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Whistleblowing studies in accounting research: A review of experimental studies on the determinants of whistleblowing

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ABSTRACT

We review and summarize accounting literature that examines whistleblowing in the accounting context. We organize our review around the five determinants of whistleblowing identified by Near and Miceli (1995). The first determinant is characteristics of the whistleblower. Studies related to this determinant examine whistleblowers' personality characteristics, moral judgment, and demographic characteristics. Studies related to the second determinant, characteristics of the report recipient, examine characteristics of the individual or individuals who receive the report and characteristics of the reporting channel. The third determinant is characteristics of the wrongdoer. Studies in this area focus on the wrongdoer's power and credibility. Fourth, accounting studies related to characteristics of the wrongdoing examine factors that affect the dependence of the organization on the wrongdoing and evidence credibility. Studies related to the final determinant, characteristics of the organization, examine organizational perceptions of the appropriateness of whistleblowing, organizational climate, and organizational structure. For each determinant, we first summarize and analyze the findings of prior research, and then we present suggestions for future accounting research in whistleblowing.

1. Introduction

The term whistleblowing is derived from a sporting event where the referee blows the whistle to stop an illegal or foul play (Qusqas & Kleiner, 2001). Researchers from different disciplines define whistleblowing in various ways (Erkmen, Caliskan, & Esen, 2014). As discussed by Brennan and Kelly (2007), the more widely accepted and most frequently used definition of whistleblowing in accounting research is by Near and Miceli (1985). They define whistleblowing as “the disclosure by organization 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 & Miceli, 1985; 4). This definition has been adopted by numerous whistleblowing studies (e.g., Ayers & Kaplan, 2005; Keenan, 2002; King, 1997; Miceli & Near, 1994; Miceli & Near, 1997; Near, Rehg, Van Scotter, & Miceli, 2004).

Starting in the 1980s, a number of researchers from many disciplines began to investigate ways to promote whistleblowing (Keil, Tiwana, Sainsbury, & Sneha, 2010). A series of accounting scandals that began with Enron's collapse in 2001 brought unprecedented

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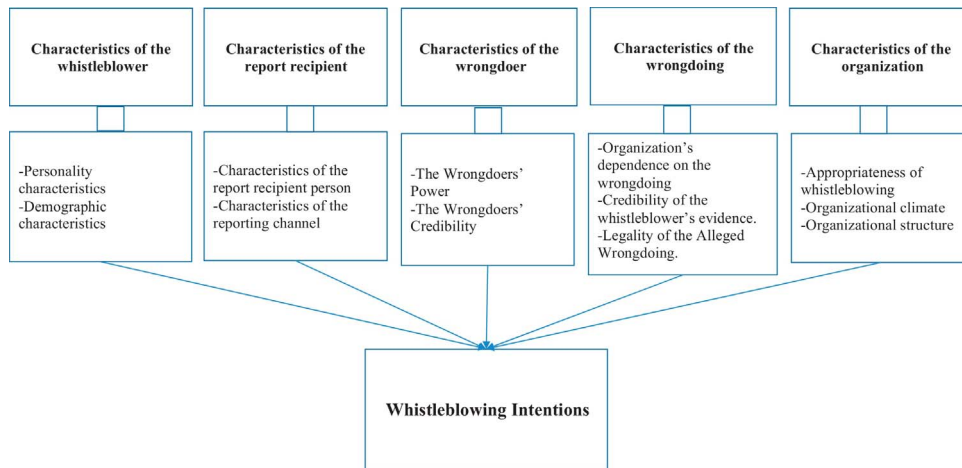


Fig. 1. Model of whistleblowing determinants (adapted from Near & Miceli, 1995).

attention to the importance of deterring accounting fraud. Employee tips are considered the most common method of detecting fraud (Association of Certified Fraud Examiners (ACFE), 2010; Dyck, Morse, & Zingales, 2010). However, numerous surveys show that not all observed fraud is reported (Ethics Resource Center, 2012; Ethics Resource Center, 2013; Hudson Employment Index, 2005; Miceli, Near, & Dworkin, 2008;). The Ethics Resource Center (2013) found that 41 percent of employees observed misconduct in their workplace, but out of the 41 percent of employees who observed misconduct, around 33 percent remained silent.

Providing a systematic review of the extant accounting whistleblowing literature contributes to research and practice by identifying gaps in the research investigating the obstacles that prevent witnesses from blowing the whistle. In this study, we review and summarize accounting literature that examines whistleblowing in the accounting context. Section 2 reviews and synthesizes the literature on each determinant of whistleblowing. We present overall conclusions in Section 3.

2. Determinants of whistleblowing

2.1. Whistleblowing model

Whistleblowers usually report wrongdoing in an attempt to terminate the wrongdoing (Near & Miceli, 1995). Therefore, the decision to blow the whistle is closely related to whether they believe the wrongdoing will be stopped (Near et al., 2004). Near and Miceli (1995) propose a model of effective whistleblowing by focusing on factors that effectively contribute to termination of the wrongdoing. This model has been used extensively to explain witnesses' reporting intentions. For example, based on the model proposed by Near and Miceli (1995), Mesmer-Magnus and Viswesvaran (2005) explore the correlation of whistleblowing intentions, actions, and retaliation. In addition, Curtis and Taylor (2009) use the model to identify personal characteristics and organizational variables and investigate the influence of identity disclosure, situational context, and personal characteristics on witnesses' whistleblowing intentions.

We use the Near and Miceli (1995) model to structure our review of the accounting whistleblowing literature (See Fig. 1). Specifically, we review and summarize whistleblowing accounting literature based on the five primary determinants of effective whistleblowing identified in the model: characteristics of the whistleblower, characteristics of the report recipient, characteristics of the wrongdoer, characteristics of the wrongdoing, and characteristics of the organization.

2.2. Characteristics of the whistleblower

The first determinant of effective whistleblowing identified in the Near and Miceli (1995) model is characteristics of the whistleblower. Three categories of characteristics of the whistleblower are described by Miceli et al. (2008): personality characteristics, moral judgment, and demographic characteristics. Personality characteristics (i.e., dispositional characteristics) are internal factors that cause an event or behavior. Moral judgment refers to the ability to judge one's own and others' behavior as right or wrong (Li, Zhu, & Gummerum, 2014). Demographic characteristics involve factors such as age, race, sex, and working experience.

