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Snitches get Stitches and End up in Ditches: A Systematic Review

of the Factors Associated with Whistleblowing Intentions

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1   Abstract

2   Blowing the whistle on corruption or wrongdoing can facilitate the detection, investigation,

3   and then prosecution of a violation that may have otherwise gone undetected. The purpose of

4   this systematic review was to identify the factors that are associated with intentions to blow

5   the whistle on wrongdoing. We searched Academic Search Premier, CINAHL Complete,

6   Education Research Complete, ERIC, Medline, PsycARTICLES, PsycINFO, Regional

7   Business News, and SPORTDiscus in January 2020. The quality of evidence was assessed

8   using the Cochrane risk of bias tool. Of the 9,136 records identified, 217 studies were

9   included in this systematic review. We identified 8 dimensions, 26 higher-order themes, and

10   119 lower-order themes. The whistleblowing dimensions were personal factors,

11   organizational factors, cost and benefits, outcome expectancies, the offence, reporting, the

12   wrongdoer, and social factors. Based on the findings, it is apparent that organizations should

13   empower, educate, protect, support, and reward those who blow the whistle, in order to

14   increase the likelihood on individuals blowing the whistle on corruption and wrongdoing. A

15   combined approach may increase whistleblowing intentions, although research is required to

16   test this assertion. From a policy perspective, more consistent protection is required across

17   different countries.

18   *Keywords:* Intentions; Organizational; Reporting; Whistleblower; Wrongdoing.

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1 **Snitches get Stitches and End up in Ditches: A Systematic Review**

2 **of the Factors Associated with Whistleblowing Intentions**

3   Whistleblowing has brought several scandals to light in healthcare (Blenkinsopp et

4 al., 2019), finance (Mehortra, 2019), and sport (Whittaker et al., 2014). A widely used and

5 accepted definition of whistleblowing is the "disclosure by organization members…of illegal,

6 immoral, or illegitimate practices under the control of their employers, to persons or

7 organizationsthat may be able to effect action" (Near and Miceli, 1985, p. 4). Whistleblowing

8 represents an important mechanism of tackling corruption and wrongdoing. It is also socially

9 significant because of its impact on employees, patients, students, organizations, and society

10 in general (Culiberg and Mihelič, 2017). It is therefore unsurprising that whistleblowing has

11 received considerable attention among scholars (Culiberg and Mihelič, 2017; Mannion et al.,

12 2018; Vandekerckhove and Lewis 2012), given that not everyone reports wrongdoing.

13   There is also a financial implication of corruption. It is estimated corruption exceeds

14 €120 billion per year in the European Union (European Commission, 2018). Understanding

15 more about the factors that are linked to a person's intention to blow the whistle is important,

16 to help organizations promote this type of behavior, especially given the repercussions that

17 some whistleblowers may encounter. The literature on whistleblowing, however, is very

18 disparate. Studies have been conducted in many different areas (e.g., medicine, healthcare,

19 finance, government, and sport). Further, some studies have been hypothetical, experimental,

20 or recollections of actual whistleblowing behavior.

21   Scholars have argued that more information is required in explaining the process

22 between a person observing wrongdoing and when deciding to report the wrongdoing, or

23 remaining silent (Culiberg and Mihelič, 2017; Mesmer-Magnus and Viswesvaran 2005). A

24 psychological construct that predicts future behavior and is a key index of a person's

25 readiness to take action is intentions (Sheeran, 2002). Systematically understanding intentions

1 to blow the whistle represents an important step in understanding this behavior. This is

2 especially true for whistleblowing. considering that it is a rather rare behavior that it is not

3 manifested regularly in people's everyday life. Very few people have experienced

4 whistleblowing. In this sense, intentions reflect the most proximal precursor of

5 whistleblowing behavior (Ajzen, 2011). Due to the aforementioned factors, a systematic

6 review that analyses intentions within hypothetical, experimental, and recollections of actual

7 whistleblowing behavior in one article is warranted. This is because it would provide a

8 comprehensive understanding of the most proximal determinant of whistleblowing behavior

9 across different domains and within different contexts.

10   Although researchers have examined the relationship between intentions and

11 whistleblowing, the results are relatively inconsistent (Chen and Lai, 2014). That is, deciding

12 to blow the whistle can be a challenging decision-making process, in which the individual

13 may consider whether it is his or her responsibility (Keil and Park, 2010), the type of

14 wrongdoing (Miceli and Near, 1992), and also the personal consequences of blowing the

15 whistle (Lennane, 2012). The European Barometer on corruption revealed that 81% of

16 respondents failed to blow the whistle because of the potential of retaliation (European

17 Commission, 2018). Further, the myth that whistleblowers are disgruntled and

18 underperforming workers trying to harm their company, has now been dispelled. Indeed,

19 whistleblowers are generally high-performing and highly committed workers who want to

20 protect their company or organization from being engulfed in a crisis (Zeng et al., 2020).

21   Despite whistleblowing being crucial in tackling corruption and wrongdoing

22 (European Commission, 2018), factors that may determine whether an individual will speak

23 and report violations or remain quiet are equivocal (Chen and Lai, 2014). This might be

24 because whistleblowing research has taken place in very diverse subject areas. Further,

25 reviews on whistleblowing have tended to focus on one discrete area such as healthcare (e.g.,

1 Blenkinsop et al., 2019) or financial corruption (e.g., Mehrotra et al., 2019). As such, scholars

2 have failed to review the literature across all domains in which whistleblowing research has

3 taken place. This would provide a more comprehensive account of the literature. To address

4 this issue, the current study aimed to systematically review the literature regarding the factors

5 that are associated with a person's intention to blow the whistle.

Methods

7 **Information Sources and Search Strategy**

8 In line with revised PRISMA guidelines (Page et al., 2020) and previous reviews

9 (Nicholls et al., 2016; 2017), three distinct search strategies were utilized to obtain

10 appropriate studies. The first strategy involved using search engines. For this review, the

11 search engines examined were Academic Search Premier, CINAHL Complete, Education

12 Research Complete, ERIC, Medline, PsycARTICLES, PsycINFO, Regional Business News,

13 and SPORTDiscus were accessed in January 2020. No date limit was placed on the searches.

14 The keywords of 'whistle blowing' OR 'whistleblower' OR 'wrongdoing' were used in

15 conjunction with 'accounting', AND 'education', AND 'financial services', AND

16 'government agencies', AND 'healthcare', AND 'legal services', AND 'medicine', AND

17 'nursing', AND 'organizations', AND 'organizational', AND 'personal factors', AND

18 'personality', AND 'sport' was entered into these search engines. Pearl growing or

19 referencing tracking was the second search strategy employed in this systematic review. This

20 involved reviewing the references list of included studies for other appropriate articles

21 (Greenhalgh and Peacock, 2005; Hartley, 1990). This iterative process was conducted until

22 no new studies of relevance were identified.

23 The third search strategy used in this study involved searching the databases of peer-

24 reviewed journals manually. Before commencing this strategy, it was decided that the focus

25 of the search should be on those journals that had a history of publishing articles on

1   whistleblowing. Using the results from the database and pearl growth search strategies, the

2   journals that published three or more studies were deemed appropriate in this systematic

3   review and included into this manual journal search strategy. These journals were *Journal of*

4   *Business Ethics* (1982 – 2020), *Auditing: A Journal of Practice and Theory* (1999 – 2020),

5   *International Journal of Law and Management* (2008 – 2020), *Behavioral Research in*

6   *Accounting* (2001 – 2020), *Employee Responsibilities and Rights Journal* (1988 – 2020),

7   *Ethics and Behavior* (1991 – 2020), *Journal of Nursing Care Quality* (1986 – 2020), *Human*

8   *Relations* (1947 – 2020), *Accounting and the Public Interest* (2001 – 2020), *Journal of*

9   *Advanced Nursing* (1976 – 2020), *Managerial Auditing Journal* (1986 – 2020), and *Public*

10 *Personnel Management* (1972 – 2020). Through the database provided on each journal's

11 website, the terms 'whistleblowing' and 'whistleblower' were searched with no date limits.

12 The results of this process were reviewed in the same manner as the previous two strategies.

13 **Eligibility Criteria**

14   The inclusion criteria used for this systematic review was that a study had to be

15 primary research, published in peer-reviewed journals, and in English. Further, for inclusion

16 in this systematic review, studies needed to assess factors that assessed intentions to report

17 wrongdoing in either hypothetical or real-life situations. As such, whistleblowing behavior

18 was not part of the inclusion criteria, but the factors linked to a person's conscious decision to

19 either blow the whistle on wrongdoing or remain quiet. Research published in non-peer

20 reviewed articles, systematic-reviews, book chapters, meta-analysis, and peer-review articles

21 not in English where therefore excluded based on not meeting the inclusion criteria. As

22 indicated in Figure 1, the total number of identified records was 9,135. Following the

23 removal of 4003 duplicates, the titles and abstracts of 5,133 records were screened for those

24 entries that were deemed irrelevant (e.g., editorials; Lefebvre et al., 2019). Through this

25 initial screening process, 4,744 studies were excluded from the systematic review. For the

1   remaining 388 records, a second assessment was conducted on the full-text reports (Lefebvre

2   et al., 2019). After reviewing these papers, 171studies were excluded from the review

3   because either they were deemed irrelevant, there was no access to the full paper, or the study

4   did not meet the eligibility criteria. From this process, a total of 217 studies were included in

5   this systematic review.

6   **Assessment of Methodological Quality and Risk of Bias**

7   The Cochrane Collaboration's Risk of Bias tool (Higgins et al., 2011), which was

8   adapted by Ntoumanis et al. (2014), was used to assess the risk of bias in the studies deemed

9   eligible for the systematic review. This tool serves as a framework for assessing bias within

10   cross-sectional, longitudinal, and experimental studies, and generates an overall score of low,

11   unclear, or high risk of bias. A study that scored low risk across all criteria were considered

12   low risk. A study that scored high risk on one criterion was considered high risk, and a study

13   that scored unclear on one criterion was scored as unclear. Please see Table 1 for criteria

14   scores for each study and Table 2 for overall risk bias evaluations.

15   In order to undertake the methodological quality and risk of bias assessment, the

16   second author (Lucas Fairs) independently assessed all papers on the criteria recommended

17   by Ntoumanis et al. (2014). The lead author (Adam Nicholls) independently applied the same

18   criteria to assess methodological quality and risk of bias within 50 papers chosen at random.

19   There was one paper that required discussion, but after this was resolved, there was a 100%

20   agreement between Fairs and Nicholls.

21   **Inductive Content Analysis**

22   In order to group the findings of papers into dimensions, higher-order, and lower-

23   order themes, and in accordance with the systematic review by Nicholls et al. (2017), all of

24   the studies were subjected to an inductive and deductive content analyses procedure, as

25   outlined by Maykut and Morehouse (2002). Similar factors that predicted whistleblowing

1 intentions were grouped together as dimensions. Within each dimension, there were higher-

2 order and lower-order themes. Each dimension, and higher-, and lower-order theme was

3 given a descriptive label and a rule of inclusion was constructed for each dimension. The rule

4 of inclusion for the dimension personal factors was 'person-based constructs that are related

5 to intentions to blow the whistle.' The rule of inclusion for morality was 'principles about

6 what is right and what is wrong,' whereas the lower-order theme moral intensity was 'the

7 strength of a person's morals.'

8 **Results**

9 **Study Characteristics**

10 From the 217 articles that investigated factors associated with whistleblowing

11 intentions, a total of 289,458 individuals participated in the studies (M =1340.08, SD =

12 5627.54, Mdn =224.5). The number of involved participants ranged between five

13 (Nurhidayat and Kusumasari, 2019) and 42,020 (Caillier, 2017a). These individuals were

14 recruited from a variety of populations and countries. In terms of populations, samples used

15 in the analyzed studies included university students (e.g., Keil et al., 2007; Kennett et al.,

16 2011), government employees (e.g., Lavena, 2016; Miceli and Near, 1985), accountants and

17 auditors (e.g., Liyanarachchi and Adler, 2011; Zheng et al., 2019), healthcare professionals

18 (nurses, obstetricians, midwives; e.g., Ahern and McDonald, 2002; Vincent et al., 1999),

19 athletes (e.g., Erickson et al., 2017; Whitaker et al., 2014), managers and professional staff

20 (e.g., Schultz et al., 1993), researchers (e.g., Satalkar and Shaw, 2018), police officers (e.g.,

21 Rothwell and Baldwin, 2007a, 2007b), and teachers (e.g., Richardson et al., 2008). As for

22 countries, participants were recruited from the U.S., Canada, Australia, Malaysia, Iran,

23 Barbados, the U.K. (including Scotland), Turkey, India, South Africa, Norway, the

24 Netherlands, Ireland, Taiwan, China (including Hong Kong), Israel, Malta, the Philippines,

25 Singapore, South Korea, Indonesia, New Zealand, Mexico, Uganda, Botswana, Mauritius,

1   Italy, Switzerland, France, Croatia, Austria, Germany, and Liechtenstein. Finally, most

2   studies recruited male and female participants. One exception to this trend is Lee et al.

3   (2004),who investigated females only. See Table 2 for a description of the study

4   characteristics.

5   The majority of reviewed studies used a quantitative design (n =194; 89.40%). The

6   remaining investigations implemented either a qualitative (n = 13; 5.99%) or a mixed-

7   methods (n =10; 4.61%) approach. Most of the studies involved participants being presented

8   with scenarios of wrongdoing and assessed their intentions to report wrongdoing in a specific

9   hypothetical scenario (n = 117; 53.9%), their general views on whistleblowing and factors

10   that would determine whether wrongdoing is reported (n = 70; 32.3%), or factors that

11   associated with intentions during past events (n = 30; 13.8%). A summary of the study

12   designs is presented in Table 2.

13   **Factors that Predict Whistleblowing Intentions**

14   Eight dimensions were identified as factors that were associated with an individual's

15   intention to blow the whistle on wrongdoing. These were personal factors, organizational

16   factors, cost and benefits, outcome expectancies, the offence, reporting, the wrongdoer, and

17   social factors. Across these eight dimensions, there was a total of 26 higher-order themes and

18   119 lower-order themes (see Table 3).

19   **Personal Factors**

20   Eight higher-order themes were identified within the personal factors dimension.

21   These were: demographics, morality, attitudes, state and trait constructs, ethics, feelings

22   towards the organization, responsibility, and work-life.

23   *Demographics.* Demographic lower-order themes included age, gender, education,

24   religion, experience, position within a company, and nationality. Contrasting evidence was

25   found across the two studies that examined the relationship between age and intentions to

1   blow the whistle. Brennan and Kelly (2007) reported that the willingness to report

2   wrongdoing externally decreased with age, whereas Sims and Keenan (1998) reported that

3   whistleblowing intentions were not predicted by age.

4   Twelve studies examined the effect of gender of whistleblowing, with five studies

5   reporting that females were more likely to blow the whistle than males (Brown et al., 2016;

6   Erkmen et al., 2014; Fieger and Rice, 2018), especially when there are anonymous reporting

7   mechanisms (Kaplan et al., 2009) or no laws have been broken (Su et al., 2010). Seven

8   studies reported that males had stronger whistleblowing intentions than females (e.g., Gökçe,

9   2013c, Liyanarachchi and Adler, 2011; Miceli et al., 1991; Miceli and Near, 1988; Sims and

10   Keenan, 1998; Taylor and Curtis, 2013; Yu et al., 2019).

11   Six studies examined general education and whistleblowing education in relation to

12   intentions to blow the whistle. Educational levels were positively associated with

13   whistleblowing intentions (e.g., Cho and Song, 2015; Sims and Keenan, 1998), as was

14   education in whistleblowing (e.g., Callier, 2017a; McManus et al., 2012; Yu et al., 2019).

15   Two studies explored how religion was associated with whistleblowing intentions, with both

16   studies finding that the strength of one's faith was positively linked to intentions to blow the

17   whistle (Bocchiaro et al., 2012; Gökçe, 2015). In regard to experience, two studies revealed

18   that experience was positively linked to whistleblowing intentions (Gökçe, 2013c), whereas a

19   lack of experience or tenure was linked to people being less likely to blow the whistle

20   (Milliken et al., 2003). Finally, Brown et al. (2016) reported that senior level individuals had

21   stronger whistleblowing intentions than middle or lower-level employees. In contrast to this,

22   four studies found that lower-level employees, such as supervisors, had stronger

23   whistleblowing intentions (Miceli and Near, 1984; Rothwell and Baldwin, 2006, 2007a,

24   2007b) than senior managers.

1   In terms of nationality, four studies found that U.S citizens were more likely to blow

2   the whistle than Jamaicans (Sims and Keenan, 1999), Singaporeans (Tan et al., 2003),

3   Chinese (Keenan, 2007), and Croatians (Tavakoli et al, 2003). However, Keenan (2002a)

4   found no differences in whistleblowing intentions between U.S. and Indian citizens.

5   Whistleblowing intentions increased for U.S. individuals if they could shift the blame, but

6   this did not increase intentions for Korean participants (Keil et al, 2007). McNab et al. (2007)

7   reported that U.S. and Canadian citizens were less likely to blow the whistle on more

8   powerful people, but this was not associated with the intentions of Mexican people.

9   *Morality.* The higher-order theme morality contained 9 lower-order themes, which

10   included moral intensity, moral identity, moral reasoning, moral competence, moral

11   perception, moral conviction, moral development, and moral courage. Of the seven studies

12   that examined the relationship between moral intensity and whistleblowing, six studies

13   reported a positive relationship (e.g., Bhal and Dadhich, 2011; Chen & Lai, 2014; Proost et

14   al., 2013; Latan et al., 2019a; Taylor and Curtis, 2010; 2013), but one study only found a

15   partial and positive relationship between these two constructs (Latan et al., 2018).

16   Moral reasoning (Liyanarachchi and Newdick, 2009; Xu and Ziegenfuss, 2008),

17   moral competence (MacGregor and Stuebs, 2014), moral perception (Keenan, 2000), moral

18   conviction (Stikeleather, 2016), moral development (Brabeck, 1984; Miceli et al., 1991), and

19   moral courage (Cheng et al., 2019) were all positively associated with whistleblowing

20   intentions. Finally, moral disengagement was associated with individuals not intending to

21   blow the whistle on wrongdoing (Ion et al., 2016).

22   *Attitudes.* The attitude higher-order theme was concerned with how attitudes towards

23   whistleblowing, policy, wrongdoing, and money were linked to whistleblowing intentions.

24   Twelve studies reported that favorable attitudes towards whistleblowing positively predicted

25   whistleblowing intentions (e.g., Alleyne et al., 2018; 2019; Brown et al., 2016; Ellis and

1   Arieli, 1999; Kamarunzaman et al., 2014; Latan et al., 2018; Lim and See, 2001; Nurhidayat

2   and Kusumasari, 2019; Park and Blenkinsopp, 2009; Richardson et al., 2012; Trongmateerut

3   and Sweeney, 2013). Further, teachers' who had more favorable attitudes towards a school's

4   policy on examinations were more likely to blow the whistle than teachers with less favorable

5   attitudes (Richardson et al., 2008). Favorable attitudes towards money were associated with

6   stronger intentions to blow the whistle among business students, than those with less

7   favorable attitudes towards money, when financial incentives were provided to report

8   wrongdoing (Brink et al., 2017). Finally, Cassematis and Wortley (2013) found that public

9   sector employees from Australia act in a manner that matches their attitude. That is,

10   individuals who have a more favorable attitude to whistleblowing are more likely to blow the

11   whistle than people with a less favorable attitude. It should be noted however, that situational

12   factors such as the extent to which a person suffered as a consequence of wrongdoing and the

13   perceived seriousness or wrongdoing were stronger predictors of whistleblowing intentions

14   than attitudes.

15   *Personality.* Eight personality factors predicted intentions to blow the whistle on

16   wrongdoing. These included honesty, risk aversion, locus-of-control, traits, personal

17   disposition, and individual propensity. Honesty was positively associated with

18   whistleblowing intentions within two studies (Keil et al., 2007; Radulovic and Uys, 2019),

19   whereas risk aversion was negatively associated with whistleblowing intentions across three

20   studies (e.g., Pillay et al., 2012, 2017; Zhou et al., 2018). Three studies (Chiu, 2002, 2003;

21   Chiu and Erdener, 2003) found that locus-of-control was negatively associated with

22   intentions to blow the whistle. That is, individuals with low levels of perceived control (i.e.,

23   external loci) were less likely to blow the whistle on wrongdoing. A proactive personality

24   type was positively associated with whistleblowing intentions within two studies (Liu et al.,

25   2016; Miceli et al., 2012), although one study did not find a link between personality type

1   and whistleblowing intentions (McCutcheon, 2006). Conversely, Machiavellianism (i.e., an

2   individual who manipulates others, is deceitful, and thinks only about him or herself; Hern et

3   al., 2016) was negatively associated with whistleblowing intentions (Dalton and Radtke,

4   2013). One study found that those with the strongest intentions to blow the whistle had either

5   a personal disposition (Ion et al., 2016) or a propensity to do so (Keenan, 2000; MacNab and

6   Worthly, 2008).

7   *Beliefs.* Self-Confidence, self-efficacy, and perceived behavioral control were the

8   lower-order themes for beliefs. Self-confidence (Nurhidayat and Kusumasari, 2019) and self-

9   efficacy (MacNab and Worthley, 2008) were positively associated with intentions to blow the

10   whistle. All six studies that examined the relationship between whistleblowing intentions and

11   perceived behavioral control found a positive association (Alleyne et al., 2018, 2019; Brown

12   et al., 2016; Park and Blenkinsopp, 2009: Rustiarini and Sunarsih, 2017; Surya et al., 2017).

13   The control to benefit others (i.e., pro-social control) was also positively associated with

14   whistleblowing intentions in one study (Stansbury and Victor, 2009).

15   *Emotions.* Six studies explored how emotions were related to whistleblowing

16   intentions. Of these six studies, two studies (Latan et al., 2019; Whittaker et al., 2014) found

17   a relationship between emotions and whistleblowing intentions. It should be noted that

18   neither Latan et al. (2019) nor Whittaker et al. (2014) specified which emotion or emotions

19   were linked to whistleblowing. More specifically, two studies found a positive relationship

20   between anger and whistleblowing intentions (Gundlach et al., 2008; Jones et al., 2014) and

21   one study found that anxiety about wrongdoing was linked to a higher likelihood of endorsing

22   whistleblowing (Henningsen et al., 2013). Finally, when individuals felt hopelessness, they

23   were less likely to blow the whistle on wrongdoing (Ion et al., 2016).

24   *Ethical.* The five lower-order themes personal ethics, legitimacy, adherence to

25   principles, ethical training, and professional ethics were categorized in the ethical higher-

1   order theme. In regard to personal ethics, there were very mixed results. Three studies found

2   a positive relationship (King and Hermodson, 2000; Park et al., 2005; Zarefar and Zarefar,

3   2017), two studies found no relationship (Clements and Shawver, 2009; Gökçe, 2013d), and

4   two studies found a negative relationship between personal ethics and whistleblowing

5   intentions (Gökçe, 2013d; Pillay et al., 2018). Perceived legitimacy (Mbago et al., 2018) and

6   adherence to one's principles (Radulovic and Uys, 2019) were both positively related to

7   whistleblowing intentions. Ethics training was reported across three studies (McManus et al.,

8   2012; Shawver, 2011a; Yu et al., 2019). Ethics training increased whistleblowing intentions.

9   Finally, professional ethics was also positively associated with whistleblowing in two studies

10   (King and Scudder, 2013; Pillay et al., 2012).

11   *Feelings Towards Organization.* Trust, commitment, intentions to stay or leave, role

12   identity, and value of whistleblowing within organization, were identified as lower-order

13   themes within the feeling towards organization theme. Trust in one's organization and

14   management were positively associated with intentions to blow the whistle across 16 studies

15   (Alleyne, 2016; Attree, 2007; Arifah et al., 2017; Aydan and Kaya, 2018; Binikos, 2008;

16   Brennan and Kelly, 2007; Curtis and Taylor, 2009; Fleming et al., 2018; Guthrie and Taylor,

17   2017; Keil et al., 2010; Lavena, 2016; Seifert et al., 2014; Taylor, 2018; Taylor and Curtis,

18   2018; Ugaddan and Park, 2019; Wilson et al., 2018). Commitment to one's organization was

19   positively associated with whistleblowing intentions across 10 studies (Alleyne, 2016, 2018,

20   2019; Caillier, 2013; Chen and Lai, 2014; Latan et al., 2018; Sims and Keenan, 1998; Surya

21   et al., 2017; Taylor and Curtis, 2010, 2018). However, Somers and Casal (1994) found

22   individuals with moderate levels of commitment were the most likely to blow the whistle.

