accounting forum.
- MacGregor, J., & Stuebs, M. (2014a). The silent Samaritan syndrome: Why the whistle remains unblown. *Journal of business ethics*, 120(2), 149-164.
- MacGregor, J., & Stuebs, M. (2014b). Whistle while you work: Whistleblowing in the presence of competing incentives and pressures. *Accounting Perspectives*, 13(4), 309-324.
- McGrath, A. (2017). Dealing with dissonance: A review of cognitive dissonance reduction. *Social and Personality Psychology Compass*, 11(12), e12362.
- Miceli, M. P., Near, J. P., Rehg, M. T., & Van Scotter, J. R. (2012). Predicting employee reactions to perceived organizational wrongdoing: Demoralization, justice, proactive personality, and whistle-blowing. *Human relations*, 65(8), 923-954.
- Morvan, C., & O'Connor, A. (2017). *A theory of cognitive dissonance*: Macat Library.
- Murphy, P. R. (2012). Attitude, Machiavellianism and the rationalization of misreporting. *Accounting, Organizations and Society*, 37(4), 242-259.

- Murphy, P. R., & Dacin, M. T. (2011). Psychological pathways to fraud: Understanding and preventing fraud in organizations. *Journal of business ethics, 101*(4), 601-618.
- Murphy, P. R., & Free, C. (2015). Broadening the fraud triangle: Instrumental climate and fraud. *Behavioral Research in Accounting, 28*(1), 41-56.
- Near, J. P., & Miceli, M. P. (1995). Effective-whistle blowing. *Academy of management review, 20*(3), 679-708.
- Park, H., & Blenkinsopp, J. (2009). Whistleblowing as planned behavior—A survey of South Korean police officers. *Journal of Business Ethics, 85*(4), 545-556. doi:<https://doi.org/10.1007/s10551-008-9788-y>
- 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*(4), 929-939.
- Ringle, C. M., Wende, S., & Becker, J.-M. (2015). SmartPLS 3. *Boenningstedt: SmartPLS GmbH.*
- Rose, J. M., Brink, A. G., & Norman, C. S. (2018). The effects of compensation structures and monetary rewards on managers' decisions to blow the whistle. *Journal of Business Ethics, 150*(3), 853-862.
- Schwartz, M. S. (2016). Ethical decision-making theory: An integrated approach. *Journal of Business Ethics, 139*(4), 755-776.
- Seifert, D. L., Sweeney, J. T., Joireman, J., & Thornton, J. M. (2010). The influence of organizational justice on accountant whistleblowing. *Accounting, Organizations and Society, 35*(7), 707-717.
- Smaili, N., & Arroyo, P. (2019). Categorization of whistleblowers using the whistleblowing triangle. *Journal of Business Ethics, 157*(1), 95-117. doi:<https://doi.org/10.1007/s10551-017-3663-7>
- Soni, F., Maroun, W., & Padia, N. (2015). Perceptions of justice as a catalyst for whistle-blowing by trainee auditors in South Africa. *Meditari Accountancy Research, 23*(1), 118-140.
- Stikeleather, B. R. (2016). When do employers benefit from offering workers a financial reward for reporting internal misconduct? *Accounting, Organizations and Society, 52*, 1-14.
- Trompeter, G. M., Carpenter, T. D., Desai, N., Jones, K. L., & Riley Jr, R. A. (2012). A synthesis of fraud-related research. *Auditing: A Journal of Practice & Theory, 32*(sp1), 287-321.
- Tsang, J.-A. (2002). Moral rationalization and the integration of situational factors and psychological processes in immoral behavior. *Review of General Psychology, 6*(1), 25-50.
- Wolfe, D. T., & Hermanson, D. R. (2004). The fraud diamond: Considering the four elements of fraud.
- Yu, Y.-M. (2015). Comparative analysis of Jones' and Kelley's ethical decision-making models. *Journal of business ethics, 130*(3), 573-583.
- Zhang, J., Chiu, R., & Wei, L.-Q. (2009). On whistleblowing judgment and intention: The roles of positive mood and organizational ethical culture. *Journal of Managerial Psychology, 24*(7), 627-649.