Whistleblowers' decision-making processes may be heavily influenced by all three of these aspects of their personal characteristics (Bartels, Bauman, Cushamn, Pizarro, & McGraw, 2014; Miceli et al., 2008). Thus, it is important to understand how these characteristics contribute to the likelihood of reporting unethical conduct. Table 1 summarizes the accounting research related to characteristics of the whistleblower discussed in this section.

Table 1

Summary of accounting research on the effects of characteristics of the whistleblower on whistleblowing intentions.

Citation	Research Design	Participants	Independent variables	Key results
Brink, Cereola et al. (2015)	Between-subjects experiment	54 accounting students	Personality traits, ethical position, and wrongdoing materiality	<ul style="list-style-type: none"> ● There is a positive relation between the presence of higher levels of the alpha and beta meta-traits and whistle-blowing behaviors. ● Individuals with idealistic ethical position are more likely to report than individuals with relativistic ethical position.
Brink et al. (2017)	Between-subjects experiment	86 MBA students	Wrongdoing type and monetary attitude	<ul style="list-style-type: none"> ● Perceived responsibility to report an act significantly influences reporting to an internally administered hotline. ● Perceived seriousness of the act significantly influences reporting externally to the SEC. ● High anxiety toward money increases the likelihood of reporting to a company's internal hotline. ● High distrust toward money increases the likelihood of reporting to both channel. ● Viewing money as a source of power decreases the likelihood of reporting to both channels.
Curtis and Taylor (2009)	Within-subjects scenario-based survey	122 auditors	Locus of control and ethical style	<ul style="list-style-type: none"> ● Auditors with an internal locus of control and auditors who exhibit a judging ethical style are more likely to report.
Dalton and Radtke (2013)	Between-subjects experiment	116 MBA students	Machiavellianism	<ul style="list-style-type: none"> ● Machiavellianism is negatively related to whistle-blowing.
Erkmen et al. (2014)	Survey	116 accounting professionals	Age and types of wrongdoing	<ul style="list-style-type: none"> ● Female accounting professionals are more likely to blow the whistle than male accounting professionals when the fraud involves fake invoices. ● Older accounting professionals are more likely to blow the whistle than younger professionals when the fraud involves misclassification of sales and profits.
Kaplan et al. (2009)	Between-subjects experiment	118 MBA students	Gender and reporting channel	<ul style="list-style-type: none"> ● Female participants' reporting intentions are higher than male participants' only under the anonymous reporting channel condition.
Liyanarachchi and Adler (2011)	Quasi-experiment	2000 Australian accountants	Age and gender	<ul style="list-style-type: none"> ● Among early career accountants, male accountants are more likely than female accountants to blow the whistle. ● In the age group of 45 or above, female accountants' reporting intentions decline as the retaliation threat increases. The change in retaliation threat has little impact on male accountants' reporting intentions.

2.2.1. Personality characteristics and moral judgment

Regarding personality characteristics and moral judgment, Curtis and Taylor (2009) examine witness' whistleblowing in public accounting firms from the perspectives of individuals' locus of control and ethical style. Locus of control refers to how one person attributes events to either internal factors (e.g., internal hard work) or external factors (e.g., luck). Ethical style describes an individual's approach to evaluating ethical dilemmas. Curtis and Taylor (2009) employ a within-subjects scenario-based survey method and find that auditors with an internal locus of control and auditors who exhibit a judging ethical style are more likely to report unethical conduct.

Dalton and Radtke (2013) examine the joint effects of Machiavellianism and ethical environment on whistleblowing. Social and personality psychologists define Machiavellianism as a person's tendency to deceive others to achieve personal goals (Christie & Geis, 1970). Dalton and Radtke (2013) find that Machiavellianism is negatively related to whistle-blowing in a between-subjects experiment with MBA students.

Brink, Cereola, & Menk, (2015) investigate whether witnesses' personality traits and ethical position are associated with their whistleblowing intentions. They use the Big Five Factors (extroversion, openness to experience, conscientiousness, neuroticism, and

agreeableness) developed by John, Donahue, and Kentle (1991) and updated by John, Naumann, and Soto (2008) to measure personality. By conducting a between-subjects experiment with upper-level accounting students, they find a positive relation between the presence of higher levels of the alpha and beta meta-traits and whistle-blowing behaviors. The alpha trait consists of agreeableness, conscientiousness, and emotional stability (neuroticism). Beta traits are traits that indicate self-development and preservation. The Forsyth (1992) model of ethical orientation states that individuals with higher levels of idealism will have a defined set of behaviors whereas more relativistic individuals would not have a defined set of behaviors. Building on this model, Brink, Cereola et al. (2015) predict and find that individuals with idealistic ethical position are more likely to report than individuals with relativistic ethical position.

Brink, Lowe, and Victoravich (2017) examine how a whistleblower's monetary attitude (Yamauchi & Templer, 1982) may impact reporting likelihood to internal and external whistleblowing channels. The results indicate that high anxiety toward money increases the likelihood of reporting to a company's internal hotline, but does not significantly affect the likelihood of reporting to the Securities and Exchange Commission (SEC). A high distrust toward money increases the likelihood of reporting to both channels, and viewing money as a source of power decreases the likelihood of reporting to both channels.

2.2.2. Demographic characteristics

Demographic characteristics are also a potentially influential aspect of whistleblower characteristics. Most experimental studies collect participants' demographic information, such as age, gender and work experience. In general, results from accounting whistleblowing studies show that years of work experience, gender, and type of employment are not significantly associated with reporting intentions (e.g., Brink, Lowe, & Victoravich, 2013; Kaplan, Pope, & Samuels, 2011; Seifert, Sweeney, Joireman, & Thornton, 2010).

However, several studies focus on demographic variables as the variables of interest and test for potential interactions with other variables (e.g., Erkmen et al., 2014; Liyanarachchi & Adler, 2011; Kaplan, Pany, Samuels, & Zhang, 2009). Kaplan et al. (2009) examine the interaction between witnesses' gender and the anonymity of the reporting channel on individuals' intentions to report fraudulent financial reporting. They conduct an experiment with evening MBA students and find that female participants' reporting intentions are higher than male participants only in the anonymous reporting channel condition.