23   Intentions to stay or leave a company were not associated with whistleblowing intentions

24   (Casal and Bogui, 2008). Possessing a strong role identity increased the chances of

25   whistleblowing in one study (Grube et al., 2010). Individuals were more likely to blow the

1 whistle when they perceived that their organization valued whistleblowing (Cassematis and

2 Wortley, 2013; Pillay et al., 2012).

3   *Responsibility.* Personal responsibility, role responsibility, displacement of

4 responsibility, need to correct wrongdoing, and wanting justice were identified as the lower-

5 order themes for higher-order theme labelled responsibility. Of the 19 studies that examined

6 the relationship between personal responsibility and whistleblowing intentions, 18 found a

7 positive relationship between these constructs (Alleyne et al., 2017, 2018, 2019; Brink et al.,

8 2017; Curtis, 2006; Dalton and Radtke, 2013; Gao et al., 2015; Gundlach et al., 2008; Kaplan

9 and Whitecotton, 2001; Keil et al., 2004, 2010; Latan et al., 2018; Lowe et al., 2015; Park et

10 al., 2008, 2009; Park and Keil, 2009; Schultz et al., 1993; Smith et al., 2001). Although Ayers

11 and Kaplan, (2005) also found a positive relationship between personal responsibility and

12 whistleblowing intentions, this relationship was only observed when whistleblowing channels

13 were anonymized. Role responsibility was examined in five studies, and all these studies

14 reported that when whistleblowing was part of one's role in an organization, individuals had

15 stronger whistleblowing intentions (Casal and Bogui, 2008; Keil et al., 2007; Miceli and

16 Near, 1984; Trevino and Victor, 1992; Victor et al., 1993). Intentions to blow the whistle

17 were linked to the need to correct wrongdoing in one study (Alleyne et al., 2013) and the

18 desire to ensure justice, either social (Omotoye, 2017; Soni et al., 2015;) or organizational

19 (Gökçe, 2013e; Pillay et al., 2017; Seifert et al., 2010, 2014; Victor et al., 1993).

20   *Job.* This higher-order theme contained six lower-order themes: job security, job

21 satisfaction, workload, role benefits, salary, and performance evaluation. When job security

22 was high, individuals had stronger intentions to blow the whistle (Shawver, 2008), although

23 when an individual feared losing their job, he or she was less likely to blow the whistle on

24 wrongdoing (Allenye, 2016). Four studies examined the relationship between job satisfaction

25 and whistleblowing intentions, with contrasting findings. Three studies found a positive

1   relationship between job satisfaction and whistleblowing intentions (Alleyne et al., 2013;

2   Miceli and Near, 1988; Yu et al., 2019), whereas one study found no relationship between

3   these constructs (Sims and Keenan, 1998).

4   Having a high workload was negatively associated with whistleblowing intentions

5   (Vincent et al., 1999), as was being on a lower salary (Miceli et al., 1991). However,

6   receiving personal benefits (Allenyne et al., 2013) were positively linked to whistleblowing

7   intentions. In regard to job performance evaluations, Miceli et al. (1991) found that

8   individuals who received a negative evaluation of their job performance were less inclined to

9   blow the whistle, whereas Robertson et al. (2011) reported whistleblowing intentions were

10   greatest for wrongdoers who were poor performers.

11   **Organizational Factors**

12   Five higher-order themes were categorized within the organizational dimension,

13   which were characteristics, leadership, support, moral code, and protection.

14   *Characteristics.* The lower-order themes for characteristics were structure, size,

15   unionization, type of industry, reputation, professional standards, and attachment to a project.

16   Four studies examined the relationship between the structure of an organization and

17   intentions to blow the whistle on wrongdoing. A hierarchical structure was negatively

18   associated with whistleblowing intentions in three studies (Milliken et al., 2003; Park and

19   Keil, 2009; Satalkar and Shaw, 2018), although another study found that an organization's

20   structure could have a positive impact on whistleblowing (Alinaghian et al., 2018). The size

21   of an organization was negatively associated with whistleblowing (Barnett, 1992; Liu and

22   Ren, 2017), as was unionization (Barnett, 1992). An organization's reputation was positively

23   associated with whistleblowing intentions (Keil et al., 2007; Pillay et al., 2012) as were an

24   organization's professional standards (Curtis and Taylor, 2009; Rennie and Crosby, 2002).

1   Finally, if wrongdoing occurred when an organization was attached to or relied heavily on a

2   particular project, individuals were more likely to blow the whistle (Keil et al., 2010).

3   *Leadership.* The higher-order leadership theme contained five lower-order themes,

4   which included ethical management, managerial reactions, communication, leadership style,

5   and dissimilarity between manager and employee. Eleven studies reported a positive

6   relationship between ethical management and whistleblowing intentions (Alleyne, 2016; Bhal

7   and Dadhich, 2011; Cheng et al., 2019; Chiasson et al., 1995; Hechanova and Manaois, 2020;

8   Kaptein, 2011; Keil et al., 2010; Near et al., 2004; Ugaddan and Park, 2019; Wen and Chen,

9   2016; Zhang et al., 2016). If an individual thought that a manager may react negatively to

10   whistleblowing or had reacted negatively in the past, people were less intent on blowing the

11   whistle (Alleyne et al., 2013; Perry et al., 1997; Scheetz and Fogarty, 2019; Zhang et al.

12   2013). One study reported that aversive leaders elicited greater whistle-blowing intentions in

13   financially unstable organizations (Thoroughgood et al., 2011). Communication between

14   workers and management was examined across five studies and communication quality with

15   management was positively associated with whistleblowing intentions in all of these studies

16   (Chaudhary et al., 2019; Kamarunzaman et al., 2014; Lyndon et al., 2012; Richardson et al.,

17   2008; Zhang, 2008). In terms of leadership style, transformational leadership (Caillier, 2013),

18   laissez-faire style (Erturk and Donmez, 2016), and an authentic style (Liu et al., 2015) were

19   positively associated with whistleblowing intentions. Finally, when there was a larger

20   demographic dissimilarity (e.g., salary, education, sociogenic status) between a manager and

21   an employer, individuals had weaker intentions to blow the whistle on wrongdoing (Park and

22   Keil, 2009).

23   *Moral Code.* An organization's moral code included the lower-order themes of ethics,

24   climate, values, and regulations. An organization's ethics was positively associated with

25   whistleblowing intentions. That is, whistleblowing intentions were greater among

1 organizations who were ethical in nine studies (Aydan and Kaya, 2018; Dalton and Radtke,

2 2013; Liu et al., 2016; Scheetz and Fogarty, 2019; Taylor and Curtis, 2018; Thoroughgood et

3 al., 2011; Tumuramye et al., 2018; Zhang et al., 2016; Zhou et al., 2018). The climate in

4 which employees worked in was also related to whistleblowing across seven studies. In five

5 studies (Ahmad et al., 2014; Alleyne, 2016; Keil et al., 2004, 2010; Rothwell and Baldwin,

6 2007b) a highly ethical working climate was positively associated with whistleblowing

7 intentions. However, ethical climate was stronger among US citizens than it was for

8 Singaporeans (Tan et al., 2003), whereas when individuals were expected to remain silent,

9 individuals were less likely to blow the whistle (Park and Kiel, 2009). Finally, if an

10 organization was highly regulated, individuals were much more likely to blow the whistle, in

11 comparison to organizations that were not highly regulated (Miceli et al., 1991).

12   *Protection.* The level of protection an organization provided an individual was

13 categorized into the lower order themes of legal, previous incidents, and policies and

14 procedures. If an organization had a strong legal system and would externally prosecute

15 individuals who committed immoral or illegitimate acts (Pillay et al., 2012; 2017) or lacked

16 protective legislation (Zipparo, 1999), individuals were less intent on blowing the whistle.

17 The way in which an organization managed previous whistleblowing intentions was

18 investigated across four studies. Three of these studies found that if an organization had

19 previously dealtwith a previous report of wrongdoing well, individuals were more likely to

20 blow the whistle (King and Hermodson, 2000; Perry et al., 1997; Scheetz and Fogarty, 2019).

21 However, if an organization had managed previous whistleblowing incidents negatively,

22 introducing an externally administered hotline increased whistleblowing intention (Zhang et

23 al., 2013). The extent to which organizations had policies and procedures to protect

24 whistleblowers was also linked to intentions. That is, organizations with policies and

25 procedures to protect individuals was linked to greater whistleblowing intentions (Cho and

1   Song, 2015; Olesen et al., 2019; Omotoye, 2017; Wainberg and Perreault, 2016; Xu and

2   Ziegenfuss, 2008).

3   **Cost and Benefits**

4   This dimension contained two higher-order themes, which were personal costs and

5   benefits. The benefits higher-order dimension comprised of financial, incentives, personal,

6   societal, and benefit-to-cost differential lower-order themes.

7   *Personal Costs.* Fifteen studies (Alleyne et al., 2017, 2018, 2019; Ayers and Kaplan,

8   2005; Chaudhary et al., 2019; Cho and Song, 2015; Curtis, 2006; Gao et al., 2015; Kaplan et

9   al., 2009; Kaplan and Whitecotton, 2001; Kennett et al., 2011; Kennett et al., 2011; Latan et

10 al., 2018; Schultz et al., 1993) reported that personal costs such as monetary or job loss were

11 negatively associated with whistleblowing intentions. Interestingly, Oelrich (2019) found that

12 whistleblowing intentions were more strongly decreased by monetary losses than increased

13 by monetary gains.

14   *Benefits.* Monetary benefits to blow the whistle on wrongdoingwas positively

15 associated with whistleblowing intentions in 10 studies (Andon et al., 2018; Berger et al.,

16 2017; Guthrie and Taylor, 2017; Latan et al., 2019c; Miceli and Near, 1984; Pope and Lee,

17 2013; Rose et al., 2018; Stikeleather, 2016; Teichmann, 2019; Xu and Ziegenfuss, 2008).

18 Further, Rose et al. (2018) and Stikeleather (2016) both found that the size of the financial

19 reward was positively linked to whistleblowing intentions. Three studies assessed the impact

20 of incentives to blow the whistle. Two of the studies found that incentives increased

21 whistleblowing intentions (Berger et al., 2017; Brink et al., 2013), but Boo et al. (2016) found

22 that incentives to blow the whistle do not increase whistleblowing intentions when an

23 individual has a close relationship with the wrongdoer. Personal benefits were positively

24 associated with whistleblowing intentions (Alleyne et al., 2013, 2017), especially for

25 individuals who score highly on the Machiavellianism personality trait (Dalton and Radtke,

1 2013), as were societal benefits (Kennett et al., 2011). Finally, whistleblowing intentions

2 were higher when individuals perceived that the benefits outweighed the costs of this

3 behavior (Keil et al., 2010).

4 **Outcome Expectancies**

5   This dimension contained expectancies regarding the organization and personal, as

6 consequence of whistleblowing. The organizational higher-order dimension contained three

7 lower-order themes: impact, effectiveness, and expectancy. The lower-order themes for

8 personal were future career and hostility.

9   *Organizational.* Two studies found that individuals were less likely to blow the

10 whistle on wrongdoing if they felt that this may be detrimental to the organization (Alleyne et

11 al., 2013; Hwang et al., 2014). The perceived effectiveness of an organization's ability to

12 handle whistleblowing was positively associated with whistleblowing intentions (Casal and

13 Bogui, 2008). Finally, when individuals expected that an organization would act upon

14 whistleblowing, intentions were higher than in organizations where there was a low

15 expectancy (Tumuramye et al., 2018).

16   *Personal.* Two studies explored how individual's evaluation of their future career

17 prospects, as a consequence of whistleblowing, impacted intentions. Both studies found that

18 individuals who expected that their career development would suffer, were less intent on

19 blowing the whistle (Fleming et al., 2018; Liu and Ren, 2017). If individuals anticipated

20 hostility in the form of intimidation (Lyndon et al., 2012), they were less intent on blowing

21 the whistle.

22 **The Offence**

23   There was one higher-order theme for the offence, or the act of wrongdoing, which

24 was termed characteristics. Characteristics comprised of five lower-order themes, which were

25 severity, type, frequency, intentionality, and duration.

1   *Characteristics.* The relationship between severity of the wrongdoing and

2   whistleblowing intentions was examined in 14 studies (Ahmad et al., 2013, 2014; Alleyne et

3   al., 2013; Andon et al., 2018; Ayers and Kaplan, 2005; Brink et al., 2017; Caillier, 2017b;

4   Curtis, 2006; Latan et al., 2019b; King, 1997; MacGregor and Stuebs, 2014; Nawawi and

5   Salin, 2018; Richardson et al., 2012; Schultz et al., 1993). All 14 of these studies found a

6   positive relationship between the severity of the wrongdoing and whistleblowing intentions.

7   The type of wrongdoing was positively associated with whistleblowing intentions in four

8   studies (Brink et al., 2017; Lee et al., 2004; Somers and Casal, 2011; Taylor, 2019), although

9   Scheetz and Wilson (2019) found that all types of wrongdoing were positively associated

10   with whistleblowing among not-for-profit employees. Six studies (Brooks and Perot, 1991;

11   Grube et al., 2010; Lee et al., 2004; Lyndon et al., 2012; Rothwell and Baldwin, 2006)

12   examined the extent to which the frequency of wrongdoing was linked to whistleblowing

13   intentions. All six studies found that the frequency of wrongdoing was positively linked to

14   intentions to blow the whistle. Individuals that witnessed intentional wrongdoing were more

15   likely to blow the whistle in comparison to accidental wrongdoing (Keil et al., 2018). Finally,

16   Lee et al. (2004) found that the duration of wrongdoing was positively associated with

17   whistleblowing intentions.

18   **Reporting**

19   The reporting dimension contained one higher-order theme, named mechanisms.

20   Within mechanisms, there were five lower-order themes: anonymized vs. non-anonymized,

21   reporting system, channel of communication, processes, and opportunities.

22   *Mechanisms.* Eleven studies examined the extent to which anonymized vs. non-

23   anonymized whistleblowing channels was linked to intentions to blow the whistle. There

24   were some contrasting findings as five studies indicated anonymized reporting channels were

25   linked positively to whistleblowing intentions (Alleyne et al., 2012, 2017; Atkinson et al.,

1   2012; Kaplan et al., 2009; Keil et al., 2010). Five studies, however, reported that anonymized

2   whistleblowing channels were not associated with increased whistleblowing intentions, in

3   comparison to protected identity channels (Curtis and Taylor, 2009; Gökçe, 2013b, 2013b;

4   Miceli and Near, 1984; Pope and Lee, 2013). Ayers and Kaplan (2005) found that it was the

5   perceived seriousness of the wrongdoing rather than whether the reporting channel was

6   anonymized that was more strongly linked to whistleblowing intentions. The channel of

7   communication and its association with whistleblowing intentions was examined within five

8   studies. Individuals were more likely to blow the whistle via internal channels in comparison

9   with externally run whistleblowing channels (Chaudhary et al., 2019; Chen and Lai, 2014;

10 Kamarunzaman et al., 2014). Onthe contrary, Smith et al. (2001) found individuals were

11 more reluctant to blow the whistle through internal channels, as did Gao et al. (2015) who

12 found whistleblowing intentions were higher for third-party administered reporting channels.

13 The process of whistleblowing across different organizations also impacted intentions. For

14 example, a lack of confidence (Flemming et al., 2018), a complicated process (Francalanza

15 and Buttigieg, 2016), a sub-certification process (Lowe et al., 2015), or a tedious

16 investigative process were also associated with decreased intentions to blow the whistle on

17 wrongdoing. Being aware and having the opportunity to blow the whistle was positively

18 reported with intentions in the study by Latan et al. (2019c).

19 **The Wrongdoer**

20   The wrongdoer dimension comprised of three higher-order themes, which were

21 demographics, relationship, and purposes. The demographic higher-order theme contained

22 the lower-order themes status/rank, fault, and reputation, whereas the relationship higher-

23 order theme contained the lower-order themes status/rank of whistleblower in relation to

24 wrongdoer, the wrongdoer's knowledge of potential whistleblower, and relationship with

1 wrongdoer. Finally, the purposes higher-order theme contained punish/hurt the wrongdoer

2 and help the wrongdoer.

3   *Demographics.* Five studies explored how the status of the wrongdoer was associated

4 with the intentions of individuals to blow the whistle. Four studies found that individuals

5 were less intent on blowing the whistle on wrongdoers who were superior to them in an

6 organization (Ahmad et al., 2013; Chaudhary et al., 2019; Gao et al., 2015; Miceli et al.,

7 1991). Taylor and Curtis (2013) found that individuals have stronger intentions to blow the

8 whistle on their peers, in comparison to a superior person. There were stronger intentions to

9 blow the whistle on wrongdoers if they were perceived to be at fault (Park et al., 2008) and if

10 they had a poorer reputation (Robertson et al., 2011).

11   *Relationship.* In regard to the relationship higher-order theme, one study found that

12 whistleblowing intentions decreased if the whistleblower knew the individual (Robinson et al.

13 2012). Six studies examined the quality of the relationship with a wrongdoer and how it

14 affected whistleblowing intentions. Each reported that relationship closeness with the

15 wrongdoer was negatively associated with whistleblowing intentions (Alleyne et al., 2013;

16 Erickson et al., 2017; Hwang et al., 2008; Milliken et al., 2003; Olesen et al., 2019; Satalkar

17 and Shaw, 2018). That is, people had stronger intentions to blow the whistle on people they

18 were not very close to.

19   *Purpose.*There were two lower-order themes for the purpose higher-order theme. One

20 study reported that intentions to blow the whistle were higher when a person wanted to hurt

21 the wrongdoer (Rennie and Crosby, 2002), whereas Moore and McAuliffe (2010) found that

22 the fear of hurting a colleague was associated with lower whistleblowing intentions. The

23 Rennie and Crosby (2002) study also found that whistleblowing intentions were associated

24 with helping the wrongdoer.

25 **Social Factors**

1   The social dimension included three higher-order themes, which were group, support,

2   and norms. The group higher theme comprised of the presence of bystanders, cohesion,

3   interests, social confrontation from work colleagues to whistleblower, peer invalidation of

4   wrongdoing, and approval. Support included social support, supportive communication

5   among peers, receptivity, and support during previous whistleblowing. The norms higher-

6   order theme included three lower-order themes, which were cultural norms, social norms, and

7   subjective norms.

8   *Group.* The presence of other bystanders, who had observed the wrongdoing, was

9   associated with reduced intentions to blow the whistle (Gao et al., 2015), especially if there

10   were few witnesses (Miceli et al., 1991). Four studies examined the relationship between

11   group cohesion and whistleblowing intentions. Three studies indicated that cohesion was

12   positively associated with whistleblowing intentions (Alleyne et al., 2019; Latan et al., 2018;

13   Rothwell and Baldwin, 2007b), whereas one study found that cohesion was negatively

14   associated with whistleblowing intentions (Whitaker et al., 2014). Whistleblowing intentions

15   increased if members of a group were negatively affected by wrongdoing (Trevino and

16   Victor, 1992) or the group would benefit from whistleblowing (Victor et al. 1993). The threat

17   of being confronted by team members, as a consequence of whistleblowing, was negatively

18   associated with whistleblowing intentions (Kaplan et al., 2010; Olesen et al., 2019). When

19   groups within an organization approved whistleblowing, intentions to blow the whistle on a

20   wrongdoing were higher (Kennett et al., 2011), whereas when a group disagreed with

21   whistleblowing, intentions were lower (Miceli et al., 2002).

22   *Support.* Support contained the lower-order themes of social support, supportive

23   communication among peers, receptivity, support during previous whistleblowing. Social

24   support was examined across 11 studies (Alleyne et al., 2018; Bellefontaine, 2009; Chen et

25   al., 2017; Cho and Song, 2015; Grube et al., 2010; Kamarunzaman et al., 2014; Kaptein,

1   2011; Latan et al., 2018; Milliken et al., 2003; Sims and Keenan, 1998; Tumuramye et al.,

2   2018) and was positively linked to whistleblowing intentions. Supportive communication

3   from peers was positively associated with whistleblowing intentions in two studies (Lyndon

4   et al., 2012; Zhang, 2008), but had no effect on whistleblowing intentions in another study

5   (Park et al., 2009).

6   *Norms*. Cultural norms were associated with whistleblowing intentions in four studies

7   (Alleyne et al., 2017; Pillay et al., 2018; Schultz et al., 1993; Tan et al., 2003), although

8   Gökçe (2013b) found that cultural norms were not associated with whistleblowing intentions.

9   Descriptive norms (Chen et al., 2017), social norms (i.e., the accepted standards of behavior

10   within social groups;Chen and Lai, 2014; Latan et al., 2018; Clements and Shawyer, 2011;

11   Izraeli and Jaffe, 1998; Shawver, 2011b), and subjective norms (i.e., the belief about whether

12   an important person or group will approve a particular behavior; Ellis and Arieli, 1999; Park

13   and Blenkinsopp, 2009; Richardson et al., 2012; Trongmateerut and Sweeney, 2013) were

14   positively associated with whistleblowing intentions.

15   **Discussion**

16   The purpose of this systematic review was to identify the factors that were associated

17   with whistleblowing intentions. We identified 8 dimensions, 26 higher-order themes, and 119

18   lower-order themes. The whistleblowing dimensions were personal factors,

19   organizationalfactors, cost and benefits, outcome expectancies, the offence, reporting, the

20   wrongdoer, and social factors. The findings of this systematic review indicate that a person's

21   intentions to blow this whistle is multifaceted. Some findings within the different dimensions,

22   such as personal factors were equivocal, whereas other dimensions were unequivocal such as

23   costs and benefits and the offence.

24   Personal factors appear important in whether individuals intend to blow the whistle or

25   not. There were, however, some contrasting findings within this dimension among studies

1 that explored the same constructs. In particular, of the twelve studies that examined gender

2 differences five studies found that females were more likely to blow the whistle, whereas

3 seven reported that males are more likely to blow the whistle. One factor that appears to

4 influence this finding is the reporting mechanism, as females prefer anonymized platforms to

5 blow the whistle (Kaplan et al., 2009). A possible explanation for why females prefer

6 anonymized platforms is because they perceive higher levels of retaliation than males (Rehg

7 et al., 2008). Additionally, power or status in an organization seems to reduce the incidence

8 of retaliation for males, but not for females (Rehg et al., 2008).

9   In regard to the mixed findings regarding gender, this might be due to the different

10 environments and organizations in which whistleblowing was assessed. Evidence suggests

11 that organizations have different practices and policies on whistleblowing, which are linked

12 to intentions (Olesen et al., 2019). Overall, though, these mixed findings indicate that gender

13 might not be as important as other personal factors that are associated with intentions to blow

14 the whistle.

15   One explanation for these contrasting findings might relate to moral intensity (Jones,

16 1991), which was overlooked in the aforementioned studies. Moral intensity has been shown

17 to impact decision making across many different situations, including whistleblowing (Fredin

18 et al., 2018). Moral intensity is composed of six-issue related characteristics (Shafer et al.,

19 2001; Singer et al., 1998). These are the consequences of a moral act (i.e., blowing the

20 whistle), social consensus regarding whether blowing the whistle is ethical or unethical,

21 probability of whether others might blow the whistle, the length of time between blowing the

22 whistle and action occurring, how close the potential whistleblower feels to the victim, and

23 the number of people that would be affected by whistleblowing. Another explanation for

24 these differences may also be the extent to which some people engage in moral

25 disengagement and thus reducing cognitive dissonance by distorting the consequences of

1 wrongdoing or dehumanizing victims, so that their decision not to report an incident is less

2 immoral (Bandura, 1990; Bandura et al., 1996). Future research could consider the role of

3 moral intensity and moral disengagement in influencing whether or not individuals will blow

4 the whistle on wrongdoing or remain silent.

5   A person's position in an organization was another factor that was associated with

6 whistleblowing intentions, with the majority of studies reporting that those within lower

7 management are more likely to blow the whistle than senior management (e.g., Miceli and

8 Near, 1984; Rothwell and Baldwin, 2006, 2007a, 2007b). This might be because those in

9 lower management are typically newer to their role and those with less than two years in their

10 role are more likely to blow the whistle (Ford, 2013). Recently, however, there has been an

11 increase in regulatory focus among management, so that blowing the whistle on wrongdoing

12 is increasingly being placed on the agenda for all levels of management (Jones and Chiu,

13 2020), which may explain why a minority of studies found that senior managers were more

14 likely to blow the whistle than middle managers (Brown et al., 2016).

15   There were a number of constructs within the personal dimension that were positively

16 associated with whistleblowing intentions, which included morality (Latan et al, 2019),

17 attitudes (Allenyne et al., 2019), honesty (Keil et al., 2007), and self-efficacy (MacNab and

18 Worthley, 2008). Given that interventions have shown that attitudes (e.g., Nicholls et al.,

19 2020a, 2020b) and self-efficacy (Hyde et al., 2008) can be enhanced, programs that attempt

20 to promote favorable attitudes to whistleblowing and self-efficacy, may have a positive

21 impact on promoting whistleblowing intentions. Research is required to test this assertion.

22   The organization in which a person belongs to, how it is run, its moral code, and what

23 protection it offers to individuals also appears to be linked to whistleblowing intentions. The

24 size of an organization (Liu and Ren, 2017), unionization (Barnett, 1992), and a hierarchical

25 structure (Satalkar and Shaw, 2018) were all negatively associated with whistleblowing

1   intentions. Leadership is an important organizational factor that is related to whether

2   individuals intend to blow the whistle or not. In particular, ethical leadership within an

3   organization is positively associated with whistleblowing intentions (e.g., Allenye et al.,

4   2016; Zhang et al., 2016), along with leadership styles, such as transformational leadership

5   (Caillier, 2013). Linked to leadership, is how leaders within an organization ensure that they

6   offer protection to those who may blow the whistle through handling reports of

7   whistleblowing (Scheetz and Fogarty, 2019) and ensuring that there are policies and practices

8   in place to protect individuals (Olesen et al., 2019). The explanation of Olesen et al.'s (2019)

9   could lie in Siegrist's (2012) effort-reward imbalance model. Siegrist (1996) proposed that

10   decision making is based on the appraisal of effort and reward. Even though an individual

11   may be motivated to blow the whistle on wrongdoing, if he or she appraises that the reward

12   whistleblowing is low or indeed negative (e.g., job loss, retaliation, or impeding one's chance

13   or promotion), he or she may remain quiet. The effort-reward model represents an interesting

14   framework for future whistleblowing research and is something that leaders could consider

15   when developing whistleblowing mechanisms to protect individuals.