Liyanarachchi and Adler (2011) recruit Australian accountants to participate in a quasi-experimental survey investigating the effect of accountants' age, gender and retaliation on their whistleblowing intentions. In their study, they vary the degree of retaliation through manipulation and find a significant three-way interaction among participants' gender, age, and retaliation. Among early career accountants, male accountants are more likely than female accountants to blow the whistle. When accountants are 45 years old and above, they respond to retaliation differently depending on their gender. Specifically, female accountants' reporting intentions in this age group tend to decline as the retaliation threat increases. In contrast, the change in retaliation threat has little impact on male accountants' reporting intentions.

Erkmen et al. (2014) conduct a survey of accounting professionals in Turkey to examine the effect of witness' age, gender and types of wrongdoing on whistleblowing intentions. They find female accounting professionals are more likely to blow the whistle than male accounting professionals when the fraud involves fake invoices, and older accounting professionals are more likely to blow the whistle than younger professionals when the fraud involves misclassification of sales and profits.

2.2.3. Directions for future research

Accounting studies have investigated only a few potential relations between whistleblowers' personality characteristics and reporting intentions. Future research could examine other key elements of personality that may influence whistleblowing in accounting settings. For example, in much of the whistleblowing literature, participants are asked to assume the role of an accountant or internal auditor who discovers wrongdoing. One key personality characteristic fostered by the accounting profession is professional skepticism. The Public Company Accounting Oversight Board (PCAOB) defines professional skepticism as "an attitude that includes a questioning mind, being alert to conditions that may indicate possible misstatement due to fraud or error, and a critical assessment of audit evidence" (PCAOB, 2002, AS 1015.07). Future research could investigate how this personality characteristic interacts with other factors to influence reporting intentions.

Further, studies indicate that apprenticeship training (work-based secondary education) can alter some aspects of personality. For example, Bolli and Hof (2014) find that apprenticeship training can reduce neuroticism and increase agreeableness and conscientiousness. Prior research indicates that certain personality traits are associated with a lower likelihood of reporting unethical conduct. Thus, an interesting avenue for future research would be the examination of external factors, such as training, that have the potential to alter the personality traits associated with whistleblowing intentions.

As noted in the previous section, accounting research often collects general demographic information such as gender, age, and work experience. However, these characteristics have been the focus of only a few accounting studies, which find that demographic variables may interact with other variables to significantly impact reporting intentions. Certain demographic characteristics may be of particular importance to the accounting profession. For example, accountants who pursue CPA and other professional certifications obtain the relevant education through a variety of degree and training programs, such as 50-h undergraduate degrees, specialized master's degrees, MBAs, and for-profit exam preparation courses (Brink, Norman, & Weir, 2016). It may be that differences in accounting-specific education may influence perceptions and actions related to whistleblowing in accounting contexts.

2.3. Characteristics of the report recipient

The second determinant of effective whistleblowing identified in the [Near and Miceli \(1995\)](#) model is characteristics of the report recipient. There are two key subcategories within characteristics of the report recipient. The first subcategory relates to the characteristics of the individual or individuals who receive the report. These characteristics can further be decomposed into personality characteristics, moral judgment, and demographic characteristics. Second, characteristics of the report recipient also encompass characteristics of the reporting channel, such as its administration. Both subcategories of report recipient characteristics are potentially important as they may influence whether witnesses believe that the report will be handled properly and, therefore, subsequently influence willingness to report. [Table 2](#) summarizes the accounting research related to characteristics of the report recipient discussed in this section.

Table 2

Summary of accounting research on the effects of characteristics of the report recipient on whistleblowing intentions.

Citation	Research Design	Participants	Independent variables	Key results
Brink et al. (2013)	Between-subjects experiment	81 MBA students	Strength of evidence, and whistleblowing Incentives	<ul style="list-style-type: none"> • The likelihood of reporting internally is greater than to the SEC. • When evidence is strong, internal rewards increase reporting to SEC • When evidence is weak the presence of an internal incentive decreases SEC reporting intentions.
Brink et al. (2017)	Between-subjects experiment	86 MBA students	Wrongdoing type and monetary attitude	<ul style="list-style-type: none"> • Perceived responsibility to report an act significantly influences reporting to an internally administered hotline. • Perceived seriousness of the act significantly influences reporting externally to the SEC. • High anxiety toward money increases the likelihood of reporting to a company's internal hotline. • High distrust toward money increases the likelihood of reporting to both channel. • Viewing money as a source of power decreases the likelihood of reporting to both channels.
Curtis and Taylor (2009)	Within-subjects scenario-based survey	122 in-charge level auditors	Identity disclosure, locus of control and ethical style	<ul style="list-style-type: none"> • Reporting intention is significantly lower under a disclosed identity format. • No significant difference in reporting intention between anonymous and protected identity formats.
Kaplan et al. (2009)	Between-subjects experiment	37 MBA students	Anonymous hotline administrator	<ul style="list-style-type: none"> • Reporting intentions to the internal hotline are significantly higher compared to the external hotline.
Kaplan et al. (2010)	Between-subjects experiment	96 MBA students	Social confrontation and recipient power status	<ul style="list-style-type: none"> • Reporting intentions to the supervisor's supervisor are stronger than to an internal auditor when there is unsuccessful social confrontation with the supervisor.
Kaplan et al. (2011)	Between-subjects experiment	207 MBA students	Auditor inquiry, reporting channel	<ul style="list-style-type: none"> • Reporting intentions to an inquiring auditor are stronger than to a non-inquiring auditor. • Reporting intentions to an internal auditor are stronger than intentions to an external auditor.
Kaplan et al. (2012)	Repeated measures experiment	81 MBA students	Reporting channel, retaliation to the previous whistleblower, and transgressor repercussions	<ul style="list-style-type: none"> • Reporting intentions to anonymous channel are higher than to a non-anonymous channel only when the previous whistleblowing outcome is negative.
Kaplan and Schultz (2007)	Mixed design experiment	90 MBA students	Anonymous reporting channel, different fraud cases	<ul style="list-style-type: none"> • The existence of an anonymous channel reduces the likelihood of reporting to non-anonymous channels.
Zhang et al. (2013)	Between-subjects experiment	130 MBA students	Anonymous hotline administrator, previous whistleblowing outcomes	<ul style="list-style-type: none"> • Reporting intentions to an external hotline are higher when the organization has a history of poor responsiveness to whistleblowing and when participants are low on the proactivity scale.

2.3.1. Characteristics of the individual or individuals receiving the report

Within accounting, characteristics of the report recipient are particularly important. Internal auditors often fill the role of report recipient or make decisions that influence the identity of the individuals who will act as report recipients. It is, therefore, critical to fully understand what individual characteristics impact the effectiveness of those in this role.

[Kaplan, Pope, and Samuels \(2010\)](#) experimentally manipulate whether the report recipient is the supervisor's supervisor or an internal auditor and whether there is an unsuccessful social confrontation between the transgressor and the witness. MBA student participants indicate higher reporting intentions to the supervisor's supervisor than to an internal auditor when there is an

unsuccessful social confrontation with the supervisor. However, reporting intentions to the supervisor's supervisor are not stronger than to an internal auditor when there is no social confrontation.

Kaplan et al. (2011) extend this research by investigating whether the potential report recipient's inquiry enhances reporting intentions or not. They vary the identity of the source of inquiry as either an internal auditor or external auditor. Participants' whistleblowing intentions to an inquiring auditor are stronger than whistleblowing intentions to a non-inquiring auditor. Further, whistleblowing intentions to an internal auditor are stronger than their intentions to an external auditor.

2.3.2. Characteristics of the reporting channel

Within accounting, characteristics of the reporting channel are also of particular interest and importance. The Sarbanes-Oxley Act of 2002 (SOX) requires that public companies maintain an anonymous reporting channel witnesses can use to report matters related to questionable accounting or auditing practices (U.S. House of Representatives, 2002). However, there is no specific guidance as to how the reporting channel should be administered (SEC, 2003, 20). Some companies have a reporting hotline administered by internal auditors while others choose to have it administered by external auditors. Whether such differences in reporting channel administration influence whistleblowers is, therefore, an important question for empirical research. Aspects of the reporting channel that have been of interest in extant accounting literature include whether the reporting channel is anonymous or not, whether a reporting hotline is administered internally by employees of the company or externally by a third party, and whether reporting intentions differ between internal and external reporting channels.

Several studies investigate the effect of reporting channel anonymity. In an experimental setting, Kaplan and Schultz (2007) find that the existence of an anonymous channel reduces the likelihood of reporting to non-anonymous channels. Curtis and Taylor (2009) conduct a survey with auditors to examine their whistleblowing intentions under three forms of identity disclosure: disclosed identity format, anonymous format, and protected identity format where the witnesses' identity is known to those who must investigate, but not to the perpetrator. The results indicate that reporting intentions are significantly lower under a disclosed identity format, and there is no significant difference in reporting intentions between anonymous and protected identity formats. Kaplan, Pany, Samuels, and Zhang (2012) further investigate witnesses' preference of reporting channels with an experiment. They find witnesses' reporting intentions to an anonymous channel are higher than to a non-anonymous channel only when a previous whistleblowing outcome is negative.

Several additional studies investigate the effect of whether the reporting channel is administered internally or externally. Kaplan et al. (2009) examine intentions to report a fraudulent act to an anonymous reporting hotline that is administered either internally by company personnel or externally by a third-party provider. They find that the reporting intentions to the internal hotline are significantly higher than to the external hotline. Zhang, Pany, and Reckers (2013) argue that an internal reporting channel might not always be better than an external reporting channel at encouraging whistleblowing. By conducting an experiment with M.B.A students, they find that participants' reporting intentions to an external hotline are higher when the organization has a history of poor responsiveness to whistleblowing and when participants are low on the proactivity scale. Proactive behavior is defined by Grant (2000, 436) as "taking initiative in improving current circumstances".

Brink et al. (2013) and Brink et al. (2017) examine differences between the internal reporting channel established in response to SOX and the external reporting channel made available by the Dodd-Frank Wall Street Reform and Consumer Protection Act (U.S. House of Representatives, 2010). Brink et al. (2013) experimentally examine the impact of monetary incentives and evidence strength on employees' intentions to report fraud through these two channels. Reporting intentions are consistently higher for the internal channel. Reporting intentions to the external channel are greatest when evidence is strong and a monetary incentive for reporting is present. Brink et al. (2017) examine whether the type of wrongdoing (fraudulent financial reporting versus insider trading), assessments of the wrongdoing, and monetary attitude influence reporting intentions to these two channels. Consistent with Brink et al. (2013), intentions to report to an internal hotline are consistently higher than intentions to report externally to the SEC. The results indicate that the perceived responsibility to report a wrongful act is strongly associated with internal reporting, whereas perceptions of increased seriousness of the act influence external reporting. As discussed in Section 2.2.1, they also find that different aspects of individuals' attitude toward money explain reporting intentions to these channels.

2.3.3. Directions for future research

Corporations prefer witnesses to report unethical behavior internally, as external reporting brings reputation damage and high litigation risk (Berry, 2004; Davidson & Worrel, 1988; Laczniak & Murphy, 1991). As documented above, environmental conditions can affect perceptions of the acceptability of an internally administered internal reporting channel (Zhang et al., 2013). Future research could explore additional environmental factors influencing perceptions of internal reporting channels. For example, the question arises as to whether the choice of reporting channel is contingent upon the primary beneficiary of the wrongdoing. When fraud is conducted for the wrongdoer's personal benefit, witnesses' reporting intentions to an internally administered hotline might be higher than to an externally administered hotline because such wrongdoing provides no benefits to the company and the company may be more likely to take corrective action. However, if the wrongdoing is unethical pro-organizational behavior, the witness might be more likely to report to an external channel because the pro-organizational wrongdoing provides certain benefits to the company and the company might not take corrective action after receiving the report.

Under SOX, the reporting channels are established by audit committees (SEC, 2003, 20). Therefore, it is also important to explore the effects of audit committee quality on encouraging reporting unethical behaviors. Stronger audit committees, which have more external members and meet more regularly, may indicate that there is a higher possibility of terminating the wrongdoing when it is reported. There are several studies in the auditing literature investigating the relation between the audit committee qualities and earnings manipulation. The accounting literature can be extended by bridging the audit committee literature and whistleblowing literature.