16   Organizational leadership is also responsible for setting out an organization's moral

17   code, in regard to ethics, values, and working climate. The most ethical organizations had

18   staff with stronger whistleblowing intentions (Aydan and Kaya, 2018; Taylor and Curtis,

19   2018), as did those with highly ethical working climates for staff (Ahmad et al., 2014). One

20   of the reasons why leadership may be associated with whistleblowing intentions is because it

21   is they who are responsible for monitoring organizational governance and ensuring

22   compliance (D'Cruzand Noronha, 2016) and also creating the environment in which bullying

23   does not take place, so that workers do not fear reprisals (Bjorkelo et al., 2020). Another

24   possible reason is that ethical leaders create a highly ethical culture in which wrongdoing

1   strongly deviates from the norm. In such environments, individuals may have stronger

2   whistleblowing intentions.

3   With respect to other dimensions that are associated with whistleblowing intentions,

4   the studies on cost and benefit dimensions revealed that monetary losses were negatively

5   associated with intentions to blow the whistle (e.g., Cho and Song, 2015). Monetary gains,

6   however, were positively associated with whistleblowing intentions (Andon et al., 2018).

7   Larger monetary rewards were linked to stronger whistleblowing intentions than smaller

8   amounts (Berger et al., 2017).

9   Somewhat linked to cost and benefit dimension, was the outcome expectancies

10 dimension, in which individuals considered the impact of whistleblowing on their

11 organization and themselves. If people expected their career development to suffer after

12 blowing the whistle, they were less likely to do so (Flemming et al., 2018). Further, people

13 were less intent on blowing the whistle if they felt this act would damage their organization

14 (Hwang et al., 2014). The offence dimension contained studies that indicated that severity

15 (Richardson et al., 2012), type (Brink et al., 2017), and frequency of wrongdoing (Lydon et

16 al., 2012) were positively associated with whistleblowing intentions.

17   The type of reporting mechanism available to individuals to blow the whistle

18 impacted intentions in some studies, but the findings were mixed. Indeed, anonymized

19 reporting channels were associated with higher whistleblowing intentions, in comparison to

20 non-anonymized reporting (Alleyne et al., 2017). It should be noted, however, that when

21 anonymized channels were compared with protective identity systems there was no

22 difference (Curtis and Taylor, 2009). There is conflicting evidence between whistleblowing

23 intentions and reporting channels that are internally managed in comparison to externally

24 managed channels, so this might not be as important as other factors (Gao et al., 2015).

1   The person that has committed the wrongdoing and his or her relationship with the

2   potential whistleblower is another antecedent of whistleblowing intention. Whistleblowing

3   intentions were weaker when the wrongdoer was a superior within the organization

4   (Chaudhary et al., 2019) and when the wrongdoer was closer to the person observing the

5   wrongdoing (Olesen et al., 2019).

6   In the social dimension, people had stronger whistleblowing intention when there was

7   strong group cohesion (Latan et al., 2018), or if group members were affected by wrongdoing

8   (Trevino and Victor, 1992). Finally, cultural (Pillay et al., 2018), social (Chen and Lai, 2014),

9   and subjective factors (Richardson et al., 2012) were positively associated with

10   whistleblowing intentions.

11   It should be noted that most of the studies included in this systematic review

12   examined participants' intentions to blow the whistle in scenarios in which wrongdoing

13   occurred among doctors and nurses (Lyndon et al., 2012), soldiers (Ellis and Arieli, 1999),

14   accountants (Alleyne et al., 2019), and accounting students (Trongmateerut and Sweeney,

15   2013). In contrast, other studies reported intentions to report wrongdoing for behaviors that

16   had actually occurred (e.g., Moore and McAuliffe, 2010, 2012). Despite differences in the

17   occupations of the participants recruited and whether situation had occurred or was a

18   scenario-based study, these factors did not appear to impact on the results. That is, there were

19   many commonalities among scenario based and studies that involved actual behavior, in

20   addition to individuals with different occupations.

21   **Limitations**

22   According to the most recent PRISMA guidelines (Page et al., 2020), it is good

23   practice to compare the findings of a systematic review with previous systematic reviews. As

24   previously mentioned, this is the first systematic review on whistleblowing across multiple

25   domains such as medicine, heath, finance, and government, so it is not possible to do this in

1   the present review. A consequence of this is that the studies included in this systematic

2   review varied greatly, along with the type of wrongdoing, such as cheating, food tampering,

3   stealing money, and endangering the lives of patients.

4   The majority of studies reported whistleblowing intentions in hypothetical scenarios,

5   and only a few of the studies reported intentions among individuals who blew this whistle. It

6   should be noted, however, that including studies across these different domains and in both

7   real-life and hypothetical situations allows scholars to full grasp the antecedents of

8   whistleblowing intentions, which may be useful for developing interventions to promote

9   whistleblowing behaviors.

10   Another limitation of this study relates to the review processes used. Due to time

11 constraints, all searches were screened by one author, Lucas Fairs. Recent evidence suggests

12 that single screening of abstracts misses up to 13% of studies that may be deemed relevant

13 (Garlehner et al., 2020). It should be noted however, that all decisions were verified by the

14 lead author, Adam Nicholls, who checked the data. As such, there is the possibility of some

15 risk of error within this systematic review, but others such as Nussbaumer-Streit et al. (2020)

16 suggested that single author screening of abstracts would not change the overall conclusions

17 of a review. As such, we feel confident that the systematic review is representative of the

18 literature and that our conclusions are valid.

19   Another limitation relates to comparisons made in regard to whistleblowing intentions

20 and country of residence. Most studies compared whistleblowing intentions between U.S

21 citizens and citizens from another country. As such, generalizations cannot be made to people

22 who reside in other countries.

23 **Implication for Practice, Future Research, and Policy**

24   Given the importance of whistleblowing in revealing wrongdoing (e.g., Blenkinsopp

25 et al, 2019; Mehrotra et al., 2019; Whittaker et al., 2014), it is important that most, if not all,

1   employees or members from an organizationhave strong intentions to report any wrongdoing

2   they encounter. Although some of the findings from this systematic review were equivocal,

3   there appears to be a number of steps that organizations can take to maximize the likelihood

4   of individuals blowing the whistle on wrongdoing. Given the apparent multifaceted nature of

5   whistleblowing, a multipronged approach may be required to maximize whistleblowing

6   intentions, which stems from the leadership and management of an organization to empower,

7   educate, protect, support, and reward those who blow the whistle. Indeed, the way in which

8   an organization is managed in terms of ethics and leadership styles, is crucial for enhancing

9   whistleblowing intentions (Nurhidayat and Kusumasari, 2019).

10   Providing education on whistleblowing to individuals within an organization, such as

11   explaining what whistleblowing is, why it is important, how to do it, and place a personal

12   responsibility on individuals to blow the whistle when they see wrongdoing, rather than

13   waiting for someone else to act (Alleyne et al., 2017) may also be important. Indeed, a recent

14   European Barometer revealed that 49% of citizens did not know how or where to report

15   corruption (European Commission, 2018). Organizations should value and promote

16   whistleblowing to employees or members, given this is also linked to intentions to blow the

17   whistle (Pillay et al., 2012).

18   Organizations need to have procedures in place that offer genuine protection, in terms

19   of reporting procedures that protect the identity of whistleblowers (Pope and Lee, 2013),

20   prevent reprisals and intimidation (Lyndon et al., 2012), and do not harm future career

21   development (Fleming et al., 2018; Liu and Ren, 2017). The threat of retaliation may explain

22   why 81% of respondents failed to report corruption in a recent EU Special Barometer on

23   corruption (European Commission, 2018). Leaders within organizations need to support

24   individuals by positivelypromoting whistleblowing to employees or members, given people

25   are less likely to blow the whistle if they fear a manager will have a negative reaction

1   (Scheetz and Fogarty, 2019) or they have poor communication with their manager (Chaudry

2   et al., 2019). As such, individuals need to feel that they would be supported by the

3   management if they blew the whistle on wrongdoing.

4   Another way to promote whistleblowing is to reward whistleblowers financially

5   (Latan et al., 2019) or offer reduced sentences, so that the benefits of whistleblowing

6   outweigh the costs (Keil et al., 2010). It should be noted that these incentives may encourage

7   false whistleblowing accounts, so caution might be needed (Mattiesen et al., 2011).

8   Future research could assess the recommendations made in this systematic review by

9   assessing their impact on whistleblowing intentions and modify them accordingly and

10 longitudinally tracking the extent to which individuals report any wrongdoing they encounter.

11 It would also be interesting to examine whether interventions that promote whistleblowing

12 intentions could be generic or whether they need to be context specific. That is, would a

13 generic whistleblowing intervention be just as effective as an intervention designed

14 specifically for doctors, nurses, accountants, or teachers. Our findings would indicate that key

15 factors to promote whistleblowing intentions are unlikely to be context specific. However,

16 this assumption would need testing.

17   There are a number of personal factors that are associated with whistleblowing

18 intentions such as attitudes, self-efficacy, and confidence. It would be useful to see, for

19 example, how promoting favorable attitudes towards blowing the whistle may shape

20 whistleblowing intentions. If promoting favorable attitudes impacts whistleblowing

21 intentions, this could be incorporated within educational interventions too. Given the

22 importance of whistleblowing on revealing wrongdoing, developing interventions appears to

23 be an important step in this area of research.

24   In regard to whistleblowing policy, the protection for whistleblowers varies across

25 different countries. Within the European Union, for example, only 10 countries (e.g., France,

1 Hungary, Ireland, Italy, Lithuania, Malta, Netherlands, Slovakia, Sweden and the UK)

2 provide comprehensive legal protection to whistleblowers from reprisal (European

3 Commission, 2018). However, the European Union launched a new directive to provide

4 comprehensive and uniform protection to all whistleblowers (Directive EU 2019/1937),

5 which means that companies with more 50 employees are obliged to set up suitable internal

6 reporting channels. A key feature of this directive is to provide protection to employees, job

7 applicants, former employees, supporters of a whistleblower, and journalists who report

8 wrongdoing. Currently, protection only applies to wrongdoing relating to EU law (e.g., tax

9 fraud, money laundering, public health, product and road safety, environmental protection,

10 consumer protection, and data protection).

11   Similarly, there have also been changes in the United States (US) to protect

12 whistleblowers, such as the Dodd-Frank Act (2010), which was passed in following the

13 financial crisis and offers protection and rewards to whistleblowers who report wrongdoing.

14 From 2011 to 2020, the U.S. Securities and Exchange Commission (SEC) and the

15 Commodity Futures Trading Commission (CFTC) have recovered over $3.7 billion. Further,

16 $840 million has been awarded to whistleblowers (National Whistleblower Centre,

17 2021).Another example of changes in US law is the Presidential Policy Directive-19 (2019)

18 which protects whistleblowers with classified information.In the United States there are over

19 20 statutes to protect whistleblowers (Occupational Safety and Health Administration, 2019)

20 and, US citizens living in the US and outside of the US are offered protection when reporting

21 wrongdoing (National Whistleblower Centre, 2021).

22   Intentions to blow the whistle are related to a multitude of factors, and one of these

23 identified in this systematic review is outcome expectancies. If individuals do not feel

24 threatened but feel protected, they are likely to have stronger whistleblowing intentions (Cho

25 and Song, 2015). As such, the new directives and laws within the US and the EU are positive

1 steps. However, whistleblowers who report wrongdoing outside EU laws, but relate to the

2 breaking on national laws among member states are not currently protected by the EU. As

3 such, there will be some circumstances in which whistleblowers are not offered

4 comprehensive protection, even when individuals are reporting wrongdoing that breaks

5 national laws.

6   In conclusion, whistleblowing intentions are multifaceted. They can be associated

7 with personal factors, organizational factors, cost and benefits appraisals, outcome

8 expectancies, the offence, reporting, the wrongdoer, and social factors. Based on the findings,

9 it is apparent that organizations should educate their employees, protect their employees from

10 reprisals, support those who blow the whistle on wrongdoing, and even reward

11 whistleblowers. This should empower individuals to blow the whistle and thus increase the

12 likelihood of individuals blowing the whistle on corruption and wrongdoing. Further,

13 education on whistleblowing could also include psycho-social components that promote

14 favorable attitudes towards whistleblowing, boost self-efficacy, and improve communication

15 between employees and management. From a policy perspective, more consistent protection

16 is required across different countries, so that organizations are required to adhere to laws and

17 policies. Taken together, these factors could increase whistleblowing intentions, although

18 research is required to assess these recommendations.

1   References

2   Ahern, K., and McDonald, S. (2002). The beliefs of nurses who were involved in a

3   whistleblowing event. J. Adv. Nurs. 38, 303–309. doi:10.1046/j.1365-

4   2648.2002.02180.x.

5   Ahmad, S. A., Smith, M., and Ismail, Z. (2013). Internal whistleblowing intentions by

6   internal auditors: A prosocial behaviour perspective. Malaysian Accounting Review 12,

7   145–182. doi:10.24191/mar.v12i1.201.

8   Ahmad, S. A., Yunos, R. M., Ahmad, R. A. R., and Sanusi, Z. M. (2014). Whistleblowing

9   behaviour: The influence of ethical climates theory. Procedia Soc. Behav. Sci. 164,

10   445–450. doi:10.1016/j.sbspro.2014.11.101.

11 Ajzen, I. (2011). The theory of planned behavior: Reactions and reflections. *Psychology &*

12   *Health, 26*, 1113-1127. doi: 10.1080/08870446.2011.613995.

13 Alinaghian, N., Nasr Isfahani, A., and Safari, A. (2018). Factors influencing whistle-blowing

14   in the Iranian health system. J. Hum. Behav. Soc. Environ. 28, 177–192.

15   doi:10.1080/10911359.2017.1349703.

16 Alleyne, P. (2016). The influence of organizational commitment and corporate ethical values

17   on non-public accountants' whistle-blowing intentions in Barbados. J . Appl. Account.

18   Res. 17, 190–210. doi:10.1108/JAAR-12-2013-0118.

19 Alleyne, P., Charles-Soverall, W., Broome, T., and Pierce, A. (2017). Perceptions, predictors

20   and consequences of whistleblowing among accounting employees in Barbados.

21   Meditari Account. Res. 25, 241–267. doi:10.1108/MEDAR-09-2016-0080.

1   Alleyne, P., Haniffa, R., and Hudaib, M. (2019). Does group cohesion moderate auditors'

2   whistleblowing intentions? J. Int. Account. Audit. Tax. 34, 69–90.

3   doi:10.1016/j.intaccaudtax.2019.02.004.

4   Alleyne, P., Hudaib, M., and Haniffa, R. (2018). The moderating role of perceived

5   organizational support in breaking the silence of public accountants. J. Bus. Ethics 147,

6   509–527. doi:10.1007/s10551-015-2946-0.

7   Alleyne, P., Weekes-Marshall, D., and Arthur, R. (2013). Exploring factors influencing

8   whistle-blowing intentions among accountants in Barbados. J. East. Caribb. Stud. 38,

9   35–62.

10   Andon, P., Free, C., Jidin, R., Monroe, G. S., and Turner, M. J. (2018). The impact of

11   financial incentives and perceptions of seriousness on whistleblowing intention. J. Bus.

12   Ethics 151, 165–178. doi:10.1007/s10551-016-3215-6.

13   Arifah, W. N., Ahmad, W., and Ahmad, F. (2017). Impact of organizational trust on whistle-

14   blowing intentions at Malaysian enforcement agency. International Journal of Research

15   in Business Studies and Management 4, 1–6.

16   Atkinson, K. E., Jones, R. C., and Eduardo, M. (2012). Whistle blowing, hotlines and the

17   impacts of Sarbanes Oxley and Dodd-Frank. International Research Journal of Applied

18   Finance 3, 1731–1738.

19   Attree, M. (2007). Factors influencing nurses' decisions to raise concerns about care quality.

20   J. Nurs. Manag. 15, 392–402. doi:10.1111/j.1365-2834.2007.00679.x.

21   Aydan, S., and Kaya, S. (2018). Ethical climate as a moderator between organizational trust

22   & whistleblowing among nurses and secretaries. Pak. J. Med. Sci. 34.

23   doi:10.12669/pjms.342.14669.

1 Ayers, S., and Kaplan, S. E. (2005). Wrongdoing by consultants: An examination of

2   employees' reporting intentions. J. Bus. Ethics 57, 121–137. doi:10.1007/s10551-004-

3   4600-0.

4 Bandura, A. (1990). Mechanisms of moral disengagement. In W. Reich (Ed.), Origins of

5   terrorism: Psychologies, ideologies, theologies, states of mind (pp. 161-191).

6   Cambridge: Cambridge University Press.

7 Bandura, A., Barbaranelli, C., Caprara, G. V., and Pastorelli, C. (1996). Mechanisms of moral

8   disengagement in the exercise of moral agency. J. Pers. Soc. Psych. 71(2), 364–374.

9   https://doi.org/10.1037/0022-3514.71.2.364

10 Barnett, T. (1992). A preliminary investigation of the relationship between selected

11   organizational characteristics and external whistleblowing by employees. J. Bus. Ethics

12   11, 949–959. doi:10.1007/BF00871961.

13 Barnett, T., Bass, K., and Brown, G. (1996). Religiosity, ethical ideology, and intentions to

14   report a peer's wrongdoing. J. Bus. Ethics 15, 1161–1174. doi:10.1007/BF00412815.

15 Barnett, T., Cochran, D. S., and Taylor, G. S. (1993). The internal disclosure policies of

16   private-sector employers: An initial look at their relationship to employee

17   whistleblowing. J. Bus. Ethics 12, 127–136. doi:10.1007/BF00871932.

18 Bellefontaine, N. (2009). Exploring whether student nurses report poor practice they have

19   witnessed on placements. Nurs. Times 105, 28–31.

20 Berger, L., Perreault, S., and Wainberg, J. (2017). Hijacking the moral imperative: How

21   financial incentives can discourage whistleblower reporting. Auditing-J. Pract. Th. 36,

22   1–14. doi:10.2308/ajpt-51663.

Bhal, K. T., and Dadhich, A. (2011). Impact of ethical leadership and leader–member exchange on whistle blowing: The moderating impact of the moral intensity of the issue. J. Bus. Ethics 103, 485–496. doi:10.1007/s10551-011-0876-z.

Binikos, E. (2008). Sounds of silence: Organizational trust and decisions to blow the whistle. SA J. Ind. Psychol. 34, 48–59.

Bjørkelo, B., Einarsen, S., and Matthiesen, S. B. (2010). Predicting proactive behaviour at work: Exploring the role of personality as an antecedent of whistleblowing behaviour. J. Occup. Organ. Psychol. 83, 371–394. doi:10.1348/096317910X486385.

Black, L. M. (2011). Tragedy in policy: A quantitative study of nurses' attitudes toward patient advocacy activities. Am. J. Nurs. 111, 26–35. doi:10.1097/01.NAJ.0000398537.06542.c0.

Bjorkelo, B., Thorsen, C., D'Cruz, P., and Mikkelsen, E.G. (2020). Whistleblowing and bullying at work: The role of leaders. In P. D'Cruz, E. Noronha, L. Keashly& S. Tye-Williams (Eds). Handbooks of workplace bullying, emotional abuse and harassment: Special topics and particular occupations, professions and sectors. Singapore: Springer.

Blenkinsopp, J., Snowden, N., Mannion, R., Powell, M., Davies, H., Millar, R., and McHale, J. (2019). Whistleblowing over patient safety and care quality: a review of the literature. J Health Org Man, 33, 737–756. doi:10.1108/jhom-12-2018-0363

Bocchiaro, P., Zimbardo, P. G., and Van Lange, P. A. M. (2012). To defy or not to defy: An experimental study of the dynamics of disobedience and whistle-blowing. Soc Influ. 7, 35–50. doi:10.1080/15534510.2011.648421.

1   Boo, E., Ng, T. B.-P., and Shankar, P. G. (2016). Effects of incentive scheme and working

2   relationship on whistle-blowing in an audit setting. Auditing-J. Pract. Th. 35, 23–38.

3   doi:10.2308/ajpt-51485.

4   Brabeck, M. (1984). Ethical characteristics of whistle blowers. J. Res. Pers. 18, 41–53.

5   doi:10.1016/0092-6566(84)90037-0.

6   Brennan, N., and Kelly, J. (2007). A study of whistleblowing among trainee auditors. Br.

7   Account. Rev. 39, 61–87. doi:10.1016/j.bar.2006.12.002.

8   Brink, A. G., Lowe, D. J., and Victoravich, L. M. (2013). The effect of evidence strength and

9   internal rewards on intentions to report fraud in the Dodd-Frank regulatory

10   environment. Auditing-J. Pract. Th. 32, 87–104. doi:10.2308/ajpt-50449.

11   Brink, A. G., Lowe, D. J., and Victoravich, L. M. (2017). The public company

12   whistleblowing environment: Perceptions of a wrongful act and monetary attitude.

13   Account. Public Interest 17, 1–30. doi:10.2308/apin-51681.

14   Brooks, L., and Perot, A. R. (1991). Reporting sexual harassment: Exploring a predictive

15   model. Psychol. Women Q. 15, 31–47. doi:10.1111/j.1471-6402.1991.tb00476.x.

16   Brown, J. O., Hays, J., and Stuebs, M. T. (2016). Modeling accountant whistleblowing

17   intentions: Applying the theory of planned behavior and the fraud triangle. Account.

18   Public Interest 16, 28–56. doi:10.2308/apin-51675.

19   Caillier, J. G. (2013). Do employees feel comfortable blowing the whistle when their

20   supervisors practice transformational leadership? Int. J. Public Adm. 36, 1020–1028.

21   doi:10.1080/01900692.2013.798812.

22   Caillier, J. G. (2017a). An examination of the role whistle-blowing education plays in the

23   whistle-blowing process. Soc. Sci. J. 54, 4–12. doi:10.1016/j.soscij.2016.09.005.

1   Caillier, J. G. (2017b). Public service motivation and decisions to report wrongdoing in U.S.

2   federal agencies: Is this relationship mediated by the seriousness of the wrongdoing.

3   Am. Rev. Public Adm. 47, 810–825. doi:10.1177/0275074015626299.

4   Casal, J. C., and Bogui, F. B. (2008). Predictors of responses to organizational wrongdoing.

5   Psychol. Rep. 103, 121–133. doi:10.2466/pr0.103.1.121-133.

6   Cassematis, P. G., and Wortley, R. (2013). Prediction of whistleblowing or non-reporting

7   observation: The role of personal and situational factors. J. Bus. Ethics 117, 615–634.

8   doi:10.1007/s10551-012-1548-3.

9   Chaudhary, N. S., Gupta, K. P., and Phoolka, S. (2019). A study of whistle-blowing

10   intentions of teachers working in higher education sector. Int. J. Law Manag. 61, 106–

11   132. doi:10.1108/IJLMA-10-2017-0253.

12   Chen, C.-P., and Lai, C.-T. (2014). To blow or not to blow the whistle: the effects of potential

13   harm, social pressure and organizational commitment on whistleblowing intention and

14   behaviour. Bus Ethics: A Euro Rev, 23, 327–342. doi:10.1111/beer.12053

15   Chen, C. X., Nichol, J. E., and Zhou, F. H. (2017). The effect of incentive framing and

16   descriptive norms on internal whistleblowing. Contemp. Account. Res. 34, 1757–1778.

17   doi:10.1111/1911-3846.12325.

18   Cheng, J., Bai, H., and Yang, X. (2019). Ethical leadership and internal whistleblowing: A

19   mediated moderation model. J. Bus. Ethics 155, 115–130. doi:10.1007/s10551-017-

20   3517-3.

21   Chiasson, M., Johnson, G. H., and Byington, J. R. (1995). Blowing the whistle: Accountants

22   in industry. CPA Journal 65, 24–27.

1 Chiu, R. K. (2002). Ethical judgement, locus of control, and whistleblowing intention: A case

2   study of mainland Chinese MBA students. Manag. Audit. J. 17, 581–587.

3   doi:10.1108/02686900210447588.

4 Chiu, R. K. (2003). Ethical judgment and whistleblowing intention: Examining the

5   moderating role of locus of control. Journal of Business Ethics 43, 65–74. doi:J. Bus.

6   Ethics.

7 Chiu, R. K., and Erdener, C. (2003). The ethics of peer reporting in Chinese societies:

8   Evidence from Hong Kong and Shanghai. Int. J. Hum. Resour. Manag. 14, 335–353.

9   doi:10.1080/0958519021000029153.

10 Cho, Y. J., and Song, H. J. (2015). Determinants of whistleblowing within government

11   agencies. Public Pers. Manage. 44, 450–472. doi:10.1177/0091026015603206.