2.4. Characteristics of the wrongdoer

The third determinant of effective whistleblowing identified in the [Near and Miceli \(1995\)](#) model is characteristics of the wrongdoer. Specifically, [Near and Miceli \(1995\)](#) focus on the wrongdoer's power and credibility. As illustrated in their model, the characteristics influencing wrongdoers' power include their position in the hierarchy, pay grade, professional status, and education level. Characteristics influencing wrongdoers' credibility include perceived motives, and performance. [Near and Miceli \(1995\)](#) assert that the wrongdoers' power and credibility influence whether the company will take corrective actions against the wrongdoer and wrongdoing. Therefore, witnesses' assessments of wrongdoers' characteristics are important factors that may significantly influence whistleblowing intentions. [Table 3](#) summarizes the accounting research related to characteristics of the wrongdoer discussed in this section.

Table 3

Summary of accounting research on the effects of characteristics of the wrongdoer on whistleblowing intentions.

Citation	Research Design	Participants	Independent variables	Key results
Kaplan (1995)	Between-subjects experiment	57 audit seniors	Audit staff work history, audit step necessity	<ul style="list-style-type: none"> • Auditors' reporting intentions are significantly stronger when the wrongdoer has poor work history and when the audit step is necessary.
Robertson et al. (2011)	Between-subjects experiment	181 auditors	Likeability reputation, performance reputation	<ul style="list-style-type: none"> • Reporting intentions are lower when the wrongdoer has a good performance reputation versus a poor performance reputation. • Reporting intentions are lower when the wrongdoer is more likeable.
Taylor and Curtis (2013)	Between-subjects experiment	106 senior-level auditors	Organizational response, power distance	<ul style="list-style-type: none"> • Auditors' are more likely to blow the whistle when the wrongdoer is a co-worker than when he is the supervisor only if the previous organizational response is weak. • If the previous organizational response is strong, auditors are more likely to report to a supervisor than a co-worker.

2.4.1. Wrongdoers' power

[Taylor and Curtis \(2013\)](#) investigate auditors' likelihood of reporting observations of colleagues' unethical behavior by varying whether the wrongdoer is a co-worker or supervisor and whether the previous organizational response to reported wrongdoing is strong or not. Results indicate that auditors' whistleblowing likelihood is higher when the wrongdoer is a co-worker than when he is the supervisor only when there is no previous organizational response to unethical behaviors. If the prior organizational response is strong, auditors are more likely to report the supervisor than the co-worker.

2.4.2. Wrongdoers' credibility

[Kaplan \(1995\)](#) investigates the effect of the wrongdoer's work performance on auditor reporting intentions upon discovery of unethical conduct. In his study, the unethical conduct is a premature sign-off on an audit procedure, and the wrongdoer's work history is manipulated as either good or poor. He finds that reporting intentions are significantly stronger when the wrongdoer has a poor work history. [Robertson, Stefaniak, and Curtis \(2011\)](#) extend [Kaplan \(1995\)](#) by examining the effects of a wrongdoer-auditor's performance and likeability reputation on fellow auditors' intentions to report. Through an experiment with auditors, they find that reporting intentions are lower when the wrongdoer has a good performance reputation and when the wrongdoer is more likeable. They find that the reporting intention is the lowest when the wrongdoer is both likeable and has good performance reputation.

2.4.3. Directions for future research

Few empirical accounting studies examine the effect of wrongdoers' characteristics on whistleblowing. In general, these studies find that witnesses' reporting intentions are lower when the wrongdoer is credible with good work performance and has power in the organization. Strong prior organizational responses help to increase reporting intentions. Future research could extend this area of whistleblowing research in a variety of ways.

Companies want their employees to have credibility and positive records of work performance. However, extant research suggests that when such employees engage in unethical behaviors, witnesses' reporting intentions are low. Future research could investigate variables that interact with wrongdoers' credibility and work performance to encourage reporting on employees who commit unethical conduct despite being perceived favorably due to other aspects of their reputation.

Further, extant whistleblowing literature investigating wrongdoer characteristics focuses on cases where a single wrongdoer commits the unethical activity alone. Most of the major organizational frauds over the past decade, such as Enron, WorldCom, Tyco, and HealthSouth, have been committed through the collusion of multiple employees ([Free & Murphy, 2015](#)). [Free and Murphy \(2015\)](#) assert that it is unlikely that any single individual has the ability to conduct a major accounting fraud without the assistance of others in the organization. Scholars suggest that more research should be done on fraudulent acts involving multiple employees. (e.g., [Hochstetler, 2001](#); [Van Mastrigt & Farrington, 2011](#)). [Free \(2015\)](#) reviews popular frameworks used to examine fraud and suggests

three areas where there is considerable scope for academic research. One of the areas he suggests for further exploration is the nature of collusion in fraud. Future accounting research on whistleblowing can incorporate co-offending situations and investigate how multiple wrongdoers interact with other variables influencing witnesses' whistleblowing intentions.

Whistleblowing research in accounting also tends to focus on a wrongdoer who is in the same organization as the witness. The frequency of companies outsourcing organizational functions to other companies has increased rapidly in recent years. As discussed by [Ayers and Kaplan \(2005\)](#), the impact on reporting intentions is not clear when the wrongdoer is a non-employee. In such a situation, reporting intentions might increase since witnesses may feel that retaliation possibility will be minimal when reporting on consultants. However, organizational employees may believe that it is not their responsibility to report the wrongdoing of consultants, making reporting less likely. [Ayers and Kaplan \(2005\)](#) test a whistleblowing model under the setting that the wrongdoer is a consultant to the company. In their study, the wrongdoer is a non-employee across treatments, not a between-subjects variable. As a result, the question remains regarding whether there is a significant reporting difference between an employee wrongdoer and non-employee wrongdoer. Future research can experimentally manipulate whether the wrongdoer is an employee or non-employee to examine how this impacts reporting intentions.

2.5. Characteristics of the wrongdoing

The fourth determinant of effective whistleblowing identified in the [Near and Miceli \(1995\)](#) model is characteristics of the wrongdoing. [Near and Miceli \(1995\)](#) separate characteristics of the wrongdoing into three dimensions: the organization's dependence on the wrongdoing, the credibility of the whistleblower's evidence, and the legality of the alleged wrongdoing. In general, each of the three dimensions influences witnesses' perceptions of whether the report will be handled properly or not. However, accounting studies tend to focus only on the reporting of accounting related acts that are illegal. Thus, most of the accounting literature in related to characteristics of the wrongdoing focuses on factors that affect the dependence of the organization on the wrongdoing and evidence credibility. [Table 4](#) summarizes the accounting research related to characteristics of the wrongdoing discussed in this section.

Table 4

Summary of accounting research on the effects of characteristics of the wrongdoing on whistleblowing intentions.

Citation	Research Design	Participants	Independent variables	Key results
Brink et al. (2013)	Between-subjects experiment	81 MBA students	Strength of evidence, and whistleblowing Incentives	<ul style="list-style-type: none"> • The likelihood of reporting internally is greater than to the SEC. • When evidence is strong, internal rewards increase reporting to SEC • When evidence is weak the presence of an internal incentive decreases SEC reporting intentions.
Brink, Cereola et al. (2015)	Between-subjects experiment	54 accounting students	Wrongdoing materiality, personality traits, and ethical position	<ul style="list-style-type: none"> • Materiality of the wrongdoing influences witness' reporting intentions through a positive association with higher idealistic orientation and higher levels of the alpha and beta meta-traits.
Brink, Eller et al. (2015)	Between-subjects experiment	137 MBA and Masters level accounting students	Strength of evidence, other employees' awareness of the act	<ul style="list-style-type: none"> • When there is strong evidence indicating a fraudulent act, individuals with sole knowledge are more likely to report than when others are aware of the fraudulent act (the bystander effect). • The bystander effect is not found when evidence of fraud is weak.
Kaplan et al. (2009)	Between-subjects experiment	103 MBA students	Procedural safeguards (strong or weak) and the type of fraudulent act	<ul style="list-style-type: none"> • When the reporting channel is anonymous, reporting intentions are greater for misappropriation of assets compared to fraudulent financial reporting.
Kaplan et al. (2011)	Between-subjects experiment	207 MBA students	Type of fraudulent act, auditor inquiry, reporting channel	<ul style="list-style-type: none"> • No systematic difference in reporting intentions is found between the two different types of fraudulent acts, misappropriation of assets and fraudulent financial reporting. • The type of fraudulent act is not found to interact with auditor inquiry or report recipient.
Kaplan and Schultz (2007)	Mixed design experiment	90 MBA students	Anonymous reporting channel, different fraud cases	<ul style="list-style-type: none"> • Reporting intentions are lower under financial statement fraud than under theft.
Robinson et al. (2012)	Between-subjects experiment	181 auditors	Likeability reputation, performance reputation	<ul style="list-style-type: none"> • Employees are less likely to report financial statement fraud than theft. • Employees are less likely to report immaterial than material financial statement fraud

2.5.1. Organization's dependence on the wrongdoing

Near and Miceli (1995) conclude that the greater the dependence of the organization on the wrongdoing, the less likely the company will take corrective actions. Several accounting whistleblowing studies investigate the organization's dependence on the wrongdoing by varying the type of wrongful act presented in experimental conditions. While some studies find no systematic differences related to the type of wrongdoing, the studies that find differences find that wrongful acts that benefit the company lead to lower reporting intentions than acts that do not benefit the company.

Kaplan and Schultz (2007) vary the primary beneficiary of the wrongdoing within-subjects and examine witnesses' decisions to report and choice of reporting channel. They ask participants to indicate their reporting intention under three case scenarios: financial statement fraud, theft, and a non-fraudulent case. Financial statement fraud is described as benefiting both the company and the perpetrator, while theft benefits the perpetrator and harms the company. The non-fraudulent case involves an employee's poor work quality being discovered by another employee. They find that reporting intentions are lower under financial statement fraud than under the theft. Also, using a within-subjects design, Robinson, Robertson, and Curtis (2012) investigate differences in whistleblowing intentions between cases of theft or financial statement fraud. They find lower whistleblowing intentions for financial statement fraud than theft with lower whistleblowing intentions for immaterial than material financial statement fraud.

Kaplan et al. (2009) examine whether reporting intentions in cases involving fraudulent financial reporting and misappropriation of assets. They find higher reporting intentions for misappropriation of assets compared to fraudulent financial reporting, but only when the reporting channel is anonymous. Kaplan et al. (2011) further examine the interactive relation among types of fraudulent acts, auditor inquiry, and reporting recipient. They do not find a systematic difference between misappropriation of assets and fraudulent financial reporting.

2.5.2. Credibility of the whistleblower's evidence

Evidence strength has an impact on the credibility of the whistleblower's evidence. While the general assumption is that stronger evidence should lead to higher reporting intentions and more effective whistleblowing (Near & Miceli, 1995), at least two accounting studies find that evidence strength may interact with other situational factors in unexpected ways. Brink et al. (2013) conduct a between-subjects experiment with MBA students to investigate the effects of evidence strength and monetary rewards for whistleblowing on internal reporting and external reporting channels. When evidence is strong, their results suggest that the presence of a monetary incentive for reporting internally increases reporting to SEC. However, when evidence is weak, the presence of an internal incentive decreases SEC reporting intentions. Brink, Eller, and Gan (2015) investigate the interaction between evidence strength and the presence of bystanders. They find that when evidence is strong, individuals are more likely if there are no bystanders. However, results indicate no bystander effect when evidence of fraud is weak.

2.5.3. Directions for future research

Our discussion above discusses accounting studies investigating the type of wrongful act. The assumption being made is that the type of wrongdoing influences the organization's dependence on the wrongdoing. However, wrongdoing type and the organization's dependence on the wrongdoing are difference concepts. In these studies, it is sometimes difficult to conclude whether the results are due to the wrongdoing behavior (e.g., manipulating financial statements vs. stealing from the company) or the organizational benefits from the wrongdoing. Thus, one direction for future research is for studies to investigate organizational dependence on the wrongdoing more directly. For example, the type of wrongdoing could be held constant while the benefits to the company are manipulated.