12 Clements, L. H., and Shawver, T. (2011). Moral intensity and intentions of accounting

13   professionals to whistleblow internally. Journal of Forensic Studies in Accounting &

14   Business 3, 67–82.

15 Clements, L. H., and Shawver, T. J. (2009). Whistleblowing intentions of accounting

16   professionals. Journal of Business Disciplines 10, 85–101.

17 Culiberg, B., and Mihelič, K. K. (2016). The Evolution of Whistleblowing Studies: A Critical

18   Review and Research Agenda. J. Bus. Ethics 146, 787–803. doi:10.1007/s10551-016-

19   3237-0

20 Curtis, M. B. (2006). Are audit-related ethical decisions dependent upon mood? J. Bus. Ethics

21   68, 191–209. doi:10.1007/s10551-006-9066-9.

1   Curtis, M. B., and Taylor, E. Z. (2009). Whistleblowing in public accounting: Influence of

2   identity disclosure, situational context, and personal characteristics. Account. Public

3   Interest 9, 191–220. doi:10.2308/api.2009.9.1.191.

4   Dalton, D., and Radtke, R. R. (2013). The joint effects of Machiavellianism and ethical

5   environment on whistle-blowing. J. Bus. Ethics 117, 153–172. doi:10.1007/s10551-

6   012-1517-x.

7   D'Cruz, P., andBjørkelo, B. (2016). Sociocultural dynamics in whistleblowing: Insights from

8   India. Asia Pacific Journal of Business Administration, 8(2), 143-162.

9   doi:http://dx.doi.org/10.1108/APJBA-07-2015-0061Elias, R. (2008). Auditing students'

10   professional commitment and anticipatory socialization and their relationship to

11   whistleblowing. Manag. Audit. J. 23, 283–294. doi:10.1108/02686900810857721.

12 Directive (EU) 2019/1937 (2019). The European Parliament and of the Council of 23 October

13   2019 on the protection of persons who report breaches of Union law. Retrieved from:

14   https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32019L1937

15 Dodd-Frank Act (2010). H.R. 4173 (111th): Dodd-Frank Wall Street Reform and Consumer

16   Protection Act.One Hundred Eleventh Congress of the United States of America: At the

17   second session.

18 Ellis, S., and Arieli, S. (1999). Predicting intentions to report administrative and disciplinary

19   infractions: Applying the reasoned action model. Hum. Relat. 52, 947–967.

20   doi:10.1177/001872679905200705.

21 Erickson, K., Backhouse, S. H., and Carless, D. (2017). "I don't know if I would report

22   them": Student-athletes' thoughts, feelings and anticipated behaviours on blowing the

23   whistle on doping in sport. Psychol. Sport Exerc. 30, 45–54.

24   doi:10.1016/j.psychsport.2017.01.005.

Erkmen, T., ÖzsözgünÇalışkan, A., and Esen, E. (2014). An empirical research about whistleblowing behavior in accounting context. J. Account. Organ. Chang. 10, 229–243. doi:10.1108/JAOC-03-2012-0028.

Erturk, A., and Donmez, E. (2016). Relationship between leadership styles of school principals and whistleblowing behaviors of teachers. Univers. J. Educ. Res. 4, 55–62. doi:10.13189/ujer.2016.041308.

European Commission (2018). Whistleblower Protection. Retrieved from https://ec.europa.eu/info/sites/info/files/placeholder_11.pdf

Fieger, P., and Rice, B. S. (2018). Whistle-blowing in the Australian Public Service: The role of employee ethnicity and occupational affiliation. Pers. Rev. 47, 613–629. doi:10.1108/PR-07-2017-0203.

Fleming, C. A., Humm, G., Wild, J. R., Mohan, H. M., Hornby, S. T., Harries, R. L., et al. (2018). Supporting doctors as healthcare quality and safety advocates: Recommendations from the Association of Surgeons in Training (ASiT). Int. J. Surg. 52, 349–354. doi:10.1016/j.ijsu.2018.02.002.

Ford, S. (2013). Staff most likely to whistleblow about concerns inside two years. *Nurs. Times.* Retrieved from: https://www.nursingtimes.net/roles/nurse-managers/staff-most-likely-to-whistleblow-about-concerns-inside-two-years-05-06-2013/

Francalanza, C., and Buttigieg, E. (2016). Maltese certified public accountants and whistle-blowing: Traits, influences and propensity. J . Appl. Account. Res. 17, 262–284. doi:10.1108/JAAR-09-2013-0062.

Fredin, A. J. (2011). The effects of anticipated regret on the whistleblowing decision. Ethics Behav. 21, 404–427. doi:10.1080/10508422.2011.604296.

1 Fredin, A., Venkatesh, R., Riley, J., and Eldridge, S. W. (2018). "The road not taken": A

2   study of moral intensity, whistleblowing, and regret. Ethics Behav. 29, 320–340.

3   doi:10.1080/10508422.2018.1469088.

4 Gao, J., Greenberg, R., and Wong-On-Wing, B. (2015). Whistleblowing intentions of lower-

5   level employees: The effect of reporting channel, bystanders, and wrongdoer power

6   status. J. Bus. Ethics 126, 85–99. doi:10.1007/s10551-013-2008-4.

7 Gartlehner G, Affengruber L, Titscher V, Noel-Storr A, Dooley G, Ballarini N, König F.

8   (2020). Single-reviewer abstract screening missed 13 percent of relevant studies: a

9   crowd-based, randomized controlled trial. J Clin Epidemiol, 121, 20-28. doi:

10   10.1016/j.jclinepi.2020.01.005.

11 Greenhalgh, T., and Peacock, R. (2005). Effectiveness and efficiency of search methods in

12   systematic reviews of complex evidence: Audit of primary sources. *BMJ*, *331*(7524),

13   1064–1065. https://doi.org/10.1136/bmj.38636.593461.68

14 Grube, J. A., Piliavin, J. A., and Turner, J. W. (2010). The courage of one's conviction: When

15   do nurse practitioners report unsafe practices? Health Commun. 25, 155–164.

16   doi:10.1080/10410230903544944.

17 Gundlach, M. J., Martinko, M. J., and Douglas, S. D. (2008). A new approach to examining

18   whistle blowing: The influence of cognitions and anger. SAM Advanced Management

19   Journal 73, 40–50.

20 Guthrie, C. P., and Taylor, E. Z. (2017). Whistleblowing on fraud for pay: Can I trust you?

21   Journal of Forensic Accounting Research 2, A1–A19. doi:10.2308/jfar-51723.

22 Hartley, R. J. (1990). *Online searching: Principles and practice*. Bowker-Saur.

1 Hechanova, Ma. R. M., and Manaois, J. O. (2020). Blowing the whistle on workplace

2   corruption: The role of ethical leadership. Int. J. Law Manag. 62, 277–294.

3   doi:10.1108/IJLMA-02-2019-0038.

4 Henningsen, M. L. M., Valde, K. S., and Denbow, J. (2013). Academic misconduct: A goals–

5   plans–action approach to peer confrontation and whistle-blowing. Commun. Educ. 62,

6   148–168. doi:10.1080/03634523.2012.752509.

7 Hern, D., Vujaklija, A., Ivanisevic, R., Knezevic, J., Marusic, M., and Marusic, A. (2006).

8   Students' moral reasoning, Machiavellianism, and socially desirable responding:

9   Implications for teaching ethics and research integrity. *Medical Education, 40,* 269–

10   277. doi:10.1111/j.1365-2929.2006.02391.x.

11 Higgins, J. P. T., Altman, D. G., and Sterne, J. A. C. (2011). "Assessing risk of bias in

12   included studies." in Cochrane Handbook for Systematic Reviews of Interventions, eds

13   J. P. T. Higgins and S. Green (The Cochrane Collaboration). Available online at:

14   www.handbook.cochrane.org

15 Hwang, D. B. K., Chen, Y., Staley, A. B., Tsai, Y., and Chu, C.-L. (2014). A comparative

16   study of the propensity of whistle-blowing: Empirical evidence from China, Taiwan,

17   and the United States. International Journal of Accounting and Financial Reporting 3,

18   202. doi:10.5296/ijafr.v3i2.4723.

19 Hwang, D., Staley, B., Te Chen, Y., and Lan, J. (2008). Confucian culture and whistle-

20   blowing by professional accountants: An exploratory study. Manag. Audit. J. 23, 504–

21   526. doi:10.1108/02686900810875316.

22 Hyde, J., Hankins, M., Deale, A., and Marteau, T. M. (2008). Interventions to Increase Self-

23   efficacy in the Context of Addiction Behaviors. J Health Psychol, *13*, 607–623.

24   doi:10.1177/1359105308090933

Ion, R., Smith, K., Moir, J., and Nimmo, S. (2016). Accounting for actions and omissions: a discourse analysis of student nurse accounts of responding to instances of poor care. J. Adv. Nurs. 72, 1054–1064. doi:10.1111/jan.12893.

Ion, R., Smith, K., Nimmo, S., Rice, A. M., and McMillan, L. (2015). Factors influencing student nurse decisions to report poor practice witnessed while on placement. Nurse Educ. Today 35, 900–905. doi:10.1016/j.nedt.2015.02.006.

Izraeli, D., and Jaffe, E. D. (1998). Predicting whistle blowing: A theory of reasoned action approach. Int. J. Value-Based Manage. 11, 19–34. doi:10.1023/A:1007759806376.

Jackson, D., Peters, K., Andrew, S., Edenborough, M., Halcomb, E., Luck, L., et al. (2010). Understanding whistleblowing: Qualitative insights from nurse whistleblowers. J. Adv. Nurs. 66, 2194–2201. doi:10.1111/j.1365-2648.2010.05365.x.

Jenkel, I., and Haen, J. J. (2012). Influences on students' decisions to report cheating: A laboratory experiment. J. Acad. Ethics 10, 123–136. doi:10.1007/s10805-012-9154-7.

Jones, J. C., Spraakman, G., and Sánchez-Rodríguez, C. (2014). What's in it for me? An examination of accounting students' likelihood to report faculty misconduct. J. Bus. Ethics 123, 645–667. doi:10.1007/s10551-013-2015-5.

Jones, N., and Chiu, S. (2020). Whistleblowing in the spotlight: why are managers in Hong Kong more likely to blow the whistle?Retrieved from: https://riskandcompliance.freshfields.com/post/102ght8/whistleblowing-in-the-spotlight-why-are-managers-in-hong-kong-more-likely-to-blo

Jones, T. (1991). Ethical decision making by individuals in organizations: An issue-contingent model. *Academy of Management Review, 16(2),* 366–395.

1   Kamarunzaman, N. Z., Zawawi, A. A., and Hussin, Z. Hj. (2014). Reporting misdeeds: An

2   evaluation on intention to blowing the whistle. Int. J. Soc. Sci. Humanit. 4, 269–274.

3   doi:10.7763/IJSSH.2014.V4.361.

4   Kaplan, S. E. (1995). An examination of auditors' reporting intentions upon discovery of

5   procedures prematurely signed-off. Auditing 14, 90–114.

6   Kaplan, S. E., Pany, K., Samuels, J. A., and Zhang, J. (2009a). An examination of the

7   association between gender and reporting intentions for fraudulent financial reporting.

8   J. Bus. Ethics 87, 15–30. doi:10.1007/s10551-008-9866-1.

9   Kaplan, S. E., Pany, K., Samuels, J. A., and Zhang, J. (2009b). An examination of the effects

10   of procedural safeguards on intentions to anonymously report fraud. Auditing-J. Pract.

11   Th. 28, 273–288. doi:10.2308/aud.2009.28.2.273.

12   Kaplan, S. E., Pope, K. R., and Samuels, J. A. (2010). The effect of social confrontation on

13   individuals' intentions to internally report fraud. Behav. Res. Account. 22, 51–67.

14   doi:10.2308/bria.2010.22.2.51.

15   Kaplan, S. E., Pope, K. R., and Samuels, J. A. (2011). An examination of the effect of inquiry

16   and auditor type on reporting intentions for fraud. Auditing-J. Pract. Th. 30, 29–49.

17   doi:10.2308/ajpt-10174.

18   Kaplan, S. E., and Schultz, J. J. (2007). Intentions to report questionable acts: An

19   examination of the influence of anonymous reporting channel, internal audit quality,

20   and setting. J. Bus. Ethics 71, 109–124. doi:10.1007/s10551-006-0021-6.

21   Kaplan, S. E., and Whitecotton, S. M. (2001). An examination of auditors' reporting

22   intentions when another auditor is offered client employment. Auditing-J. Pract. Th. 20,

23   45–63. doi:10.2308/aud.2001.20.1.45.

1   Kaptein, M. (2011). From inaction to external whistleblowing: The influence of the ethical

2   culture of organizations on employee responses to observed wrongdoing. J. Bus. Ethics

3   98, 513–530. doi:10.1007/s10551-010-0591-1.

4   Keenan, J. P. (1995). Whistleblowing and the first-level manager: Determinants of feeling

5   obliged to blow the whistle. J. Soc. Behav. Pers. 10, 571–584.

6   Keenan, J. P. (2000). Blowing the whistle on less serious forms of fraud: A study of

7   executives and managers. Empl. Responsib. Rights J. 12, 199–217.

8   doi:10.1023/A:1013015926299.

9   Keenan, J. P. (2002a). Comparing Indian and American managers on whistleblowing. Empl.

10   Responsib. Rights J. 14, 79–89. doi:10.1023/A:1021171520620.

11   Keenan, J. P. (2002b). Whistleblowing: A study of managerial differences. Empl. Responsib.

12   Rights J. 14, 17–32. doi:10.1023/A:1015796528233.

13   Keenan, J. P. (2007). Comparing Chinese and American managers on whistleblowing. Empl.

14   Responsib. Rights J. 19, 85–94. doi:10.1007/s10672-007-9036-0.

15   Keil, M., Im, G. P., and Mähring, M. (2007). Reporting bad news on software projects: The

16   effects of culturally constituted views of face-saving. Info. Systems J. 17, 59–87.

17   doi:10.1111/j.1365-2575.2006.00235.x.

18   Keil, M., and Park, C. (2010). Bad news reporting on troubled IT projects: Reassessing the

19   mediating role of responsibility in the basic whistleblowing model. J Sys Soft, 83,

20   2305–2316. doi:10.1016/j.jss.2010.07.009

21   Keil, M., Park, E. H., and Ramesh, B. (2018). Violations of health information privacy: The

22   role of attributions and anticipated regret in shaping whistle-blowing intentions. Info.

23   Systems J. 28, 818–848. doi:10.1111/isj.12168.

1   Keil, M., Smith, H. J., Pawlowski, S. D., and Jin, L. (2004). "Why didn't somebody tell

2   me?": Climate, information asymmetry, and bad news about troubled projects. Data

3   Base Adv. Inf. Syst. 35, 65–84. doi:10.1145/1007965.1007971.

4   Keil, M., Tiwana, A., Sainsbury, R., and Sneha, S. (2010). Toward a theory of

5   whistleblowing intentions: A benefit-to-cost differential perspective. Decis. Sci. 41,

6   787–812. doi:10.1111/j.1540-5915.2010.00288.x.

7   Kennett, D., Downs, A., and Durler, M. G. (2011). Accounting students' intent to blow the

8   whistle on corporate fraudulent financial reporting: An experiment. International

9   Journal of Business and Social Science 2, 14–23.

10   King, III, G. (1997). The effects of interpersonal closeness and issue seriousness on blowing

11   the whistle. The Journal of Business Communication 34, 419–436.

12   doi:10.1177/002194369703400406.

13   King, III, G., and Hermodson, A. (2000). Peer reporting of coworker wrongdoing: A

14   qualitative analysis of observer attitudes in the decision to report versus not report

15   unethical behavior. J. Appl. Commun. Res. 28, 309–329.

16   doi:10.1080/00909880009365579.

17   King, III, G., and Scudder, J. N. (2013). Reasons registered nurses report serious

18   wrongdoings in a public teaching hospital. Psychol. Rep. 112, 626–636.

19   doi:10.2466/21.13.PR0.112.2.626-636.

20   Latan, H., Chiappetta Jabbour, C. J., and Lopes de Sousa Jabbour, A. B. (2019a). Ethical

21   awareness, ethical judgment and whistleblowing: A moderated mediation analysis. J.

22   Bus. Ethics 155, 289–304. doi:10.1007/s10551-017-3534-2.

Latan, H., Chiappetta Jabbour, C. J., and Lopes de Sousa Jabbour, A. B. (2019b). To blow or not to blow the whistle: The role of rationalization in the perceived seriousness of threats and wrongdoing. J. Bus. Ethics. doi:10.1007/s10551-019-04287-5.

Latan, H., Chiappetta Jabbour, C. J., and Lopes de Sousa Jabbour, A. B. (2019c). 'Whistleblowing triangle': Framework and empirical evidence. J. Bus. Ethics 160, 189–204. doi:10.1007/s10551-018-3862-x.

Latan, H., Ringle, C. M., and Chiappetta Jabbour, Charbel Jose (2018). Whistleblowing intentions among public accountants in Indonesia: Testing for the moderation effects. J. Bus. Ethics 152, 573–588. doi:10.1007/s10551-016-3318-0.

Lavena, C. F. (2016). Whistle-blowing: Individual and organizational determinants of the decision to report wrongdoing in the federal government. Am. Rev. Public Adm. 46, 113–136. doi:10.1177/0275074014535241.

Lee, J.-Y., Heilmann, S. G., and Near, J. P. (2004). Blowing the whistle on sexual harassment: Test of a model of predictors and outcomes. Hum. Relat. 57, 297–322. doi:10.1177/0018726704043273.

Lefebvre, C., Glanville, J., Briscoe, S., Littlewood, A., Marshall, C., Metzendorf, M.-I., Noel-Storr, A., Rader, T., Shokraneh, F., Thomas, J., and Wieland, L. S. (2019). Searching for and selecting studies. In J. P. T. Higgins, J. Thomas, J. Chandler, M. Cumpston, T. Li, M. J. Page, and V. A. Welch (Eds.), *Cochrane Handbook for Systematic Reviews of Interventions* (2nd ed.). John Wiley and Sons Ltd.

Lennane, J. (2012). What happens to whistleblowers and why.*Soc Med, 6,* 249-258. Retrieved from www.socialmedicine.info

1 Li, S. M., and Ma, W. W. K. (2016). Exploring group effects on individual ethical

2   judgements and whistleblowing decisions of accountancy students. JCAR 5.

3   doi:10.21863/jcar/2016.5.1.021.

4 Lim, V. K. G., and See, S. K. B. (2001). Attitudes toward, and intentions to report, academic

5   cheating among students in Singapore. Ethics Behav. 11, 261–274.

6   doi:10.1207/S15327019EB1103_5.

7 Liu, G., and Ren, H. (2017). Ethical team leadership and trainee auditors' likelihood of

8   reporting client's irregularities. J. Financ. Crime 24, 157–175. doi:10.1108/JFC-02-

9   2016-0012.

10 Liu, S.-M., Liao, J.-Q., and Wei, H. (2015). Authentic leadership and whistleblowing:

11   Mediating roles of psychological safety and personal identification. J. Bus. Ethics 131,

12   107–119. doi:10.1007/s10551-014-2271-z.

13 Liu, Y., Zhao, S., Jiang, L., and Li, R. (2016). When does a proactive personality enhance an

14   employee's whistle-blowing intention?: A cross-level investigation of the employees in

15   Chinese companies. Ethics Behav. 26, 660–677. doi:10.1080/10508422.2015.1113382.

16 Liyanarachchi, G. A., and Adler, R. (2011). Accountants' whistle-blowing intentions: The

17   impact of retaliation, age, and gender. Aust. Account. Rev. 57, 167–182.

18   doi:10.1111/j.1835-2561.2011.00134.x.

19 Liyanarachchi, G. A., and Newdick, C. (2009). The impact of moral reasoning and retaliation

20   on whistle-blowing: New Zealand evidence. J. Bus. Ethics 89, 37–57.

21   doi:10.1007/s10551-008-9983-x.

1   Lowe, D. J., Pope, K. R., and Samuels, J. A. (2015). An examination of financial sub-

2   certification and timing of fraud discovery on employee whistleblowing reporting

3   intentions. J. Bus. Ethics 131, 757–772. doi:10.1007/s10551-013-2020-8.

4   Lyndon, A., Sexton, J. B., Simpson, K. R., Rosenstein, A., Lee, K. A., and Wachter, R. M.

5   (2012). Predictors of likelihood of speaking up about safety concerns in labour and

6   delivery. BMJ Qual. Saf. 21, 791–799. doi:10.1136/bmjqs-2010-050211.

7   MacGregor, J., and Stuebs, M. (2014). The Silent Samaritan Syndrome: Why the whistle

8   remains unblown. J. Bus. Ethics 120, 149–164. doi:10.1007/s10551-013-1639-9.

9   MacNab, B. R., Brislin, R., Worthley, R., Galperin, B. L., Jenner, S., Lituchy, T. R., et al.

10   (2007). Culture and ethics management: Whistle-blowing and internal reporting within

11   a NAFTA country context. Int. J. Cross Cult. Manag. 7, 5–28.

12   doi:10.1177/1470595807075167.

13   MacNab, B. R., and Worthley, R. (2008). Self-efficacy as an intrapersonal predictor for

14   internal whistleblowing: A US and Canada examination. J. Bus. Ethics 79, 407–421.

15   doi:10.1007/s10551-007-9407-3.

16   Mannion, R., Blenkinsopp, J., Powell, M., McHale, J., Millar, R., Snowden, N., and Davies,

17   H. (2018). Understanding the knowledge gaps in whistleblowing and speaking up in

18   health care: narrative reviews of the research literature and formal inquiries, a legal

19   analysis and stakeholder interviews. Health Serv. Deliv. Res., 6, 1–190.

20   doi:10.3310/hsdr06300

21   Mattiesen, S. B., Bjorkelo, B., and Burke, R. J. (2011). Workplace bullying as the dark side

22   ofWhistleblowing. InS. Einarsen, H. Hoel, Zapf, D. & Cooper, C.L.(Eds.) *Bullying and*

23   *Harassment in the Workplace*.2nd ed Boca Raton, FL: CRC Press/Taylor & Francis

24   Group (pp 301-324).

1   Maykut, P. and Morehouse, R. (2002). Beginning Qualitative Research: A Philosophical and

2   Practical Guide (Teachers' Library). Washington, DC: Falmer Press.

3   Mbago, M., MpeeraNtayi, J., and Mutebi, H. (2018). Does legitimacy matter in

4   whistleblowing intentions? Int. J. Law Manag. 60, 627–645. doi:10.1108/IJLMA-02-

5   2017-0017.

6   McCutcheon, L. E. (2006). Is there a whistleblower personality? *Psychology: A Journal of*

7   *Human Behavior, 2–9.*

8   McManus, L., Subramaniam, N., and James, W. (2012). A comparative study of the effect of

9   web-based versus in-class textbook ethics instruction on accounting students'

10   propensity to whistle-blow. J. Educ. Bus. 87, 333–342.

11   doi:10.1080/08832323.2011.627890.

12   Mesmer-Magnus, J. R., and Viswesvaran, C. (2005). Whistleblowing in organizations: An

13   examination of correlates of whistleblowing intentions, actions, and retaliation. *J. Bus.*

14   *Ethic., 62*, 277–297.

15   Miceli, M. P., Dozier, J. B., and Near, J. P. (1991a). Blowing the whistle on data fudging: A

16   controlled field experiment. J. Appl. Social Pyschol. 21, 271–295. doi:10.1111/j.1559-

17   1816.1991.tb00521.x.

18   Miceli, M. P., and Near, J. P. (1984). The relationships among beliefs, organizational

19   position, and whistle-blowing status: A discriminant analysis. Acad. Manage. Rev. 27,

20   687–705.

21   Miceli, M. P., and Near, J. P. (1985). Characteristics of organizational climate and perceived

22   wrongdoing associated with whistle-blowing decisions. Pers. Psychol. 38, 525–544.

23   doi:10.1111/j.1744-6570.1985.tb00558.x.

Miceli, M. P., and Near, J. P. (1988). Individual and situational correlates of whistle-blowing.

Pers. Psychol. 41, 267–281. doi:10.1111/j.1744-6570.1988.tb02385.x.

Miceli, M.P. and Near, J.P. (1992). Blowing the Whistle: The organizational and legal

implications for companies and employees. New York: Lexington Books.

Miceli, M. P., Near, J. P., Rehg, M. T., and Van Scotter, J. R. (2012). Predicting employee

reactions to perceived organizational wrongdoing: Demoralization, justice, proactive

personality, and whistle-blowing. Hum. Relat. 65, 923–954.

doi:10.1177/0018726712447004.

Miceli, M. P., Near, J. P., and Schwenk, C. R. (1991b). Who blows the whistle and why?

Industrial and Labor Relations Review 45, 113–130.

Milliken, F. J., Morrison, E. W., and Hewlin, P. F. (2003). An exploratory study of employee

silence: Issues that employees don't communicate upward and why*. J. Manag. Stud.

40, 1453–1476. doi:10.1111/1467-6486.00387.

Moore, L., and McAuliffe, E. (2010). Is inadequate response to whistleblowing perpetuating

a culture of silence in hospitals? Clinical Governance: An Intl. J. 15, 166–178.

doi:10.1108/14777271011063805.