Free (2015) reviews popular frameworks used to examine fraud and suggests three areas where there is considerable scope for academic research. One of the areas is the rationalization of fraudulent behaviors by offenders. Wrongdoing conducted in the name of benefiting the organization is a common rationalization for committing fraud. Future studies can examine the effect of rationalization on witnesses' reporting intentions by varying the purpose of the fraudulent act.

Many corporations' whistleblowing standards require reporting the misconduct in "good faith," a term that every employee is apt to understand differently (Heard & Miller, 2006). Some companies state that the whistleblower is subject to disciplinary actions if not reporting in good faith (Heard & Miller, 2006). Reporting a misconduct that lacks convincing evidence may lead to questions regarding whether the reporting is in good faith or not. This may discourage the witnesses from reporting the questionable act. Future research can investigate whether a lack of evidence is related to questions of acting in good faith, and how such questions might influence reporting intentions.

2.6. Characteristics of the organization

The final determinant of effective whistleblowing identified in the Near and Miceli (1995) model is characteristics of the organization. From the perspective of encouraging whistleblowing, characteristics of the organization can be classified into the following categories: appropriateness of whistleblowing, organizational climate, and organizational structure (Near & Miceli, 1995). Appropriateness of whistleblowing refers to the degree to which whistleblowing is considered part of one's regular responsibility. Organizational climate refers to the ethical climate, which can encourage whistleblowing or discourage whistleblowing. The level of bureaucracy is a key variable affecting organizational structure.

As discussed by Near and Miceli (1995), the organization's structure and climate can reflect and influence its employees' resistance to change. The witnesses' whistleblowing intentions are influenced by their perception of organizational support and whether the company is willing to change the wrongful acts. Thus, it is important to investigate how the characteristics of the

organization can improve whistleblowing. These factors are of particular importance within the scope of accounting as the organizational structure for whistleblowing procedures often involves accountants directly. As discussed in Section 2.3, SOX requires public companies to implement structures that permit the anonymous reporting of accounting and auditing wrongdoing. Further, internal auditors often make decisions that influence the reporting structure in an organizational setting. Table 5 summarizes the accounting research related to characteristics of the organization discussed in this section.

Table 5
Summary of accounting research on the effect of characteristics of the organization on whistleblowing intentions.

Citation	Research Design	Participants	Independent variables	Key results
Brennan and Kelly (2007)	Survey	240 trainee auditors	Organizational structures	<ul style="list-style-type: none"> ● Having formal structures is positively associated with employees' reporting intention. ● Training offered by organization increases employees' reporting confidence.
Brink et al. (2013)	Between-subjects experiment	81 MBA students	Internal reward Incentives, Strength of Evidence	<ul style="list-style-type: none"> ● The likelihood of reporting internally is greater than likelihood of reporting to the SEC. ● When evidence is strong, internal rewards increase reporting to SEC ● When evidence is weak the presence of an internal incentive decreases SEC reporting intentions.
Dalton and Radtke (2013)	Between-subjects experiment	116 MBA students	Machiavellianism and ethical environment	<ul style="list-style-type: none"> ● An organization's ethical environment increases reporting intentions, especially when the witnesses are high in Machiavellianism.
Lowe et al. (2013)	Between-subjects experiment	76 MBA students	Financial sub-certification procedure	<ul style="list-style-type: none"> ● Reporting intentions decrease when the superior who committed a fraudulent act certified that there was no fraud.
Rose et al. (2016)	Between-subjects experiment	115 MBA students	Compensation structure	<ul style="list-style-type: none"> ● Restricted stock compensation increases reporting intentions when large whistleblowing rewards are available.
Seifert et al. (2010)	Between-subjects experiment	447 internal auditors and management accountants	Organizational justice	<ul style="list-style-type: none"> ● Organizational procedural justice, distributive justice, and interactional justice increase accountant's intentions of reporting financial statement fraud internally.
Taylor and Curtis (2013)	Between-subjects experiment	106 senior-level auditors	Organizational response, power distance	<ul style="list-style-type: none"> ● When the organizational response to reports of wrongdoing is strong, witnesses are more likely to report supervisors than peers. ● When the organizational response to reports of wrongdoing is weak, witnesses are more likely to report peers than supervisors.
Wainberg and Perreault (2016)	Between-subjects experiment	68 graduate students	Anti-retaliation policy and job security	<ul style="list-style-type: none"> ● A vivid anti-retaliation policy may lower reporting intentions, because it increases the salience of retaliatory threats.
Xu and Ziegenfuss (2008)	Between-subjects experiment	201 internal auditors	Cash reward, employment contract reward	<ul style="list-style-type: none"> ● Internal auditors are more likely to report wrongdoing when cash or employment contract rewards are provided
Zhang et al. (2013)	Between-subjects experiment	130 MBA students	Anonymous hotline administrator, previous whistleblowing outcomes	<ul style="list-style-type: none"> ● When organizations have a history of negative outcomes related to whistleblowers, witnesses low in proactivity are less likely to report to internal hotlines but more likely to report to external hotline.

2.6.1. Appropriateness of whistleblowing

Regarding the appropriateness of whistleblowing, one key factor is the company's whistleblowing policy. A whistleblowing policy may include descriptions of witnesses' responsibility to report wrongdoing, reporting channels, and organizational efforts to protect whistleblowers from retaliation (Hassink, Vides, & Bollen, 2007). Wainberg and Perreault (2016) conduct an experiment with graduate students by varying the existence of an explicit whistleblower anti-retaliation policy. They find that a vivid anti-retaliation

policy may have the opposite of the intended effect and lower whistleblower' reporting intentions because it increases the salience of retaliatory threats.

2.6.2. Organizational climate

An organizational whistleblowing climate may be influenced by many factors, such as the organization's response to prior whistleblowing incidents, the ethical environment, and internal rewards for whistleblowing. Zhang et al. (2013) investigate the interactive effects of previous whistleblowing outcomes, reporting channel, and personal proactivity scale. They vary the outcome for a previous whistleblower as either positive or negative. They find that when organizations have a history of negative outcomes for previous whistleblowers and when witnesses are low on the proactivity scale, witnesses are less likely to report to internal hotlines and more likely to report via external hotline.

Taylor and Curtis (2013) conduct an experiment in an audit environment by manipulating whether the organization takes responsive actions against ethics violations and whether the wrongdoer is a supervisor or a peer of the witness. They find that when the organizational response is strong, witnesses are more likely to report to supervisors than peers. Without a strong organizational response, witnesses are more likely to report to peers than supervisors.

Dalton and Radtke (2013) examine the joint effect of Machiavellianism and ethical environment on whistleblowing. They manipulate the organization's ethical environment by varying whether the company's ethical standards are emphasized or not. They find that emphasizing the ethical environment increases witnesses' reporting intentions, especially when if witnesses are high in Machiavellianism. Xu and Ziegenfuss (2008) conduct a survey with internal auditors to examine whether a cash reward or employment contracts have an impact on auditors' whistleblowing intentions. The results indicate that internal auditors are more likely to report wrongdoing when a cash reward or employment contract reward is provided.

Brink et al. (2013) further investigate how internal rewards influence witnesses' choice of reporting channel. Their results show that when evidence is strong, internal rewards increase reporting to SEC, but SEC reporting intentions decrease when evidence is weak and there is an internal incentive. Seifert et al. (2010) apply the theory of organizational justice to the design of whistleblowing policies and procedures. They manipulate organizational procedural justice (e.g., consistency of procedures and freedom from bias in carrying out procedures), distributive justice (e.g., resolutions are perceived as fair), and interactional justice (e.g. individuals are treated with dignity and respect). They conduct an experiment with internal auditors and management accountants and find that organizational procedural justice, distributive justice, and interactional justice increase the likelihood that an organizational accountant would internally report financial statement fraud.

2.6.3. Organizational structure

Brennan and Kelly (2007) examine the relation between audit firms' organizational structures and trainee auditors' whistleblowing intentions. They conduct a survey of a group of trainee accountants in the UK and measure the participants' response to their organization's formal structures, training, and whistleblowing policy. They find that having formal structures is positively associated with employees' reporting intentions. Training offered by the organization increases employees' reporting confidence.

Lowe, Pope, and Samuels (2015) investigate the effect of a financial sub-certification procedure in an organization on witnesses' reporting intentions. Financial sub-certification occurs when supervisors sign and certify that there is no fraud on the financial statements. Using an experimental approach with MBA student participants, they find that when sub-certification is present, witnesses' reporting intentions are diminished compared to when sub-certification is absent.

Rose, Brink, and Norman (2016) conduct an experiment by manipulating the corporations' compensation structure (unrestricted stock compensation or restricted stock compensation) and monetary reward (large or small). They find that restricted stock compensation enhances managers' whistleblowing intention when large rewards are available, and without large rewards, restricted stock compensation decreases managers' whistleblowing intentions.

2.6.4. Directions for future research

There is a need for additional accounting research examining the organizational characteristics that influence whistleblowing intentions. For example, a company's internal whistleblowing policy provides detailed explanations and guidance for employees who witness unethical behaviors. Hassink et al. (2007) conduct a content analysis of whistleblowing policies of leading European countries and find that the content of companies' whistleblowing policies varies. For example, firms describe different reporting channels. Only 50 percent of the sample provided detailed contact information of where to report, and 78 percent of the sample mentioned that the whistleblower's identity would be kept anonymous. Systematic research could be conducted to discover additional differences and trends in organizational whistleblowing structure in practice and the effects of these variations on whistleblowing behavior.

The specific design of the whistleblowing policies is also an area where research is lacking. For example, the specific language used within these policies may affect whistleblowing intentions of the employees covered by these policies. Béthoux, Didry, and Mias (2007) and Logsdon and Wood (2005) document that employees recognize the value assigned by the corporation to ethics and the reporting of wrongdoing through the language the company uses. Amongst other features, the tone of the language used in corporate communication with employees is potentially influential (Schwartz, 2002). Language with a negative tone (e.g., statements framed as "do not" or "should not") may provide clearer direction than language with a positive tone (e.g., statements framed as "do" or "should") (Schwartz, 2002). Future research could conduct controlled experiments to investigate the effects of different language features, such as tone, in whistleblowing policies on witnesses' perceived responsibility for reporting and reporting intentions.

Another organizational characteristic worth exploring is the confidentiality agreement existing between employees and organizations. The U.S. Department of Justice and the SEC wish to encourage employees to report corporate wrongdoing to the SEC. However, it is a common practice for firms to sign confidentiality agreements with employees to prevent disclosure of sensitive data to unauthorized parties. Strassberg and Harrington (2015) asserts that conflicts between employers, employees, and government lawyers regarding these agreements are inevitable. In April 2015, the SEC filed an enforcement action against KBR, Inc. (KBR) alleging that KBR's confidentiality agreement contained language that could discourage employees from reporting potential violations of the federal securities laws to the SEC (SEC, 2015). The SEC did not claim to know of any instances where KBR employees had in fact been dissuaded from becoming whistleblowers. KBR settled the case without admitting or denying liability. Thus, it is still debatable whether there is any empirical evidence that a standard confidentiality agreement discourages employees from blowing the whistle to the SEC. As confidentiality agreements are popular mechanisms to protect sensitive information, future research could investigate whether a confidentiality agreement leads to lower whistleblowing reporting to the SEC. If this does discourage employees from reporting possible federal securities law violations to the SEC, it is worth exploring effective methods that protect sensitive corporate information without discouraging whistleblowing to the SEC.

3. Conclusion

This study summarizes the extant accounting research related to whistleblowing. Whistleblowing is of great importance to the accounting profession. Accounting professionals face a range of ethical decisions in workplace, which may include decisions about reporting wrongdoing or how to respond as the recipient of such reports. Effectively encouraging whistleblowing is of great importance, as employee tips are considered the most common method of detecting fraud (ACFE 2010; Dyck et al., 2010). There has been extensive research in accounting literature investigating ways to encourage whistleblowing. However, our understanding of the determinants of whistleblowing intentions is still limited in several areas. The synthesis of past research in accounting regarding the determinants of whistleblowing intentions provided by this paper identifies promising avenues for future research to promote reporting unethical behaviors.

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