Moore, L., and McAuliffe, E. (2012). To report or not to report? Why some nurses are

reluctant to whistleblow. Clinical Governance: An Intl. J. 17, 332–342.

doi:10.1108/14777271211273215.

National Whistleblower Centre (2021). The Dodd-Frank Act. Retried from:

https://www.whistleblowers.org/what-is-the-dodd-frank-act/

1 Nawawi, A., and Salin, A. S. A. P. (2018). Whistle blowing intentions – evidence from

2   Malaysian PLC. Int. J. Law Manag. 60, 1111–1125. doi:10.1108/IJLMA-04-2017-

3   0096.

4 Nayir, D. Z., Rehg, M. T., and Asa, Y. (2018). Influence of ethical position on

5   whistleblowing behaviour: Do preferred channels in private and public sectors differ? J.

6   Bus. Ethics 149, 147–167. doi:10.1007/s10551-016-3035-8.

7 Near, J. P., Baucus, M. S., and Miceli, M. P. (1993). The relationship between values and

8   practice: Organizational climates for wrongdoing. Adm. Soc. 25, 204–226.

9 Near, J. P., and Miceli, M. P. (1985). Organizational dissidence: The case of whistle-blowing.

10   J Bus Ethics, 4, 1–16. doi:10.1007/bf00382668

11 Near, J. P., Rehg, M. T., Van Scotter, J. R., and Miceli, M. P. (2004). Does type of

12   wrongdoing affect the whistle-blowing process? Bus. Ethics Q. 14, 219–242.

13   doi:10.5840/beq200414210.

14 Nicholls, A. R., Cope, E., Bailey, R., Koenen, K., Dumon, D., Theodorou, N. C., … Laurent,

15   J.-F. (2017). Children's first experience of taking anabolic-androgenic steroids can

16   occur before their 10th birthday: A systematic review identifying 9 factors that

17   predicted doping among young people. *Frontiers in Psychology*, 8.

18   https://doi.org/10.3389/fpsyg.2017.01015

19 Nicholls, A. R., Fairs, L. R. W., Plata-Andrés, M., Bailey, R., Cope, E., … Chanal, B. (2020).

20   Feasibility randomised controlled trial examining the effects of the Anti-Doping

21   Values in Coach Education (ADVICE) mobile application on doping knowledge and

22   attitudes towards doping among grassroots coaches. BMJ Open Sport Exerc Med, 6,

23   e000800. doi: 10.1136/bmjsem-2020-000800

Nicholls, A.R., Morley, D., Thompson, M. A., Huang, C., Abt, G., … Ntoumanis, N. (2020). The Effects of the iPlayClean Education Programme on Doping Attitudes and Susceptibility to use Banned Substances among High-Level Adolescent Athletes from the UK: A Cluster-Randomised Controlled Trial. Int J Drug Pol, 82, 102820. Doi: 10.1016/j.drugpo.2020.102820

Nicholls, A. R., Taylor, N. J., Carroll, S., and Perry, J. L. (2016). The development of a new sport-specific classification of coping and a meta-analysis of the relationship between different coping strategies and moderators on sporting outcomes. *Frontiers in Psychology*, *7*. https://doi.org/10.3389/fpsyg.2016.01674

Nurhidayat, I., and Kusumasari, B. (2019). Why would whistleblowers dare to reveal wrongdoings?: An ethical challenge and dilemma for organizations. Int. J. Law Manag. 61, 505–515. doi:10.1108/IJLMA-11-2018-0253.

Nussbaumer-Streit B, Mayr V, Dobrescu AI, Chapman A, Persad E, Klerings I, et al. (2020). Quarantine alone or in combination with other public health measures to control COVID-19: a rapid review. The Cochrane database of systematic reviews, , CD013574. doi:10.1002/14651858.CD013574

Occupational Safety and Health Administration (2019). Directorate of Whistleblower Protection Programs (DWPP): Whistleblower statutes summary chart. Retrieved from https://www.whistleblowers.gov/sites/wb/files/2019-12/WB-Statute-Summary-Chart-10.8-Final.pdf

Oelrich, S. (2019). Making regulation fit by taking irrationality into account: The case of the whistleblower. Bus. Res. 12, 175–207. doi:10.1007/s40685-019-0094-6.

Olesen, A. P., Amin, L., Mahadi, Z., and Ibrahim, M. (2019). Whistle blowing and research integrity: Potential remedy for research misconduct in Malaysian institutions of higher education. Account. Res. 26, 17–32. doi:10.1080/08989621.2018.1554444.

1 Omotoye, A. M. T. (2017). Determinants and impediments of whistle-blowing in local

2   government councils: A case study of the South-East District Council, Botswana.

3   APSDPR 5. doi:10.4102/apsdpr.v5i1.194.

4 Page, M. J., Moher, D., Bossuyt, P., Boutron, I., Hoffmann, T., Mulrow, C. D., … McKenzie,

5   J. (2020). PRISMA 2020 explanation and elaboration: updated guidance and

6   exemplars for reporting systematic reviews. doi:10.31222/osf.io/gwdhk

7 Park, C., Im, G., and Keil, M. (2008). Overcoming the mum effect in IT project reporting:

8   Impacts of fault responsibility and time urgency. JAIS 9, 409–431.

9   doi:10.17705/1jais.00163.

10 Park, C., and Keil, M. (2009). Organizational silence and whistle-blowing on IT projects.

11   Decis. Sci. 40, 901–918. doi:10.1111/j.1540-5915.2009.00255.x.

12 Park, C., Keil, M., and Kim, J. W. (2009). The effect of IT failure impact and personal

13   morality on IT project reporting behavior. IEEE Trans. Eng. Manage. 56, 45–60.

14   doi:10.1109/TEM.2008.2009794.

15 Park, H., and Blenkinsopp, J. (2009). Whistleblowing as planned behavior - A survey of

16   South Korean police officers. J. Bus. Ethics 85, 545–556. doi:10.1007/s10551-008-

17   9788-y.

18 Park, H., Rehg, M. T., and Lee, D. (2005). The influence of Confucian ethics and

19   collectivism on whistleblowing intentions: A study of South Korean public employees.

20   J. Bus. Ethics 58, 387–403. doi:10.1007/s10551-004-5366-0.

21 Perry, E. L., Kulik, C. T., and Schmidtke, J. M. (1997). Blowing the whistle: Determinants of

22   responses to sexual harassment. Basic Appl. Soc. Psych. 19, 457–482.

23   doi:10.1207/s15324834basp1904_4.

1   Pillay, S., Dorasamy, N., and Vranic, V. (2012). Exploring whistle blowing intentions in

2   South Africa: A quantitative analysis. Afr. J. Bus. Manag. 6, 2529–2548.

3   doi:10.5897/AJBM11.148.

4   Pillay, S., Ramphul, N., Dorasamy, N., and Meyer, D. (2018). Predictors of whistle-blowing

5   intentions: An analysis of multi-level variables. Adm. Soc. 50, 186–216.

6   doi:10.1177/0095399715581621.

7   Pillay, S., Reddy, P. S., and Morgan, D. (2017). Institutional isomorphism and whistle-

8   blowing intentions in public sector institutions. Public Manag. Rev. 19, 423–442.

9   doi:10.1080/14719037.2016.1178322.

10   Pope, K. R., and Lee, C.-C. (2013). Could the Dodd–Frank Wall Street reform and consumer

11   protection act of 2010 be helpful in reforming Corporate America? An investigation on

12   financial bounties and whistle-blowing behaviors in the private sector. J. Bus. Ethics

13   112, 597–607. doi:10.1007/s10551-012-1560-7.

14   Presidential Policy Directive-19 (2019). Intelligence Community Whistleblower Protections:

15   Updated September 23rd, 2019. *Congressional Research Service.* Retrieved from:

16   https://fas.org/sgp/crs/intel/R45345.pdf

17   Previtali, P., and Cerchiello, P. (2018). The determinants of whistleblowing in public

18   administrations: An analysis conducted in Italian health organizations, universities, and

19   municipalities. Public Manag. Rev. 20, 1683–1701.

20   doi:10.1080/14719037.2017.1417468.

21   Proost, K., Pavlinská, A., Baillien, E., and Brebels, L. (2013). Employees' intention to blow

22   the whistle: The role of fairness and moral identity. Human Resources Psychology 11,

23   15–27.

1   Radulovic, U., and Uys, T. (2019). Academic dishonesty and whistleblowing in a higher

2   education institution: A sociological analysis. AJOBE 13. doi:10.15249/13-2-218.

3   Reckers-Sauciuc, A. K., and Lowe, D. J. (2010). The influence of dispositional affect on

4   whistle-blowing. Adv. Account. 26, 259–269. doi:10.1016/j.adiac.2010.05.005.

5   Rehg, M., Miceli, M., Near, J.and Van Scotter, James. (2008). Antecedents and outcomes of

6   retaliation against whistleblowers: Gender differences and power relationships. Org.

7   Sci. 19. 221-240. 10.1287/orsc.1070.0310.

8   Rennie, S. C., and Crosby, J. R. (2002). Students' perceptions of whistle blowing:

9   Implications for self-regulation. A questionnaire and focus group survey. Med. Educ.

10   36, 173–179. doi:10.1046/j.1365-2923.2002.01137.x.

11   Richardson, B. K., Wang, Z., and Hall, C. A. (2012). Blowing the whistle against Greek

12   hazing: The theory of reasoned action as a framework for reporting intentions.

13   Commun. Stud. 63, 172–193. doi:10.1080/10510974.2011.624396.

14   Richardson, B. K., Wheeless, L. R., and Cunningham, C. (2008). Tattling on the teacher: A

15   study of factors influencing peer reporting of teachers who violate standardized testing

16   protocol. Commun. Stud. 59, 202–219. doi:10.1080/10510970802257531.

17   Robertson, J. C., Stefaniak, C. M., and Curtis, M. B. (2011). Does wrongdoer reputation

18   matter? Impact of auditor-wrongdoer performance and likeability reputations on fellow

19   auditors' intention to take action and choice of reporting outlet. Behav. Res. Account.

20   23, 207–234. doi:10.2308/bria-50022.

21   Robinson, S. N., Robertson, J. C., and Curtis, M. B. (2012). The effects of contextual and

22   wrongdoing attributes on organizational employees' whistleblowing intentions

23   following fraud. J. Bus. Ethics 106, 213–227. doi:10.1007/s10551-011-0990-y.

1   Rose, J. M., Brink, A. G., and Norman, C. S. (2018). The effects of compensation structures

2   and monetary rewards on managers' decisions to blow the whistle. J. Bus. Ethics 150,

3   853–862. doi:10.1007/s10551-016-3222-7.

4   Rothwell, G. R., and Baldwin, J. N. (2006). Ethical climates and contextual predictors of

5   whistle-blowing. Rev. Public Pers. Adm. 26, 216–244.

6   doi:10.1177/0734371X05278114.

7   Rothwell, G. R., and Baldwin, J. N. (2007a). Ethical climate theory, whistle-blowing, and the

8   code of silence in police agencies in the state of Georgia. J. Bus. Ethics 70, 341–361.

9   doi:10.1007/s10551-006-9114-5.

10   Rothwell, G. R., and Baldwin, J. N. (2007b). Whistle-blowing and the code of silence in

11   police agencies: Policy and structural predictors. Crime Delinquency 53, 605–632.

12   doi:10.1177/0011128706295048.

13   Rustiarini, N. W., and Sunarsih, N. M. (2017). Factors influencing the whistleblowing

14   behaviour: A perspective from the theory of planned behaviour. Asian J. Bus. Account.

15   10, 187–214.

16   Satalkar, P., and Shaw, D. (2018). Is failure to raise concerns about misconduct a breach of

17   integrity? Researchers' reflections on reporting misconduct. Account. Res. 25, 311–

18   339. doi:10.1080/08989621.2018.1493577.

19   Scheetz, A. M., and Fogarty, T. J. (2019). Walking the talk: Enacted ethical climates as

20   psychological contract venues for potential whistleblowers. J. Account. Organ. Chang.

21   15, 654–677. doi:10.1108/JAOC-06-2018-0047.

1   Scheetz, A. M., and Wilson, A. B. (2019). Are not-for-profit employees more willing (or

2   likely) to be whistleblowers? J. Public Budg. Account. Financial Manag. 31, 2–25.

3   doi:10.1108/JPBAFM-06-2018-0054.

4   Schultz, J. J., Johnson, D. A., Morris, D., and Dyrnes, S. (1993). An investigation of the

5   reporting of questionable acts in an international setting. J. Account. Res. 31, 75.

6   doi:10.2307/2491165.

7   Seifert, D. L., Stammerjohan, W. W., and Martin, R. B. (2014). Trust, organizational justice,

8   and whistleblowing: A research note. Behav. Res. Account. 26, 157–168.

9   doi:10.2308/bria-50587.

10   Seifert, D. L., Sweeney, J. T., Joireman, J., and Thornton, J. M. (2010). The influence of

11   organizational justice on accountant whistleblowing. Account. Organ. Soc. 35, 707–

12   717. doi:10.1016/j.aos.2010.09.002.

13   Shafer, W., Morris, R., and Ketchand, A. (2001). Effects of personal values on auditors'

14   ethical decisions. Account. Audit. Accountab. J. 14, 254–277.

15   doi:10.1108/EUM0000000005517

16   Shawver, T. (2008). What accounting students think about whistleblowing? Management

17   Accounting Quarterly 9, 10.

18   Shawver, T. J. (2011a). Can ethics education impact whistleblowing? Management

19   Accounting Quarterly 12, 9.

20   Shawver, T. J. (2011b). The effects of moral intensity and whistleblowing behaviors of

21   accounting professionals. Journal of Forensic & Investigative Accounting 3.

22   Sheeran, S. (2002) Intention—Behavior Relations: A conceptual and empirical review. *Eur.*

23   *Rev. Soc. Psych., 12:1*, 1-36, doi:10.1080/14792772143000003

1   Siegrist, J. (1996). Adverse health effects of high-effort/low-reward conditions. J. Occup.

2   Health Psychol. 1, 27–41. doi: 10.1037/1076-8998.1.1.27

3   Sims, R. L., and Keenan, J. P. (1998). Predictors of external whistleblowing: Organizational

4   and intrapersonal variables. J. Bus. Ethics 17, 411–421.

5   doi:10.1023/A:1005763807868.

6   Sims, R. L., and Keenan, J. P. (1999). A cross-cultural comparison of managers'

7   whistleblowing tendencies. Int. J. Value-Based Manage 12, 137–151.

8   doi:10.1023/A:1007711220997.

9   Singer, M., Mitchell, S., and Turner, J. (1998). Consideration of moral intensity in ethicality

10   judgements: Its relationship with whistle-blowing and need-for-cognition. J. Bus.

11   Ethics 17, 527–541. doi:10.1023/A:1005765926472.

12   Smith, H. J., Keil, M., and Depledge, G. (2001). Keeping mum as the project goes under:

13   Toward an explanatory model. J. Manag. Inf. Syst. 18, 189–227.

14   doi:10.1080/07421222.2001.11045677.

15   Somers, M. J., and Casal, J. C. (1994). Organizational commitment and whistle-blowing: A

16   test of the reformer and the organization man hypothesis. Group Organ Manage. 19,

17   270–284. doi:10.1177/1059601194193003.

18   Somers, M. J., and Casal, J. C. (2011). Type of wrongdoing and whistle-blowing: Further

19   evidence that type of wrongdoing affects the whistle-blowing process. Public Pers.

20   Manage. 40, 14. doi:10.1177/009102601104000205.

21   Soni, F., Maroun, W., and Padia, N. (2015). Perceptions of justice as a catalyst for whistle-

22   blowing by trainee auditors in South Africa. Meditari Account. Res. 23, 118–140.

23   doi:10.1108/MEDAR-01-2014-0004.

1   Stansbury, J. M., and Victor, B. (2009). Whistle-blowing among young employees: A life-

2   course perspective. J. Bus. Ethics 85, 281–299. doi:10.1007/s10551-008-9770-8.

3   Stikeleather, B. R. (2016). When do employers benefit from offering workers a financial

4   reward for reporting internal misconduct? Account. Organ. Soc. 52, 1–14.

5   doi:10.1016/j.aos.2016.06.001.

6   Stöber, T., Kotzian, P., and Weißenberger, B. E. (2019). Design matters: on the impact of

7   compliance program design on corporate ethics. Bus. Res. 12, 383–424.

8   doi:10.1007/s40685-018-0075-1.

9   Su, S.-H., Kan, C., and Yang, H.-L. (2010). Cross-cultural difference and accounting ethics:

10   An empirical study for accounting students. Int. J. Organ. Innov. 2, 161–185.

11   Surya, R. A. S., Zarefar, A., and Mela, N. F. (2017). Whistle blowing in the police sector:

12   The importance of control behaviour factor and professional commitment. Acc. Fin.

13   Review 2, 9–14.

14   Tan, B. C. Y., Smith, H. J., Keil, M., and Montealegre, R. (2003). Reporting bad news about

15   software projects: Impact of organizational climate and information asymmetry in an

16   individualistic and a collectivistic culture. IEEE Trans. Eng. Manage. 50, 64–77.

17   doi:10.1109/TEM.2002.808292.

18   Tavakoli, A. A., Keenan, J. P., and Crnjak-Karanovic, B. (2003). Culture and whistleblowing:

19   An empirical study of Croatian and United States managers utilizing Hofstede's

20   cultural dimensions. J. Bus. Ethics 43, 49–64. doi:10.1023/A:1022959131133.

21   Taylor, E. Z., and Curtis, M. B. (2010). An examination of the layers of workplace influences

22   in ethical judgments: Whistleblowing likelihood and perseverance in public accounting.

23   J. Bus. Ethics 93, 21–37. doi:10.1007/s10551-009-0179-9.

1   Taylor, E. Z., and Curtis, M. B. (2013). Whistleblowing in audit firms: Organizational

2   response and power distance. Behav. Res. Account. 25, 21–43. doi:10.2308/bria-50415.

3   Taylor, E. Z., and Curtis, M. B. (2018). Mentoring: A path to prosocial behavior. J. Bus.

4   Ethics 152, 1133–1148. doi:10.1007/s10551-016-3325-1.

5   Taylor, J. (2018). Internal whistle-blowing in the public service: A matter of trust. Public

6   Adm. Rev. 78, 717–726. doi:10.1111/puar.12946.

7   Taylor, J. (2019). What causes employees to whistle while they work? Factors affecting

8   internal whistle-blowing in the Australian Public Service. Aust. J. Public Adm. 78,

9   497–515. doi:10.1111/1467-8500.12401.

10   Teichmann, F. M. J. (2019). Incentive systems in anti-bribery whistleblowing. J Financ

11   Crime 26, 519–525. doi:10.1108/JFC-04-2018-0041.

12   Thoroughgood, C. N., Hunter, S. T., and Sawyer, K. B. (2011). Bad apples, bad barrels, and

13   broken followers? An empirical examination of contextual influences on follower

14   perceptions and reactions to aversive leadership. J. Bus. Ethics 100, 647–672.

15   doi:10.1007/s10551-010-0702-z.

16   TokerGökçe, A. (2013a). Awareness and ethical orientation of alternatively certified

17   prospective teachers to intention for whistle blowing. Educ. Res. Rev. 8, 506–518.

18   TokerGökçe, A. (2013b). Prospective teachers' value orientations as determinants of

19   preference for external and anonymous whistleblowing. Coll. Stud. J. 47, 534–546.

20   TokerGökçe, A. (2013c). Relationship between whistle-blowing and job satisfaction and

21   organizational loyalty at schools in Turkey. Educ. Res. Rev. 8, 1186–1197.

22   doi:10.5897/ERR2013.1485.

TokerGökçe, A. (2013d). Teachers' value orientations as determinants of preference for external and anonymous whistleblowing. International Journal of Humanistic and Social Science 3, 163–173.

TokerGökçe, A. (2013e). Whistle-blowing intentions of prospective teachers: Education evidence. Int. Educ. Stud. 6, p112. doi:10.5539/ies.v6n8p112.

TokerGökçe, A. (2015). Relating teachers' whistleblowing tendency and personal features: Machiavellianism, religiosity, and utilitarianism. Issues Educ. Res. 25, 517–534.

Trevino, L. K., and Victor, B. (1992). Peer reporting of unethical behavior: A social context perspective. Acad. Manage. J. 35, 38–64. doi:10.2307/256472.

Trongmateerut, P., and Sweeney, J. T. (2013). The influence of subjective norms on whistle-blowing: A cross-cultural investigation. J. Bus. Ethics 112, 437–451. doi:10.1007/s10551-012-1270-1.

Tumuramye, B., Ntayi, J. M., and Muhwezi, M. (2018). Whistle-blowing intentions and behaviour in Ugandan public procurement. J. Public Procure. 18, 111–130. doi:10.1108/JOPP-06-2018-008.

Ugaddan, R. G., and Park, S. M. (2019). Do trustful leadership, organizational justice, and motivation influence whistle-blowing intention? Evidence from federal employees. Public Pers. Manage. 48, 56–81. doi:10.1177/0091026018783009.

Vandekerckhove, W., and Lewis, D. (2012). The Content of Whistleblowing Procedures: A Critical Review of Recent Official Guidelines. J. Bus. Ethic., 108(2), 253–264. doi:10.1007/s10551-011-1089-1

1   Victor, B., Trevino, L. K., and Shapiro, D. L. (1993). Peer reporting of unethical behavior:

2   The influence of justice evaluations and social context factors. J. Bus. Ethics 12, 253–

3   263. doi:10.1007/BF01666528.

4   Vincent, C., Stanhope, N., and Crowley-Murphy, M. (1999). Reasons for not reporting

5   adverse incidents: An empirical study. J. Eval. Clin. Pract. 5, 13–21.

6   doi:10.1046/j.1365-2753.1999.00147.x.

7   Wainberg, J., and Perreault, S. (2016). Whistleblowing in audit firms: Do explicit protections

8   from retaliation activate implicit threats of reprisal? Behav. Res. Account. 28, 83–93.

9   doi:10.2308/bria-51122.

10 Wen, P., and Chen, C. (2016). How does ethical leadership influence employees'

11   whistleblowing intention? Evidence from China. Soc. Behav. Pers. 44, 1255–1266.

12   doi:10.2224/sbp.2016.44.8.1255.

13 Whitaker, L., Backhouse, S. H., and Long, J. (2014). Reporting doping in sport: National

14   level athletes' perceptions of their role in doping prevention. Scand. J. Med. Sci. Sports

15   24, e515–e521. doi:10.1111/sms.12222.

16 Wilson, A. B., McNellis, C., and Latham, C. K. (2018). Audit firm tenure, auditor familiarity,

17   and trust: Effect on auditee whistleblowing reporting intentions. Int. J. Audit. 22, 113–

18   130. doi:10.1111/ijau.12108.

19 Xu, Y., and Ziegenfuss, D. E. (2008). Reward systems, moral reasoning, and internal

20   auditors' reporting wrongdoing. J. Bus. Psychol. 22, 323–331. doi:10.1007/s10869-

21   008-9072-2.

Yu, H., Sirsat, S. A., and Neal, J. A. (2019). Linking food safety training with whistle-
blowing: The mediation roles of job satisfaction and self-efficacy. Int. J. Contemp.
Hosp. Manag. 31, 141–160. doi:10.1108/IJCHM-10-2017-0689.

Zarefar, A., and Zarefar, A. (2017). The influence of ethics and locus of control to do
whistleblowing intention with profession of auditor and non-auditor as a moderating
variable. Acc. Fin. Review 2, 35–41.

Zeng, C., Kelly, S., and Goke, R. (2020). Exploring the impacts of leader integrity and ethics
on upward dissent and whistleblowing intentions. Com Rep, 33, 82–94.
doi:10.1080/08934215.2020.1761413

Zhang, F.-W., Liao, J.-Q., and Yuan, J.-M. (2016). Ethical leadership and whistleblowing:
Collective moral potency and personal identification as mediators. Soc. Behav. Pers.
44, 1223–1231. doi:10.2224/sbp.2016.44.7.1223.

Zhang, J., Chiu, R., and Wei, L. (2009a). Decision-making process of internal whistleblowing
behavior in China: Empirical evidence and implications. J. Bus. Ethics 88, 25–41.
doi:10.1007/s10551-008-9831-z.

Zhang, J., Chiu, R., and Wei, L. (2009b). On whistleblowing judgment and intention: The
roles of positive mood and organizational ethical culture. J. Manag. Psychol. 24, 627–
649. doi:10.1108/02683940910989020.

Zhang, J., Pany, K., and Reckers, P. M. J. (2013). Under which conditions are whistleblowing
"best practices" best? Auditing-J. Pract. Th. 32, 171–181. doi:10.2308/ajpt-50451.

Zhang, Y. (2008). The effects of perceived fairness and communication on honesty and
collusion in a multi-agent setting. Account. Rev. 83, 1125–1146.
doi:10.2308/accr.2008.83.4.1125.

1   Zheng, B. Z., Patel, C., and Evans, E. (2019). The influence of construal of self on internal

2   auditors' judgments on whistle-blowing: Evidence from China. Int. J. Audit. 23, 73–85.

3   doi:10.1111/ijau.12146.

4   Zhou, L., Liu, Y., Chen, Z., and Zhao, S. (2018). Psychological mechanisms linking ethical

5   climate to employee whistle-blowing intention. J. Manag. Psychol. 33, 196–213.

6   doi:10.1108/JMP-09-2017-0292.

7   Zhuang, J., Thomas, S., and Miller, D. L. (2005). Examining culture's effect on whistle-

8   blowing and peer reporting. Bus. Soc. 44, 462–486. doi:10.1177/0007650305281848.

9   Zipparo, L. (1999). Factors which deter public officials from reporting corruption. Crime,

10   Law Soc. Chang. 30, 273–287. doi:10.1023/A:1008326527512.

WHISTLEBLOWING INTENTIONS

Table 1. Risk of Bias Scores

Authors and Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Ahern and McDonald (2002)	✔	✔	✔		✗		✔	✔							
Ahmad et al. (2013)	✔	✔	✔	✗	✔		✗	✔							
Ahmad et al. (2014)	✔	✔	?		✗		✔	✔							
Alinaghian et al. (2018)	✔	✔	✔		✗		✔	✔							
Alleyne (2016)	✔	✔	✔		✔		✔	✔							
Alleyne et al. (2017)	✔	✔	✔	✔	✔	✔	✗	✔							
Alleyne et al. (2019)	✔	✔	✔		✔		✔	✔							
Alleyne et al. (2018)	✔	✔	✔		✔		✔	✔							
Alleyne et al. (2013)	✔	✔	✔		✔		✔	✔							
Andon et al. (2018)	✔	✔	✔	✔	✔	✔	✗	✔			✔	?	?	✔	✔
Arifah et al. (2017)	✔	✔	✔		✗		✔	✔							
Atkinson et al. (2012)	✔	✔	?	✗	✗	?	✗	✔			✗	✗	?	✔	✔
Attree (2007)	✗	✔	✗		✗	✗									
Aydan and Kaya (2018)	✔	✔	✔		✔		✔	✔							

Authors and Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Ayers and Kaplan (2005)	✗	✔	✔	✔	✗	✔	✗	✔			✗	✗	?	✔	✔
Barnett (1992)	✔	✔	✔		✔		✔	✔							
Barnett et al. (1996)	✗	✔	✔		✗		✔	✔							
Barnett et al. (1993)	✔	✔	✔		✔		✔	✔							
Bellefontaine (2009)	✗	✔	✗	✗	✗	✗									
Berger et al. (2017)	✔	✔	✔	✗	✗	✔	✗	✔			✗	✗	?	✔	✔
Bhal and Dadhich (2011)	✔	✔	✔	✗	✗	✔	✔	✔			✔	?	?	✔	✔
Binikos (2008)	✔	✔	✔		✗		✔	✔							
Bjørkelo et al. (2010)	✔	✔	✔		✔		✔	✔							
Black (2011)	✔	✔	✔		✔		✔	✔							
Bocchiaro et al. (2012)	✔	✔	✔	✔	✔	✔	✔	✔			✗	✗	?	✔	✔
Boo et al. (2016)	✔	✔	✔	✔	✗	✔	✗	✔			✔	?	?	✔	✔
Brabeck (1984)	✗	✔	✔	✗	✔	✔	✔	✔			✔	?	?	✔	✔
Brennan and Kelly (2007)	✗	✔	✔		✔		✗	✔							
Brink et al. (2017)	✔	✔	✔	✔	✔	✔	✔	✔			✗	✗	?	✔	✔
Brink et al. (2013)	✔	✔	✔	✔	✔	✔	✗	✔			✗	✗	?	✔	✔

Authors and Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Brooks and Perot (1991)	✔	✔	✔		✔		✔	✔							
Brown et al. (2016)	✔	✔	✔		✔		✔	✔							
Caillier (2013)	✔	✔	✔		✔		✔	✔							
Caillier (2017a)	✔	✔	✔		✔		✔	✔							
Caillier (2017b)	✔	✔	✔		✔		✔	✔							
Casal and Bogui (2008)	✔	✔	?		✘		✔	✔							
Cassematis and Wortley (2013)	✔	✔	✔		✔		✔	✔							
Chaudhary et al. (2019)	✔	✔	✔		✔		✔	✔							
Chen and Lai (2014)	✔	✔	✔		✔		✔	✔							
Chen et al. (2017)	✔	✔	?	✔	✘	✔	✘	✔			✔	?	?	✔	✔
Cheng et al. (2019)	✔	✔	✔		✔		✔	✔							
Chiasson et al. (1995)	✔	✔	✔		✘		✘	✔							
Chiu (2002)	✔	✔	?		✔		✔	✔							
Chiu (2003)	✔	✔	✔		✔		✔	✔							
Chiu and Erdener (2003)	✔	✔	✔		✔		✔	✔							
Cho and Song (2015)	✔	✔	✔		✘		✔	✔							

Authors and Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Clements and Shawver (2011)	✔	✔	✔		✔		✖	✔							
Clements and Shawver (2009)	✔	✔	✔		✖		✖	✔							
Curtis (2006)	✔	✔	✔		✔		✖	✔							
Curtis and Taylor (2009)	✖	✔	✔	✖	✔	✔	✔	✔			✖	✖	?	✔	✔
Dalton and Radtke (2013)	✔	✔	✔	✖	✔	✔	✔	✔			✖	✖	?	✔	✔
Elias (2008)	✖	✔	?		✖		✔	✔							
Ellis and Arieli (1999)	✔	✔	✔		✖		✔	✔							
Erickson et al. (2017)	✖	✔	✖		✖	✖									
Erkmen et al. (2014)	✔	✔	✔		✔		✔	✔							
Erturk and Donmez (2016)	✔	✔	✔		✖		✔	✔							
Fieger and Rice (2018)	✔	✔	✔		✔		✖	✔							
Fleming et al. (2018)	✔	✔	✔		✔		✖	✔							
Francalanza and Buttigieg (2016)	✔	✔	✔		✔		✔	✔							
Fredin et al. (2019)	✔	✔	✔	✔	✖	✔	✔	✔			✔	?	?	✔	✔
Fredin (2011)	✔	✔	✔	✔	✔	✔	✖	✔			✔	?	?	✔	✔
Gao et al. (2015)	✔	✔	✔	✔	✖	✔	✖	✔			✖	✖	?	✔	✔

Authors and Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Grube et al. (2010)	✔	✔	✔		✔		✔	✔							
Gökçe (2013a)	✔	✔	✔		✔		✔	✔							
Gökçe (2013b)	✔	✔	✔		✖		✔	✔							
Gökçe (2013c)	✔	✔	✔		✔		✔	✔							
Gökçe (2013d)	✔	✔	✔		✖		✔	✔							
Gökçe (2013e)	✔	✔	✔		✖		✔	✔							
Gökçe (2015)	✔	✔	✔		✖		✔	✔							
Gundlach et al. (2008)	✔	✔	✔	✖	✔	✔	✔	✔			✖	✖	?	✔	✔
Guthrie and Taylor (2017)	✔	✔	✔	✔	✔	✔	✔	✔			✔	?	?	✔	✔
Hechanova and Manaois (2020)	✔	✔	✔	✔	✖	✔	✔	✔							
Henningsen et al. (2013)	✖	✔	✔	✖	✔	✔	✔	✔			✖	✖	?	✔	✔
Hwang et al. (2008)	✔	✔	✔	✔	✔		✔	✔							
Hwang et al. (2014)	✔	✔	✔		✔		✖	✔							
Ion et al. (2015)	✖	✔	✖		✖	✖									
Ion et al. (2016)	✖	✔	✖		✖	✖									
Izraeli and Jaffe (1998)	✔	✔	?		✖		✖	✔							

Authors and Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Jackson et al. (2010)	✗	✓	✗		✗	✗									
Jenkel and Haen (2012)	✓	✓	✓	✓	✗	✓	✗	✓			✗	✗	?	✓	✓
Jones et al. (2014)	✓	✓	✓	✓	✓	✓	✓	✓			✗	✗	?	✓	✓
Kamarunzaman et al. (2014)	✓	✓	✓		✗		✓	✓							
Kaplan et al. (2009)	✗	✓	✓	✓	✓	✓	✗	✓			✗	✗	?	✓	✓
Kaplan (1995)	✗	✓	?	✓	✓	✓	✗	✓			✗	✗	?	✓	✓
Kaplan et al. (2009)	✗	✓	✓	✓	✓	✓	✗	✓			✗	✗	?	✓	✓
Kaplan et al. (2010)	✗	✓	✓	✓	✓	✓	✗	✓			✗	✗	?	✓	✓
Kaplan et al. (2011)	✗	✓	✓	✗	✗	✓	✗	✓			✗	✗	?	✓	✓
Kaplan and Schultz (2007)	✗	✓	✓	✓	✗	✓	✗	✓			✗	✗	?	✓	✓
Kaplan and Whitecotton (2001)	✓	✓	✓	✓	✗	✓	✓	✓			✗	✗	?	✓	✓
Kaptein (2011)	✓	✓	✓		✓		✓	✓							
Keenan (1995)	✓	✓	✓		✓		✓	✓							
Keenan (2000)	✓	✓	✓		✓		✓	✓							
Keenan (2002a)	✓	✓	✓		✓		✓	✓							
Keenan (2002b)	✓	✓	✓		✓		✓	✓							

Authors and Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Keenan (2007)	✔	✔	✔		✔		✗	✔							
Keil et al. (2007)	✗	✔	✔	✗	✔	✔	✗	✔			✔	?	?	✔	✔
Keil et al. (2018)	✔	✔	✔	✗	✔	✔	✗	✔			✔	?	?	✔	✔
Keil et al. (2004)	✔	✔	✔	✗	✗	✔	✔	✔			✔	?	?	✔	✔
Keil et al. (2010)	✔	✔	✔		✔		✗	✔							
Kennett et al. (2011)	✗	✔	✔		✗		✗	✔							
King (1997)	✔	✔	✔	✗	✔	✔	✔	✔			✗	✗	?	✔	✔
King and Hermodson (2000)	✗	✔	✗		✗	✗									
King and Scudder (2013)	✔	✔	✔		✗		✗	✔							
Latan et al. (2019a)	✔	✔	✔		✔		✔	✔							
Latan et al. (2019b)	✔	✔	✔		✔		✔	✔							
Latan et al. (2019c)	✔	✔	✔		✔		✔	✔							
Latan et al. (2018)	✔	✔	✔		✔		✔	✔							
Lavena (2016)	✔	✔	✔		✔		✔	✔							
Lee et al. (2004)	✔	✔	✔		✔		✗	✔							
Li and Ma (2016)	✔	✔	✔	✗	✔	✔	✗	✔			✔	?	?	✔	✔

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Lim and See (2001)	✔	✔	✔	✗	✗	✔	✔	✔							
Liu and Ren (2017)	✔	✔	?		✔		✔	✔							
Liu et al. (2015)	✔	✔	✔		✗		✔	✔							
Liu et al. (2016)	✔	✔	✔		?		✔	✔							
Liyanarachchi and Newdick (2009)	✗	✔	✔	✔	✗	✔	✗	✔			✗	✗	?	✔	✔
Liyanarachchi and Adler (2011)	✔	✔	✔	✗	✔	✔	✔	✔			✔	?	?	✔	✔
Lowe et al. (2015)	✗	✔	✔	✔	✗	✔	✗	✔			✔	?	?	✔	✔
Lyndon et al. (2012)	✔	✔	✔		✔		✔	✔							
MacGregor and Stuebs (2014)	✔	✔	?		✔		✗	✔							
MacNab et al. (2007)	✔	✔	✔		✔		✔	✔							
MacNab and Worthley (2008)	✔	✔	✔		✔		✔	✔							
Mbago et al. (2018)	✔	✔	✔		✔		✔	✔							
McCutcheon (2006)	✔	✔	?		✗		✔	✔							
McManus et al. (2012)	✗	✔	✔	✗	✔	✔	✗	✔			✔	?	?	✔	✔
Miceli et al. (1991)	✔	✔	✔	✔	✔		✗	✔							
Miceli et al. (2012)	✔	✔	✔		✔		✔	✔							

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Miceli et al. (1991)	✗	✔	✔	?	✔	✔	✔	✔			✗	✗	?	✔	✔
Miceli and Near (1984)	✔	✔	✔		✔		✔	✔							
Miceli and Near (1985)	✔	✔	✔		✔		✔	✔							
Miceli and Near (1988)	✔	✔	✔		✔		✔	✔							
Milliken et al. (2003)	✗	✔	✗		✗	✗									
Moore and McAuliffe (2010)	✔	✔	?		✔		✗	✔							
Moore and McAuliffe (2012)	✔	✔	?		✔		✗	✔							
Nawawi and Salin (2018)	✔	✔	✔		✔		✗	✔							
Nayir et al. (2018)	✔	✔	✔		✔		✔	✔							
Near et al. (1993)	✔	✔	?		✗		✗	✔							
Near et al. (2004)	✔	✔	✔		✗		✗	✔							
Nurhidayat and Kusumasari (2019)	✗	✔	✗		✗	✗									
Oelrich (2019)	✔	✔	?	✔	✗	✔	✔	✔			✔	?	?	✔	✔
Olesen et al. (2019)	✗	✔	✗		✗	✗									
Omotoye (2017)	✔	✔	?		✗		✗	✔							
Park et al. (2008)	✗	✔	✔	✔	✗	✔	✔	✔			✔	?	?	✔	✔

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Park and Keil (2009)	✗	✓	✓	✓	✗	✓	✓	✓			✓	?	?	✓	✓
Park et al. (2009)	✓	✓	✓	✓	✗	✓	✓	✓			✓	?	?	✓	✓
Park and Blenkinsopp (2009)	✓	✓	✓		✗		✓	✓							
Park et al. (2005)	✓	✓	✓		✓		✓	✓							
Perry et al. (1997)	✓	✓	✓		✓		✓	✓							
Pillay et al. (2012)	✓	✓	✓		✓		✓	✓							
Pillay et al. (2018)	✓	✓	✓		✓		✓	✓							
Pillay et al. (2017)	✓	✓	✓	✓	✓		✗	✓							
Pope and Lee (2013)	✗	✓	✓	✗	✗	✓	✗	✓			✓	?	?	✓	✓
Previtali and Cerchiello (2018)	✗	✓	✓	?	✓		✓	✓							
Proost et al. (2013)	✓	✓	✓		✓		✓	✓							
Radulovic and Uys (2019)	✓	✓	?		✗		✓	✓							
Reckers-Sauciuc and Lowe (2010)	✗	✓	✓	✓	✓	✓	✓	✓			✗	✗	?	✓	✓
Rennie and Crosby (2002)	✓	✓	?		✗		✗	✓							
Richardson et al. (2012)	✓	✓	✓	?	✗	✓	✓	✓			✓	?	?	✓	✓
Richardson et al. (2008)	✓	✓	✓		✗		✓	✓							

Authors and Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Robertson et al. (2011)	✔	✔	✔	✔	✔	✔	✗	✔			✔	?	?	✔	✔
Robinson et al. (2012)	✔	✔	✔	✗	✗	✔	✔	✔			✔	?	?	✔	✔
Rose et al. (2018)	✔	✔	✔	✔	✗	✔	✗	✔			✔	?	?	✔	✔
Rothwell and Baldwin (2006)	✔	✔	?		?		✔	✔							
Rothwell and Baldwin (2007a)	✔	✔	✔		✗		✔	✔							
Rothwell and Baldwin (2007b)	✔	✔	✔		✔		✗	✔							
Rustiarini and Sunarsih (2017)	✔	✔	✔		✗		✔	✔							
Satalkar and Shaw (2018)	✗	✔	?		✗	✗									
Scheetz and Fogarty (2019)	✔	✔	✔	✔	✗	✔	✗	✔			✗	✗	?	✔	✔
Scheetz and Wilson (2019)	✔	✔	✔	✔	✔	✔	✔	✔			✗	✗	?	✔	✔
Schultz et al. (1993)	✔	✔	✔	✗	✔	?	✔	✔			✗	✗	?	✔	✔
Seifert et al. (2014)	✔	✔	✔	✔	✗	✔	✗	✔			✗	✗	?	✔	✔
Seifert et al. (2010)	✔	✔	✔	✔	✔	✔	✗	✔			✗	✗	?	✔	✔
Shawver (2008)	✗	✔	✔	✔	✗		✔	✔							
Shawver (2011a)	✗	✔	?	✗	✗	?	✗	✔			✗	✗	?	✔	✔
Shawver (2011b)	✔	✔	✔	✔	✗		✗	✔							

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Sims and Keenan (1999)	✔	✔	✔		✔		✔	✔							
Sims and Keenan (1998)	✔	✔	✔		✔		✔	✔							
Singer et al. (1998)	✔	✔	✔		✗		✗	✔			✗	✗	?	✔	✔
Smith et al. (2001)	✗	✔	✔	?	?	✔	✔	✔			✔	?	?	✔	✔
Somers and Casal (2011)	✔	✔	✔		✗		✗	✔							
Somers and Casal (1994)	✔	✔	✔		✗		✔	✔							
Soni et al. (2015)	✔	✔	✔	✗	✔	✔	✗	✔			✗	✗	?	✔	✔
Stansbury and Victor (2009)	✔	✔	✔		✔		✗	✔							
Stikeleather (2016)	✔	✔	✔	✗	✗	✔	✗	✔			✔	?	?	✔	✔
Stöber et al. (2019)	✔	✔	?	✗	✔	✔	✔	✔			✔	?	?	✔	✔
Su et al. (2010)	✔	✔	✔		✔		✗	✔							
Surya et al. (2017)	✔	✔	?		✗		✗	✔							
Tan et al. (2003)	✔	✔	✔	✗	✔	✔	✔	✔			✔	?	?	✔	✔
Tavakoli et al. (2003)	✔	✔	✔		✔		✔	✔							
Taylor and Curtis (2010)	✔	✔	✔	✔	✔		✗	✔							
Taylor and Curtis (2013)	✔	✔	✔	✔	✔	✔	✗	✔			✗	✗	?	✔	✔

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Taylor and Curtis (2018)	✔	✔	✔	✔	✔		✔	✔							
Taylor (2018)	✔	✔	✔	✔	✔		✔	✔							
Taylor (2019)	✔	✔	✔		✔		✔	✔							
Teichmann (2019)	✗	✔	✗		✗	✗									
Thoroughgood et al. (2011)	✔	✔	✔	✗	✔	✔	✔	✔			✔	?	?	✔	✔
Trevino and Victor (1992)	✔	✔	✔	✗	✗	✔	✔	✔			✔	?	?	✔	✔
Trongmateerut and Sweeney (2013)	✔	✔	✔		✗		✔	✔							
Tumuramye et al. (2018)	✔	✔	✔		✗		✔	✔							
Ugaddan and Park (2019)	✔	✔	✔		✗		✔	✔							
Victor et al. (1993)	✔	✔	✔	✔	✗		✔	✔							
Vincent et al. (1999)	✔	✔	✔		✔		✗	✔							
Wainberg and Perreault (2016)	✗	✔	?	✗	✗	?	✗	✔			✗	✗	?	✔	✔
Wen and Chen (2016)	✔	✔	✔		✔		✔	✔							
Whitaker et al. (2014)	✗	✔	✗		✗	✗									
Wilson et al. (2018)	✔	✔	✔	✔	✗	✔	✗	✔			✗	✗	?	✔	✔

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Xu and Ziegenfuss (2008)	✔	✔	✔	✔	✘	✔	✔	✔			✘	✘	?	✔	✔
Yu et al. (2019)	✔	✔	✔		✔		✔	✔							
Zarefar and Zarefar (2017)	✔	✔	✔		✘		✔	✔							
Zhang et al. (2016)	✔	✔	✔		✘		✔	✔							
Zhang et al. (2013)	✔	✔	✔	✘	✘	✔	✘	✔			✘	✘	?	✔	✔
Zhang et al. (2009a)	✔	✔	✔		✔		✔	✔							
Zhang et al. (2009b)	✔	✔	✔		✔		✔	✔							
Zhang (2008)	✔	✔	?	✘	✘	✔	✘	✔			✔	?	?	✔	✔
Zheng et al. (2019)	✔	✔	✔		✘		✔	✔							
Zhou et al. (2018)	✔	✔	✔		✔		✔	✔							
Zhuang et al. (2005)	✔	✔	✔	?	✔	✔	✘	✔			✔	?	?	✔	✔
Zipparo (1999)	✔	✔	✔		✔		✘	✔							

Risk of Bias Key: ✔ = Low,   ? = Unclear,   ✘ = High

Table Note: The risks of bias of studies included were assessed using the criteria below. Studies were assessed as having a) no or low risk of bias, or b) potential risk of bias. Criterion for all studies involved: Sampling (1. Participants are randomly selected, 2. Sample sizes are adequate, 3. Participants are representative of various demographic groups, 4. If some participants were excluded from the analyses, the exclusion is justified, 5. When group comparisons were made, participants were matched on other meaningful demographics, and 15. Other risks of bias), and measures (i.e., 6. Validated measures are used, or the authors have provided sufficient supportive information of the psychometric properties of the measures they devised and 7. Measures used were clearly defined and were appropriate). The criterion for studies that adopted a longitudinal or prospective design included: 8. Authors examined whether dropout is random. 9. Missing data were treated appropriately. Finally, the following criterion was used for experimental designs: 10. Allocation sequence generated to produce comparable groups. 11. Allocation was concealed, 12. Whether blinding was done and the effectiveness of it, 13. Outcome data for all outcomes were reported. Incomplete outcomes due to attrition and exclusions were addressed, and 14. No selective outcome reporting.

Table 2. Study Characteristics

Authors and Year	Participant information	Instrumentation	Design	Risk of bias assessment	Main findings
Ahern and McDonald (2002)	95 registered general and mental health nurses in Western Australia (73% female).	A questionnaire that consisted of belief statements to whistleblowing, patient advocacy, and traditional roles of nursing.	Quantitative observational	High	◦ Whistleblowers agreed more strongly with the advocacy statements while non-whistleblowers agreed more strongly with the traditional statements.
Ahmad et al.(2013)	180 internal auditors from Malaysia (98 males and 82 females).	A questionnaire that consisted of scenarios and questions assessing internal whistleblowing intentions, seriousness of wrongdoing, and status of the wrongdoer.	Quantitative observational	High	◦ Seriousness of wrongdoing was the strongest predictor of internal whistleblowing intentions. ◦ Whistleblowing intentions was greater for less powerful wrongdoers.
Ahmad et al. (2014)	180 members of an internal auditorsorganization in Malaysia.	A questionnaire presented scenarios and questions that assessed ethical climate, participants contextual details (e.g., organization size), and whistleblowing intentions.	Quantitative observational	Unclear	◦ Perception of principle climate was a significant predictor of internal whistleblowing intentions among internal auditors. ◦ Seriousness of wrongdoing is the most consistent predictor for internal whistleblowing intentions.
Alinaghian et al. (2018)	247 staff members of an Iranian hospital (149 nurses, 101 administrative staff, and 24 interns and specialists).	A questionnaire that measured factors that influence whistleblowing (i.e., organizational cultural, individual, organizational structure, and materiality of wrongdoing).	Quantitative observational	High	◦ Organizational culture, organization structure, and the materiality of wrongdoing had a significant positive relationship with whistleblowing.
Alleyne (2016)	236 non-public accountants from corporate organizations in Barbados (104 males and 132 females).	A questionnaire comprised of scales that assess participants' whistleblowing intentions, organizational commitment, and corporate ethical values.	Quantitative observational	Low	◦ Factors that encourage whistleblowing are ethical management, confidence in the reporting system, ethical culture in the organization, trust in management, and commitment to the organization. ◦ Factors that discourage whistleblowing include distrust in the organization's systems, unethical senior management, poor work climate, dismissal of

					Whistleblower, possible job loss, and fear of reprisal from management.
Alleyne et al. (2017)	282 accounting employees in Barbados (161 females and 121 males).	A questionnaire that assessed whistleblowing perceptions, awareness of organizational wrongdoings, whistleblowing intentions, perceived seriousness, and perceived personal cost and perceived personal responsibility.	Mixed Methods observational	High	∘ Personal responsibility was a predictor of internal whistleblowing. ∘ Personal cost influenced both internal and external whistleblowing intentions. ∘ Factors that influenced whistleblowing were perceived benefits of whistleblowing, actual whistleblowing experiences, personal costs, perceived lack of anonymity, and cultural norms.
Alleyne et al. (2019)	226 accountants in Barbados (124 females and 102 males).	A questionnaire consisting of scenarios with questions related to their attitude toward whistleblowing, social desirability, group cohesion, independence commitment, moral approbation, reporting intentions, perceived responsibility and cost, and perceived behavioral control.	Quantitative observational	Low	∘ Attitude towards whistleblowing, perceived behavioral control, independence commitment, personal responsibility to report, and personal cost of reporting were all significantly related to internal whistleblowing intentions. ∘ External whistleblowing intentions were significantly related to perceived behavioral control and personal responsibility for reporting. ∘ Group cohesion was found to have a moderating role.
Alleyne et al. (2018)	226 public accountants in Barbados (124 females and 102 males).	A questionnaire that presented a scenario and questions related to whistleblowing intentions, attitudes, perceived behavior control, perceived personal responsibility and cost of reporting, and perceived organizational support.	Quantitative observational	Low	∘ Internal whistleblowing intentions were positively associated with attitude, perceived behavioral control, independence commitment, personal responsibility for reporting. ∘ Internal whistleblowing intentions were negatively associated with personal cost of reporting. ∘ External whistleblowing intentions were positively associated with perceived behavioral control. ∘ Organizational support influenced the

					preferred channel of reporting wrongdoing (internal vs external).
Alleyne et al. (2013)	236 non-public accountants from corporate organizations in Barbados (104 males and 132 females).	A questionnaire comprised of scales measuring level of awareness of whistleblowing, perception of whistleblowing, whistleblowing intentions, organizational commitment, and corporate ethical values.	Quantitative observational	Low	◦ Factors that encourage whistleblowing were job satisfaction, severity of the incident, anonymity, personal benefits, and the need to correct wrongdoing that may harm the organization. ◦ Factors that discourage participants from whistleblowing include the close relationship to the wrongdoer, publicity that may negatively impact the organization, and fear of retaliation and victimization from both management and other employees.
Andon et al. (2018)	80 U.S.-based professional accountants (52 females and 28 males).	Participants were presented with a scenario that varied according to the availability of financial incentives for whistleblowing (yes or no). The participants were asked to indicate their whistleblowing intentions, and seriousness of the wrongdoing.	Quantitative experimental	High	◦ Providing a financial incentive increased external whistleblowing intentions. ◦ Perceptions of the wrongdoing seriousness are positively associated with external whistleblowing intentions.
Arifah et al. (2017)	346 employees of an enforcement agency in Malaysia (272 males and 74 females).	A questionnaire that assessed organizational trust and whistleblowing intentions.	Quantitative observational	High	◦ Organizational trust had a positive relationship to whistleblowing intentions (internal and external).
Atkinson et al. (2012)	47 college students.	A questionnaire that consisted of scenarios with questions assessing whistleblowing intentions.	Quantitative experimental	Unclear	◦ The availability of an anonymous reporting system (e.g., hotline or website) increased whistleblowing intentions.
Attree (2007)	142 practicing nurses from three Acute NHS Trusts in England (132 females and 10 males).	A semi-structured interview exploring Registered Nurses' perceptions of standards of nursing practice, discover whether nurses have concerns about	Qualitative observational	High	◦ Fear of negative consequences (e.g., retaliation, repercussions) and a lack of confidence in organizational reporting systems discouraged whistleblowing.

		practice standards, and, if so, identify how they deal with them.			
Aydan and Kaya (2018)	369 nurses (n=167) and secretaries (n=202) from a Turkish university hospital (336 females and 33 males).	A questionnaire consisting of scales assessing ethical climate, organizational trust, and whistleblowing intentions.	Quantitative observational	Low	◦ Ethical climate positively influenced whistleblowing intentions. ◦ Ethical climate moderated the interaction between organizational trust and whistleblowing intentions.
Ayers and Kaplan (2005)	74 postgraduate business students at a U.S.-based university (53% were male).	Participants were presented with one of two scenarios that varied on the committed wrongdoing. The participants were asked to indicate their whistleblowing intentions, the perceived seriousness, perceived personal cost, perceived personal responsibility, moral equity, relativism, and contractualism.	Quantitative experimental	High	◦ The perceived seriousness of wrongdoing and personal costs were associated with whistleblowing intentions under both non-anonymous and anonymous reporting channel. ◦ Personal responsibility perceptions and moral equity judgments were associated with whistleblowing intentions through non-anonymous channel only.
Barnett (1992)	240 executives from U.S.-based manufacturing, financial, and services industries.	A questionnaire that assessed characteristics of a participant's organization and whistleblowing.	Quantitative observational	Low	◦ Organizational size, unionization, and type of industry may affect the level of external whistleblowing about sensitive legal or moral issues.
Barnett et al. (1996)	267 business students (55% were male).	A questionnaire comprised of a scenario with questions assessing religiosity, ethical ideology, ethical judgment, whistleblowing intentions.	Quantitative observational	High	◦ The relationship between ethical ideologies and whistleblowing intentions is mediated perceived ethicality of whistleblowing.
Barnett et al. (1993)	295 human resource executives of private-sector organizations (74% were male).	A questionnaire that assessed the management's responsiveness to sensitive issues, the existence of internal disclosure policy/procedure, and the perceptions of the occurrence of internal disclosure and external whistleblowing.	Quantitative observational	Low	◦ Internal disclosure policies/procedures (IDPP) are associated with a higher level of internal disclosures by employees. ◦ Implementation of IDPP resulted in a significant increase in the level of internal disclosures after the implementation of IDPP's. ◦ The more internal disclosures occurred among companies with formal IDPP than those without such policies.

Bellefontaine (2009)	6 student nurses in the U.K.	A semi-structured interview that focused on the participant's ability to report potentially unsafe practice witnessed in clinical placements.	Qualitative observational	High	◦ Factors that influenced reporting were perceptions of support from mentors and peers, confidence and knowledge base, and fear of consequences.
Berger et al. (2017)	166 accounting master's students at two North American universities (55% were female).	Participants were presented with one of three scenarios that varied on availability on monetary reward for reporting fraud (eligible, ineligible, or no incentive). The participants were asked to indicate the likelihood to blow the whistle.	Quantitative experimental	High	◦ Individuals were less likely to blow the whistle immediately if they do not qualify for an organization's fraud reporting incentives versus when they do or when financial rewards are not mentioned at all. ◦ Individuals were more likely of delayed reporting of wrongdoing when the Whistleblower does not qualify for an incentive versus when they do or when financial rewards are not mentioned at all.
Bhal and Dadhich (2011)	248 postgraduate students of an engineering institute in India. Study 1 comprised of 81 students (16 females and 81 males), 80 students participated in study 2 (23 females and 57 males), and study 3 consisted of 87 students (23 females and 64 males).	Participants were presented with scenarios and questions measuring their willingness to report. For study 1, the scenarios varied according to the leader's behavior (ethical or unethical) and the quality of leader-member exchange (high or low). In study 2, the scenarios varied according to the leader's behavior (ethical or unethical) and the magnitude of the consequences (high or low). For study 3, the scenarios varied according the quality of the leader-member exchange (high or low) and the magnitude of the consequences (high or low).	Quantitative experimental	High	◦ Both ethical leadership and leader-member exchange predicted whistleblowing intentions. ◦ The relationships between whistleblowing intentions and both ethical leadership and leader-member exchange were moderated by the moral intensity.
Binikos (2008)	129 employees of an ICT company in South Africa (48.1% were female)	A questionnaire that assessed organizational trust, whistleblowing, and knowledge and behaviors of reporting at their employer.	Quantitative observational	High	◦ Organizational trust was positively related to internal whistleblowing intentions.

WHISTLEBLOWING INTENTIONS

Bjørkelo et al. (2010)	3042 municipal (n=503; 70% were female) and postal service (n=2539; 52% were female) employees in Norway.	Study 1: A questionnaire that contained NEO-FFI and questions about whistleblowing history. Study 2: A questionnaire that contained the Inventory of Interpersonal Problems - Circumplex and questions about whistleblowing history.	Quantitative observational	Low	◦ High extraversion, low agreeableness, and high domineering in interpersonal interaction predicted actual whistleblowing behavior.
Black (2011)	564 registered nurses in the United States (513 females and 32 males)	A questionnaire that assessed work setting, reporting unsafe patient care practices or conditions, experiences with prior reporting activities, and attitudes toward reporting concerns about patient safety.	Quantitative observational	Low	◦ The most common reasons for not reporting wrongdoing were fears of workplace retaliation and the belief that nothing would come of the made reports.
Bocchiaro et al. (2012)	149 undergraduate students at a Dutch university (96 females and 53 males).	Participants completed a questionnaire that included the HEXACO-PI-R and Social Value Orientation scale along with engaging in a task where they had to deal with an unethical request by the experimenter with options of (dis)obeying or ''blowing the whistle'.	Quantitative experimental	Low	◦ Individuals with higher religious faith were more likely to blow the whistle than obedient and disobedient participants.
Boo et al. (2016)	90 audit seniors and managers (57% were female).	Participants were presented with one of six scenarios that varied according to the incentive scheme (reward or penalty or none) and relationship level wrongdoer (close or not close). The participants were asked to indicate the likelihood of whistleblowing.	Quantitative experimental	High	◦ A reward-based incentive scheme was less likely to increase whistleblowing intentions when there is a close working relationship between the Whistleblower and the wrongdoer. ◦ Both reward- and penalty-based incentive schemes increased whistleblowing intentions when a close working relationship between the Whistleblower and wrongdoer is absent.
Brabeck (1984)	32 undergraduate students at U.S.-based university (26 females and 6 males).	Participants completed a questionnaire that contained the Defining Issues Test and a task involving them being tested on an article that has an error in it.	Quantitative experimental	High	◦ Whistleblowers demonstrated a higher level of moral development than non-whistleblowers.

Brennan and Kelly (2007)	100 accounting students at an institute in Ireland (59 females and 41 males).	A questionnaire that consisted of four scenarios with questions measuring the participant's organizations structures, firm size, seriousness of wrongdoing, whistleblowing behaviors, and the influence of legislation of whistleblowing decision.	Quantitative observational	High	◦ Adequate formal reporting structures promoted greater confidence and increased the likelihood of reporting wrongdoings internally ◦ The willingness to report wrongdoing externally decreased with age.
Brink et al. (2017)	82 M.B.A. students from a university in the U.S. (56 males and 30 females).	Participants were presented with one of two scenarios that varied according to the type of wrongdoing (insider trading or fraudulent financial reporting). The participants were asked to indicate their monetary attitudes, whistleblowing likelihood, perceived responsibility to report wrongdoing, and perceived seriousness of wrongdoing.	Quantitative experimental	Unclear	◦ Perceived responsibility to report wrongdoing increased intentions to blow the whistle internally. ◦ Perceived responsibility to report wrongdoing mediated the relationship between wrongdoing type and internal whistleblowing. ◦ Whistleblowing intentions were influenced by attitudes toward money. ◦ Perceived seriousness of the wrongdoing increased intentions to blow the whistle externally.
Brink et al. (2013)	72 M.B.A. students from two major universities in the U.S. (34.7% were female).	Participants were presented with a scenario that varied according to the existence of internal whistleblowing incentives (present or absent) and strength of evidence (strong or weak). The participants were asked to indicate their whistleblowing intentions.	Quantitative experimental	Unclear	◦ The interaction between evidence strength and internal incentive provided by their employer influenced whistleblowing behavior. ◦ For weak evidence, an internal incentive decreased the likelihood of external reporting. ◦ For strong evidence, the presence of an internal incentive increased the likelihood of external reporting.
Brooks and Perot (1991)	490 faculty (n = 214) and postgraduate students (n = 276) at a university in the U.S. (100% were female).	A questionnaire that assessed sexual harassment experiences, perceived offensiveness of the experiences, and reporting behaviors.	Quantitative observational	Low	◦ Perceived offensiveness of sexual harassment experience was positively related with the likelihood of reporting. ◦ The relationship between the likelihood of reporting and both feminist ideology and frequency of behavior was mediated by perceived offensiveness.

Brown et al. (2016)	284 professional organizational accountants based in the U.S. (146 females and 138 males).	A questionnaire assessing whistleblowing intentions in hypothetical scenario, attitudes, subjective norms, and perceived behavioral control.	Quantitative observational	Low	◦ Those individuals with higher perceived control, more influential referent groups, and a more positive attitude toward whistleblowing were more likely to report fraudulent activity. ◦ Females were more likely to report fraudulent accounting activity than males. ◦ Senior-level accountants were more likely to report fraudulent activity than accountants at middle- or lower-management levels.
Caillier (2013)	964 government employees	A questionnaire consisting of the Global Transformation Leadership and scale and the Multifactor Leadership Questionnaire, along with questions pertaining to affective commitment, job satisfaction, and power-dependency.	Quantitative observational	Low	◦ Immediate supervisors that practice transformational leadership had a positive influence on employees' comfort level with whistleblowing. ◦ Employees with high levels of affective commitment were more comfortable blowing the whistle than those with lower levels. ◦ Employees were more comfortable blowing the whistle when they were satisfied with their jobs.
Caillier (2017a)	42020 U.S. federal employees.	A questionnaire that assessed whistleblowing education, organizational protection, and wrongdoing action severity.	Quantitative observational	Low	◦ Whistleblowing education was positively associated with internal whistleblowing ◦ Whistleblowing was negatively associated with retaliation.
Caillier (2017b)	42020 U.S. federal government employees	The Merit Principles Survey (MPS) 2010 questionnaire	Quantitative observational	Low	◦ Whistleblowers had higher levels of public service motivation than non-whistleblowers. ◦ Seriousness of wrongdoing had a positive effect on whistleblowing. ◦ Seriousness of wrongdoing moderated the relationship between public service motivation and internal whistleblowing only.

Study	Sample	Measure	Design	Risk of bias	Findings
Casal and Bogui (2008)	330 members of a professional accountant organization.	A questionnaire that assessed intentions to leave, stay and report, and leave and report in response to organizational wrongdoing, seriousness of wrongdoing, expected effectiveness of whistleblowing, and expected retaliation to whistleblowing, and role responsibility.	Quantitative observational	Unclear	◦ Whistleblowing intentions increased with expected effectiveness of whistleblowing and role responsibility for reporting, regardless of the intentions to stay or leave the role. ◦ Whistleblowing intentions decreased with expected retaliation for whistleblowing when there is an intention to stay in the role.
Cassematis and Wortley (2013)	3232 employees from the Australian public sector organizations (1692 females and 1541 males).	The Workplace Experiences and Relationships questionnaire, which assessed whistleblowing propensity, job satisfaction, organizational citizenship behavior, fear of reprisal, perceived wrongdoing seriousness, and personal victimization.	Quantitative observational	Low	◦ Whistleblowers had a more positive attitudes towards the act. ◦ Whistleblowers have a stronger belief that the act is valued by the organization. ◦ Fear of reprisals was a factor that most concerning for non-Whistleblower. ◦ Being personally affected by the wrongdoing was the most influential predictor of whistleblowing.
Chaudhary et al. (2019)	298 teachers from higher education institutions in India.	A questionnaire that assessed perceived cost of reporting, status of wrongdoer, seriousness of wrongdoing, whistleblowing intentions, the availability of communication channel, and perceived organizational support.	Quantitative observational	Low	◦ Availability of a proper communication channel in the organization increased the likelihood of reporting the wrongdoing internally. ◦ The high status of the wrongdoer and high costs of reporting discouraged internal whistleblowing and encouraged reporting externally. ◦ Factor discouraging internal whistleblowing is the potential negative repercussions. ◦ There is a greater intention to blow the whistle internally (vs externally for serious wrongdoings.
Chen and Lai (2014)	533 individuals in Taiwan (51.4% were female)	A questionnaire that consisted of a scenario with questions assessing moral intensity, organizational commitment,	Quantitative observational	Low	◦ The moral intensity dimension of potential harm was positively correlated with whistleblowing intention. ◦ Potential harm and social pressure

		and whistleblowing intentions and behaviors.			affect Whistleblower's choice of communication channel (i.e., internal or external) differently. ◦ Organizational commitment has a moderated mediation effect on moral intensity, whistleblowing intention, and whistleblowing behavior.
Chen et al. (2017)	147 undergraduate students.	Following the random assignment into one of four groups, the participants completed a series of tasks. At the conclusion of each task, the participants were asked to report their score and whether a group member had overstated their score to the experimenter.	Quantitative experimental	Unclear	◦ When an organization presents strong descriptive norms supporting whistleblowing, penalties lead to a greater increase in internal whistleblowing.
Cheng et al. (2019)	230 employees of retail in China (140 females and 90 males).	A questionnaire that assessed ethical leadership, perceived organizational politics, moral courage, and internal whistleblowing.	Quantitative observational	Low	◦ Ethical leadership had positive relationship with internal whistleblowing. ◦ Perceived organizational politics was negatively associated with internal whistleblowing ◦ The relationship between ethical leadership and internal whistleblowing was mediated by perceived organizational politics. ◦ Moral courage moderated the relationship between perceived organizational politics and internal whistleblowing.
Chiasson et al. (1995)	244 certified public accountants (75% were male).	A questionnaire that assessed the internal and external whistleblowing intentions.	Quantitative observational	High	◦ The probability of blow the whistle internally were highest for theft of organization funds, followed by accepting bribes and wrongdoings that could possibly cause injury to employees or the public. ◦ The probability of whistleblowing was lowest for the making on overly

					optimistic and false projections of future performance by management.
Chiu (2002)	254 M.B.A. students in China.	A questionnaire consisting of a scenario with questions assessing ethical judgment, locus of control, and whistleblowing intentions.	Quantitative observational	Unclear	◦ Locus of control moderated the relationship between ethical judgment and whistleblowing intention.
Chiu (2003)	306 managers and professionals from China.	A questionnaire consisting of a scenario with questions assessing ethical judgment, locus of control, and whistleblowing intentions.	Quantitative observational	Low	◦ Ethical judgment was positively related to whistleblowing intention. ◦ Locus of control was negatively related to whistleblowing intention. ◦ Locus of control moderated the relationship between ethical judgment and whistleblowing intention.
Chiu and Erdener (2003)	362 managers and executives in China (161 females and 201 males).	A questionnaire consisting of a scenario and questions assessing ethical judgement, ethical ideology, locus of control, and whistleblowing intentions.	Quantitative observational	Low	Locus of control moderated the relationship between ethical judgement and whistleblowing intention. Ethical judgement was positively related to whistleblowing intention.
Cho and Song (2015)	42020 U.S. federal government employees	The Merit Principles Survey (MPS) 2010 questionnaire	Quantitative observational	High	◦ Whistleblowing intentions is decreased by perceived personal costs of the act. ◦ The effect of perceived personal cost on whistleblowing intentions is alleviated by organizational support and organizational protection. ◦ Public service motivation and education increased whistleblowing intentions.
Clements and Shawver (2011)	171 public accountants (109 males and 62 females)	A questionnaire that consisted of a scenario and questions assessing moral intensity, ethicality of situation, and whistleblowing likelihood.	Quantitative observational	High	◦ Social consensus is a factor considered by accountants when deciding whether to blow the whistle internally.

Clements and Shawver (2009)	36 accounting professionals in the U.S.	A questionnaire that consisted of scenarios and questions assessing ethics and whistleblowing intentions.	Quantitative observational	High	◦ No relationship was found between ethics and whistleblowing intentions.
Curtis (2006)	220 accounting students from a U.S.-based university (142 females and 78 males)	Immediately, after the completion of an examination, the participants completed a questionnaire consisting of a scenario with questions related to whistleblowing intentions and the participant's affect.	Quantitative observational	High	◦ Negative mood was associated with lower intentions to report wrongdoings. ◦ Seriousness and responsibility moderated the relationship between affect and whistleblowing intentions. ◦ Personal cost is negatively influenced the intentions to report wrongdoings.
Curtis and Taylor (2009)	122 in-charge auditors.	A questionnaire that consisted of three scenarios that varied according to moral intensity and reporting formats. The participants were asked to indicate their likelihood of reporting, locus of control, ethical style, and trust in the organization responding to wrongdoing.	Quantitative experimental	Unclear	◦ A disclosed identity format decreased the likelihood of whistleblowing, while there was no significant difference in likelihood between anonymous and protected identity formats. ◦ Audit standards violations were more likely to be reported that than a professional code violation. ◦ Trust that the firm would investigate and act on the reported wrongdoing increased the likelihood of whistleblowing ◦ Locus of control and ethical style were significant antecedents to whistleblowing intentions.
Dalton and Radtke (2013)	116 MBA students at two U.S.-based universities (74 males and 42 females).	A questionnaire that consisted of a scenario varying according to the ethical environment (weak or strong) with questions assessing Machiavellianism, whistleblowing intentions, perceived seriousness, perceived costs/benefits and perceived responsibility.	Quantitative experimental	Unclear	◦ Machiavellianism was negatively related to whistle-blowing intentions. ◦ Machiavellianism has an indirect effect on whistleblowing through perceived benefits and perceived responsibility. ◦ A strong ethical environment increases whistleblowing intentions of those individuals who are higher in Machiavellianism.

Elias (2008)	128 auditing students from two U.S.-based universities.	A questionnaire contained scenarios with questions assessing whistleblowing perceptions and intentions, professional commitment, and perceptions of financial reporting.	Quantitative observational	Unclear	◦ Those individuals who exhibit greater professional committed to auditing students were more likely to blow the whistle. ◦ A higher perception of financial reporting was associated with higher whistleblowing intentions.
Ellis and Arieli (1999)	275 officers in the Israeli Defense Forces.	A questionnaire presenting scenarios with questions that measured general reporting impressions, whistleblowing attitudes, beliefs, and subjective norms.	Quantitative observational	High	◦ Whistleblowing attitudes and subjective norms predicted whistleblowing intentions. ◦ The effect of subjective norms was stronger than the effect of attitudes.
Erickson et al. (2017)	28 track and field university student-athletes from the UK (n = 14) and US (n = 14; 15 females and 13 males).	A semi-structured interview focused on general attitudes to PEDs and whistleblowing.	Qualitative observational	high	◦ The willingness to report a wrongdoing was dependent on the level of relationship. ◦ An individual was less likely to blow the whistle on someone they have a personal relationship with (e.g., friend) then those who are relationally distant.
Erkmen et al. (2014)	116 professional accountants from Turkey (100 males and 16 females).	A questionnaire that contained scenarios and questions measuring whistleblowing intentions.	Quantitative observational	Low	◦ Females were more likely to blow the whistle than males. ◦ Older accounting professionals will be more likely to blow the whistle.
Erturk and Donmez (2016)	393 schoolteachers from Turkey (56% were female).	A questionnaire that consisted of scales assessing whistleblowing behaviors and school principal's leadership style.	Quantitative observational	High	◦ Laissez-faire leadership style positively associated with anonymous whistleblowing behaviors. ◦ Transformational leadership has a positive relationship with internal whistleblowing.
Fieger and Rice (2018)	2375 Australian Public Service employees who observed a potential corrupt act (46.3% were female).	2014 Australian Public Service Census	Quantitative observational	High	◦ Females more likely to report wrongdoings than males. ◦ Individuals in smaller organizational units are less likely to blow the whistle than those larger ones. ◦ The longer someone is with an organization, the less likely they will blow the whistle.

Fleming et al. (2018)	288 surgical trainees.	A questionnaire that explored the experiences of surgical trainees in raising concerns over patient safety and their attitudes towards whistleblowing in general.	Quantitative observational	High	◦ Factors that discourage whistleblowing were the fear of personal vilification or reprisal, fear of impact on career, and a lack of confidence in the process. ◦ More senior trainees were significantly more likely to blow the whistle than their more junior peers.
Francalanza and Buttigieg (2016)	330 certified public accountants from Malta (36.7% were female).	A two questionnaires that assessed the personality traits, general whistleblowing intentions, and the perception of situational factors.	Quantitative observational	Low	◦ Whistleblowers showed significantly higher scores on extraversion, conscientiousness, and openness to experiences. ◦ Non-whistleblowers showed significantly higher score on neuroticism. ◦ Situational factors that discouraged whistleblowing were retaliation, expected media attention, and complications in reporting process. ◦ Situational factors that encouraged whistleblowing were ethical considerations and professional requirements.
Fredin et al. (2019)	263 U.S.-based business professionals (52.5% were female, 43.3% were male, 4.2% did not respond).	Participants were randomly assigned to one of the eight conditions that varied according to scenario type (financial or nonfinancial), moral intensity, and the action of the protagonist (blow the whistle or not). The participants were asked to predict the amount of regret experienced by the protagonist feel if he or she blew the whistle or remained silent. Finally, participants completed questions related to moral intensity.	Quantitative experimental	Unclear	◦ The regret experienced for whistleblowing is different from the regret for remaining silent.

Fredin (2011)	543 business students from a U.S.-based university and 27 business professionals (334 males and 229 females).	In the first block, the participants were presented with a financial scenario that randomly varied in moral intensity. For their scenario, they were asked to predict regret associated with either whistleblowing or remaining silent. The second block repeated the procedure of the first one but with a nonfinancial scenario. The participants were asked to predict the amount of regret experienced by the protagonist feel if he or she blew the whistle or remained silent. After making their prediction, the participants were asked to describe the source(s) of their predicted regret.	Mixed Methods experimental	Unclear	◦ Individuals are less likely to blow the whistle on financial wrongdoing than they are to blow the whistle on nonfinancial wrongdoing. ◦ The regret felt by not whistleblowing was different from the regret associated with blowing the whistle on wrongdoing
Gao et al. (2015)	369 business students at a university in the U.S. (57% were male).	Participants were presented with two independent case scenarios that varied according to reporting channel available (internal or external), the presence of bystanders (present or absent) and power status of wrongdoer (high or low). The participants were asked to indicate the intentions to blow the whistle.	Quantitative experimental	Unclear	◦ Whistleblowing intention was higher for third-party administered reporting channel (versus internally administered). ◦ Intentions to blow the whistle using an internal channel decreased when there are other bystanders. ◦ Whistleblowing intention was lower when the wrongdoer is a superior than when they are peer. ◦ Perceived personal responsibility to report mediated the relationship between whistleblowing intentions and the presence of bystander. ◦ Perceived personal cost moderated the relationship between whistleblowing intentions and power status of wrongdoer.

Grube et al. (2010)	330 nurse practitioners (97% were female).	A questionnaire that assessed role identity, frequency of unsafe patient practices, risk-taking propensity, supervisory support for reporting, value dissimilarity, and reporting behavior.	Quantitative observational	Low	∘ The likelihood of reporting unsafe practices increased as the frequency of unsafe practices increased. ∘ The relationship between frequency of unsafe practices and whistleblowing is moderated by nurse role identity and supervisory support for reporting. ∘ Strong role identity and strong organizational role identity increased the likelihood of whistleblowing about unsafe practices.
Gundlach et al. (2008)	244 non-managerial employees at a U.S.-based company (64% were male).	A questionnaire that consisted of scales that measured perception of intentions, judgment of responsibility, feelings of anger, and whistleblowing decisions.	Quantitative observational	Unclear	∘ Cognitive responses to wrongdoing can have a significant impact on individuals' decisions to blow the whistle. ∘ Feelings of anger mediated the relationship between both perceptions of intention and whistle-blowing decisions and judgments of responsibility.
Guthrie and Taylor (2017)	295 individuals from the U.S. (50.2% were female).	Participants were presented with a randomly assigned vignette that varied according the presence of retaliation threat (high or low) and the availability of monetary incentive (present or absent). The participants were asked to indicate the likelihood of their reporting the misconduct to the company's ethics hotline, followed by questions measuring of perceived severity of the wrongdoing, fear of various retaliation types, and organizational trust.	Quantitative experimental	Unclear	∘ Retaliation threat is negatively associated with whistleblowing intention. ∘ The relationship between retaliation threat and whistleblowing intentions was mediated by organizational trust. ∘ Monetary incentives moderated the influence organizational trust.
Gökçe (2013a)	180 student teachers at a Turkish university (144 females and 31 males).	A questionnaire that contained a series of scenarios with questions assessing ethical awareness, whistleblowing intentions, and whistleblowing attitudes.	Quantitative observational	Low	∘ Guaranteed employment increased the likelihood of internal and external whistleblowing.

Gökçe (2013b)	107 student teachers at a Turkish university (74 females and 33 males)	A questionnaire that assessed whistleblowing intentions and cultural values	Quantitative observational	High	◦ No relationship was observed between cultural values and the intentions to blow the whistle externally and anonymously.
Gökçe (2013c)	67 Turkish teachers (35 females and 32 males).	A questionnaire that assessed wrongdoings observed, whistleblowing intentions, job satisfaction, and employment commitment.	Quantitative observational	Low	◦ Males reported wrongdoings significantly more often than females. ◦ Those individuals with higher seniority (measured in terms of years of experience) reported wrongdoings more often than those with lower seniority.
Gökçe (2013d)	291 teachers from Turkey (64% were female).	A questionnaire measuring whistleblowing intentions, ethical value orientation, and cultural orientation.	Quantitative observational	High	◦ Collectivists preferred to blow the whistle both externally and anonymously. ◦ Individualists preferred report wrongdoings anonymously but not externally. ◦ No relationship was observed between values and the intentions to blow the whistle externally and anonymously.
Gökçe (2013e)	163 student teachers at a Turkish university (99 females and 31 males).	A questionnaire that consisted of scenarios with parts of a scale focused on ethical evaluation and whistleblowing intentions.	Quantitative observational	High	◦ Justice was the strongest influence on whistle-blowing intention.
Gökçe (2015)	271 Turkish teachers (62% were female).	A questionnaire that consisted of scales measuring modes of whistleblowing, religiosity, Machiavellianism, and utilitarianism.	Quantitative observational	High	◦ Religiosity has a positive effect on internal whistleblowing.
Hechanova and Manaois (2020)	515 employed at hospitals in Philippines. Phase 1: 12 hospital employees. Phase 2: 503 hospital employees (73% were females).	Phase 1: Interview focused on identified corrupt acts. Phase 2: A questionnaire that measured social desirability, ethical leadership, norms, controls for corruption, attitudes towards corrupt practices, and whistleblowing intentions.	Mixed Methods observational	High	◦ Policies and systems to control corruption and their implementation were positively related to whistleblowing intentions. ◦ Ethical leadership indirectly influenced whistleblowing intentions through corruption control policies and systems.

Henningsen et al. (2013)	174 undergraduate students from a U.S.-based university (53.4% were male).	Participants were presented with a scenario that varied according to wrongdoer's sex (male or female) and whether they are a member of the participant's group for an assignment (yes or no). The participant completed measures related to explicit confrontation, whistleblowing, goals, actions, and planning.	Quantitative experimental	High	◦ The prevalence of morality and anxiety was positively associated with a greater likelihood to endorse whistleblowing.
Hwang et al. (2008)	485 certified public accountants in Taiwan (267 males and 172 females).	A questionnaire that consisted of questions about factors affecting whistleblowing motivations and intentions.	Quantitative observational	Low	◦ Factors that encouraged whistleblowing were morality and abiding by the policy. ◦ Factors that discouraged whistleblowing were guanxi (personal relationships), fear of retaliation, and fear of media coverage.
Hwang et al. (2014)	1095 individuals from certified public accounting firms, corporations, professional associations, and universities in U.S., Taiwan, and China (565 females, 510 males, 20 undisclosed).	A questionnaire that measured whistleblowing intentions, factors that encourage and discourage whistleblowing, and the influence of personal relationships on whistleblowing intentions.	Quantitative experimental	High	◦ Americans had a higher willingness to engage in whistleblowing than Chinese and Taiwanese. ◦ Whistleblowing intentions of Chinese and Taiwanese were more likely to be influenced by both the dollar amounts involved and the wrongdoing's impact on companies and societies than the Americans. ◦ Personal relationships had a greater effect on the whistleblowing intentions of Chinese and Taiwanese than Americans.
Ion et al. (2015)	13 nursing students (9 females and 4 males).	A semi-structured interview.	Qualitative observational	High	◦ A reason for whistleblowing was that the individual had no choice morally and/professionally. ◦ Reasons that discourage whistleblowing included the consequences of reporting and situation ambiguity. ◦ Being adequately prepared for the

					reality of reporting was a factor that both encouraged and discouraged whistleblowing,
Ion et al. (2016)	13 undergraduate students at a university in the UK.	A series of semi-structured interviews focused on how nursing students accounted for their decisions to report or not report poor care witnessed on placement and to propose the potential functions of these accounts.	Qualitative observational	High	◦ Whistleblowers attributed their behavior to factors such as moral and professional duty and personal disposition. ◦ Non-whistleblowers attributed their behavior to factors such as the hopelessness of the situation, negative personal impact, theory-reality incongruency, and displacement of responsibility.
Izraeli and Jaffe (1998)	185 accounting students and professional accountants.	A questionnaire measuring whistleblowing intentions, beliefs and importance of outcomes associated with whistleblowing, subjective norms, locus of control, and professional socialization.	Quantitative observational	Unclear	◦ Whistleblowing intention was influenced directly by social norms, locus of control, and professional socialization.
Jackson et al. (2010)	11 nurse practitioners in Australia who have experiences being a whistleblower.	A semi-structured interview that explored nurses' experiences with whistleblowing.	Qualitative observational	High	◦ A factor that discouraged whistleblowing was fear of retaliation. ◦ Whistleblowers believed they were acting in accordance with a duty of care
Jenkel and Haen (2012)	44 undergraduate business and accounting students (28 males and 16 females).	Participants completed a math computation test without the reliance of calculators under a time constraint. During the task, a confederate used calculator near the end. After the test, the participants completed a survey which includes the opportunity to report the wrongdoing either anonymously or non-anonymously (depending on the condition).	Quantitative experimental	High	◦ Personal impact of wrongdoing increases the likelihood of whistleblowing.
Jones et al. (2014)	412 undergraduate accounting students (232 males and 182 females).	A questionnaire that presented four versions of a scenario with questions regarding perceived unfairness, anger, and self-interest in the situation.	Quantitative experimental	Low	◦ Both anger and perceived unfairness were positively associated with likelihood of whistleblowing.

Kamarunzaman et al. (2014)	511 public office employees from Malaysia (296 females and 215 males).	A questionnaire that assessed perceived organizational support, channels of communication, attitudes of whistleblowing, and whistleblowing intentions.	Quantitative observational	High	◦ Whistleblowing intention was positively associated with perceived organizational support, attitudes towards whistleblowing, and channel of communication. ◦ An influential factor on whistleblowing intentions was channel of communication.
Kaplan et al. (2009)	113 MBA students (70% were male)	A questionnaire comprised of a scenario that varied according to the wrongdoer's sex (male or female). The participants were asked about their whistleblowing intentions, perceptions of the fraudulent act, personal costs, and responsibilities of reporting.	Quantitative experimental	Unclear	◦ Females' whistleblowing intentions through an anonymous reporting channel are higher than for males; but there is no difference in terms of non-anonymous reporting channels. ◦ Relative decreases in the perceived personal costs resulted in stronger whistleblowing intentions. ◦ The availability of an anonymous reporting channel increased whistleblowing intentions.
Kaplan (1995)	57 audit seniors of an internationally certified public accountant firm (42% were female).	Participants was presented with one of four versions of a scenario that varied according to the necessity of the missed step and quality of previous work. The participants were asked to indicate their whistleblowing intentions, perception of overall performance rating, and team support.	Quantitative experimental	Unclear	◦ Whistleblowing intentions were higher when a necessary audit step was missed. ◦ Poor staff audit work history increased whistleblowing intentions.
Kaplan et al. (2009)	120 M.B.A. students from a university. Main study: 91 M.B.A. students from a university (38% females). Ancillary study: 29 M.B.A. students from a university.	Main Study: Participants were presented with a scenario that was manipulated on the presented procedural safeguards (strong or weak) and type of fraudulent act (misappropriation of assets or fraudulent financial reporting). The participants were asked to indicate the likelihood of whistleblowing, perceptions of the fraudulent act, and potential consequences of	Quantitative experimental	Unclear	◦ Anonymous whistleblowing intentions were higher for fraudulent act involving misappropriation of assets than one involving fraudulent financial reporting. ◦ Anonymous whistleblowing intentions were higher under the weak condition of procedural safeguards. ◦ Whistleblowing intentions were higher for an internally administered hotline.

		whistleblowing. Ancillary study: Participants were presented with a scenario that was manipulated on the whistleblowing hotline administrator (internal or external), while indicating whistleblowing intentions.			
Kaplan et al. (2010)	77 M.B.A. students at a university (33% were female)	Participants were presented with a scenario that varied according to the type of fraudulent act (misappropriation of assets or fraudulent financial reporting) and social confrontation (present or absent). The participants were asked to indicate whistleblowing intentions.	Quantitative experimental	Unclear	◦ When social confrontation with wrongdoing superior was unsuccessful, whistleblowing intention to the supervisor's supervisor was higher than to an internal auditor. ◦ When social confrontation with superior did not occurred, whistleblowing intention to the internal auditor was higher than to the supervisor's supervisor.
Kaplan et al. (2011)	207 M.B.A. students from a university (40% were female).	Participants were presented with one of eight scenarios that varied according to type of auditor (internal or external), existence of an inquiry (present or absent), and type of fraudulent act (misappropriation of assets and fraudulent financial reporting). The participants were asked to indicate the likelihood of whistleblowing.	Quantitative experimental	Unclear	◦ Intentions to blow the whistle to an inquiring auditor was higher than the reporting intentions to a non-inquiring auditor. ◦ Intentions to blow the whistle to an internal auditor was higher than to an external auditor.
Kaplan and Schultz (2007)	73 M.B.A. students from a university.	Participants were presented with three different scenarios while being asked to indicate their whistleblowing intentions.	Quantitative experimental	Unclear	◦ The availability of an anonymous channel reduced the likelihood of whistleblowing to non-anonymous channels. ◦ The setting of potential wrongdoing influenced the channel used by the whistleblower.

Kaplan and Whitecotton (2001)	73 audit seniors from a large CPA firm.	Participants were presented with one of four scenarios that varied according to inherent risk (high or low) and professional integrity (high or low). The participants were asked to indicate the seriousness of the wrongdoing, personal responsibility of reporting, personal cost of reporting, and whistleblowing intentions.	Quantitative experimental	Unclear	◦ Whistleblowing intentions were negatively association with perceived personal costs of reporting. ◦ Whistleblowing intentions were positively associated with perceived personal responsibility for reporting.
Kaptein (2011)	5065 U.S.-based employees (44% were female).	A questionnaire that assessed responses to wrongdoings and the ethical culture of their employers.	Quantitative observational	Low	◦ Internal whistleblowing (in the form of calling an ethics hotline) was positively associated with clarity, congruency of senior management, feasibility, supportability, and sanctionability, but negatively related to congruency of local management, and discussability. ◦ External whistleblowing was positively related to feasibility and transparency but negatively associated with clarity, congruency of local and senior management, discussability, and sanctionability.
Keenan (1995)	406 first-level managers (89% were male).	A revised version of the 1980 U.S. Merit Systems Protection Board survey.	Quantitative observational	Low	◦ Being obliged to blow the whistle was positively related to moral perceptions of minor fraud, harm to other, and serious fraud, along with knowledge or information of where to report, and managerial experience. ◦ Being obliged to blow the whistle was negatively related to fear of retaliation low and reprisal. ◦ Females were less likely to feel obliged to blow the whistle.

Keenan (2000)	725 upper- (n = 131; 88% were male), middle- (n = 188; 91% were male), and lower-level managers (n = 406; 89% were male).	A questionnaire that measured moral perception, whistleblowing intentions, personal and organization propensity of whistleblowing behaviors, interpersonal communication climate, and the fear of retaliation.	Quantitative observational	Low	◦ Organizational and individual propensity positively influenced the likelihood of blowing the whistle on less serious forms of fraud by all managerial levels. ◦ Moral perceptions positively influenced the likelihood of blowing the whistle on less serious forms of fraud of upper- and lower-level managers but negatively influenced middle-level managers. ◦ Upper- and middle-level managers were more likely to blow the whistle on less serious fraud.
Keenan (2002a)	76 managers from large manufacturing firms in the U.S. (n = 45; 100% were male) and India (n = 31; 100% were male)	A questionnaire that measured moral perception, whistleblowing intentions, personal and organization propensity of whistleblowing behaviors, and the fear of retaliation.	Quantitative observational	Low	◦ No difference between American and Indian managers in terms of whistleblowing likelihood.
Keenan (2002b)	725 upper- (n = 131), middle- (n = 188), and lower-level managers (n = 408).	A questionnaire that measured moral perception, whistleblowing intentions, personal and organizational propensity of whistleblowing behaviors, interpersonal communication climate, and the fear of retaliation.	Quantitative observational	Low	◦ Upper-level managers were more likely to blow the whistle on serious, minor, and harm to others forms of wrongdoing, followed by middle-level and then lower-level managers.
Keenan (2007)	145 mid-level managers from large companies in the U.S. (n=70) and People's Republic of China (n=75).	A revised version of the U.S. Merit Systems Protection Board survey questionnaire.	Quantitative observational	High	◦ Chinese managers are less likely to blow the whistle than their American counterparts.
Keil et al. (2007)	146 students at universities in the U.S. (n = 68; 37 females and 31 males) South Korea	Participants were presented with one of two scenarios that varied according to the opportunity to shift blame (present or absent). The participants were asked to indicate their likelihood to report bad	Mixed Methods experimental	Unclear	◦ The presence of a blame-shifting opportunity increased the willingness to report bad news among U.S. participants, but not South Korean participants.

(n = 78; 31 females and 47 males)	news and the reason underlying the decision.			◦ Reasons that influenced willingness to report include a small chance of success, severity of consequences, role responsibility, reputation (personal and company), desire to fix the issue, honesty, and desire to avoid surprises.
Keil et al. (2018) 414 individuals. Study 1: 136 undergraduate business school students from a U.S.-based university (91 males and 45 females). Study 2: 135 undergraduate business school students from a U.S.-based university (103 males and 32 females). Study 3: 143 professionals in the health and pharmaceuticals (117 females and 26 males).	Study 1: A questionnaire comprised of a scenario that varied according to the intentionality of the wrongdoing and the stability of wrongdoing. Study 2 and 3: A questionnaire comprised of a different scenario, but also varies on intentionality and stability. Participants in all studies were asked are questions assessing seriousness of the wrongdoing, anticipated regret about remaining silent, and whistle-blowing intention.	Quantitative experimental	Unclear	◦ The effect of the seriousness of a wrongdoing on whistle-blowing intentions was mediated by anticipated regret about remaining silent. ◦ Committing a wrongdoing intentionally increased the likelihood of both experiencing of anticipated regret about remaining silent and whistleblowing intention. ◦ Committing a wrongdoing unintentionally engage in wrongdoings decreased the likelihood of experiencing anticipated regret about remaining silent and whistleblowing intentions.
Keil et al. (2004) 122 students from two U.S.-based universities (26.4% were female).	Participants were presented with one of four scenarios that varied according to information symmetry (high or low) and organizational climate (conducive or non-conducive to reporting). The participants were asked to indicate their level of reluctance to report bad news, whether something ought to be reported, perceived personal responsibility for reporting, perceived information asymmetry, and perceived organizational climate.	Quantitative experimental	Unclear	◦ The assessment of personal responsibility to report had a direct positive effect on the willingness to report bad news. ◦ The assessment of whether the status ought to be reported had an indirect positive influence on reporting bad news through the assessment of personal responsibility to report. ◦ Information asymmetry and organizational climate exerted their influence on the reluctance to report through perceptions of whether

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					something ought to be reported and personal responsibility, respectively.
Keil et al. (2010)	132 individuals (44% were female).	A questionnaire consisting of scenarios that varied on personal reporting responsibility, trust in supervisor, ability to hide information, reporting anonymity, management responsiveness, organizational climate conduciveness, and senior management attachment to project. The participants were asked to indicate their whistleblowing intentions for each scenario.	Quantitative observational	High	◦ Whistleblowing intentions were positively associated with trust in supervisor, management responsiveness, organizational climate conduciveness, and senior management attachment to project. ◦ Perceived benefit-to-cost differential associated with whistleblowing positively mediated the relationship between whistleblowing intentions and trust in supervisor, management responsiveness, organizational climate conduciveness, personal reporting responsibility, and reporting anonymity.
Kennett et al. (2011)	81 accounting students from a university in the U.S. (65.4% were female).	Participants were presented with a scenario with questions that assessed peer approval, moral obligation, personal financial costs, whistleblowing likelihood.	Quantitative observational	High	◦ Peer approval and societal benefits were positively associated with whistleblowing intentions. ◦ Personal financial cost was negatively related to whistleblowing intentions.
King (1997)	261 registered nurses (96% were female).	A questionnaire comprised of scenarios that varied according to the severity of the incident and interpersonal closeness with the wrongdoer. Participants were asked about their likelihood to report a wrongdoing.	Quantitative experimental	Unclear	◦ Interpersonal closeness between an observer and wrongdoer influenced the likelihood of report a wrongdoing. ◦ Severity of incident influenced the likelihood of whistleblowing. ◦ Severity of the wrongdoing influenced the relationship between interpersonal closeness and likelihood of whistleblowing.
King and Hermodson (2000)	197 registered nurses in the U.S. (94% were female).	A questionnaire containing open-ended questions asking participants to detail an incident of wrongdoing and the reasons	Qualitative observational	High	◦ Reasons for whistleblowing included personal ethics and the belief that reporting was the "right thing to do", patient rights violation, harm to patient

		for reporting or not reporting the incident.			(potential and actual), patient negligence, legal issues, policies and procedures, and personnel issues. ◦ Reasons for not whistleblowing included personal fear, incidents were not observed personally, commonly accepted wrongdoing, wrongdoing was handled through group efforts, issue was minor, perceived or actual retaliation, and reception problems on the part of authority figures or administration.
King and Scudder (2013)	68 nurses (66 females and 2 unidentified).	A survey that consisted of questions addressing the reasons to report and not report wrongdoings	Quantitative observational	High	◦ Patients' well-being and professional ethics were the main reasons for deciding whether or not to report a wrongdoing.
Latan et al. (2019a)	162 external auditors and 173 internal auditors in Indonesia (63.28% were male).	A questionnaire comprised of scenarios and questions related to whistleblowing intentions, ethical awareness, ethical judgment, perceived moral intensity, and emotion.	Quantitative observational	Low	◦ Ethical judgment had a positive direct effect on whistleblowing. ◦ Emotion and perceived moral intensity improved the relationship between ethical judgments and whistleblowing intentions. ◦ Internal auditors were more likely to blow the whistle than external auditors.
Latan et al. (2019)b	157 tax service employees in Indonesia (123 males and 34 females).	A questionnaire comprised of a scenario and questions assessing perceived seriousness of threat, perceived seriousness of wrongdoing, rationalization, and whistleblowing intentions.	Quantitative observational	Low	◦ Perceived seriousness of threat reduced intention to blow the whistle. ◦ Perceived seriousness of wrongdoing increased whistleblowing intentions. ◦ Rationalization moderated the relationships between perceived seriousness of threat, perceived seriousness of wrongdoing, and whistleblowing intention.

Latan et al. (2019)c)	223 professional accountants from auditing firms in Indonesia (159 males and 64 females).	A questionnaire comprised of a scenario and questions assessing whistleblowing intentions along with the pressures, financial incentives, opportunities, and rationalization experienced when discovering misconducts.	Quantitative observational	Low	◦ The higher the pressure experienced, the greater the chances that a person will not blow the whistle. ◦ Financial incentives, opportunities, and rationalization had a positive effect on whistleblowing intentions.
Latan et al. (2018)	256 Indonesian public accountants (61.6% were male)	A questionnaire comprised of a scenario and questions measuring perceived behavioral control, attitudes towards whistleblowing, independence commitment, personal responsibility of reporting, personal costs of reporting, perceived organizational support, team norms, perceived moral intensity, and whistleblowing intentions.	Quantitative observational	Low	◦ Whistleblowing intentions were influenced positively by attitudes toward whistleblowing, perceived behavioral control, independence commitment, and personal responsibility for reporting ◦ Personal cost of reporting had a negative influence on whistleblowing intentions. ◦ Perceived organizational support, team norms, and perceived moral intensity can partially improve the relationship between the individual-level low antecedents and whistleblowing intentions.
Lavena (2016)	36,926 U.S. federal government employees.	2005 Merit Systems Protection Board Merit Principles Survey	Quantitative observational	Low	◦ Whistleblowing likelihood was positively associated with norm-based and affective work motives. ◦ Whistleblowing likelihood was negatively related perceptions of respect and openness, cooperativeness and flexibility in the work setting, and fair treatment and trust in superiors.
Lee et al. (2004)	1952 U.S. federal government employees (100% were female).	A questionnaire on sexual harassment.	Quantitative observational	High	◦ Whistleblowing was positively to number of types of both felonious and non-felonious sexual harassment, frequency and length of sexual harassment, and multiple harassers ◦ Whistleblowing was negatively associated with organizational level of the harasser.

Li and Ma (2016)	120 accountancy students at a university in Hong Kong (82 females and 38 males).	Initially, participants completed a questionnaire containing scenarios and questions related to ethical judgment and whistleblowing intentions. This was followed by small group discussions with other participants (3-4 individuals) about the same vignettes and questions. After the group discussion, the participants completed the questionnaire independently.	Quantitative experimental	Unclear	◦ The group whistleblowing responses were more likely to endorse stronger actions than individual responses.
Lim and See (2001)	518 students from educational institutions in Singapore (383 females and 135 males).	A questionnaire that measured self-reported cheating, perceived seriousness of cheating, perceived prevalence of cheating, and willingness to report cheating.	Mixed Methods observational	High	◦ Reasons for not blowing the whistle included the observer having an indifferent attitude of the wrongdoing and a self-interested motivation of preventing future reporting if the observer commits a wrongdoing.
Liu and Ren (2017)	150 trainee auditors from a certified public accounting firm in China.	A questionnaire comprised of scales measuring whistleblowing intentions, perceptions of team leader's ethicality, likelihood of reporting, firm size, and client's irregularities.	Quantitative observational	Unclear	◦ Perceived ethicality of team leader was positively related to the likelihood of whistleblowing on client's financial frauds. ◦ Higher evaluation of the stable firm–client relationship reduced the likelihood of reporting client's irregularities. ◦ Concerns regarding future career development increased the likelihood of whistleblowing. ◦ Negative association between team size and the likelihood of reporting client's financial frauds.
Liu et al. (2015)	718 supervisors (n = 121; 90.1% were male) and employees (n = 597; 81.4% were male) of a telecommunications company in China.	A two-part questionnaire that measured authentic leadership, psychological safety, personal identification, and whistleblowing behavior.	Quantitative observational	High	◦ Authentic leadership is positively related to internal whistleblowing. ◦ Both team psychological safety and personal identification partially mediated the relationship between authentic leadership and internal whistleblowing.

Liu et al. (2016)	559 employees in China (49.5% were female).	A questionnaire comprised of scales assessing proactive personality, instrumental ethical climate, moral identity, and whistleblowing intentions.	Quantitative observational	Unclear	◦ Proactive personality was positively related to internal whistleblowing intention. ◦ Both Instrumental ethical climate and moral identity positively influence the relationship between proactive personality and external whistle-blowing intention.
Liyanarachchi and Newdick (2009)	51 undergraduate accounting students from a university in New Zealand (28 males and 23 females).	A questionnaire comprised of a task that varied according retaliation consequences (strong or weak) and questions assessing whistleblowing likelihood and moral reasoning scale.	Quantitative experimental	Unclear	◦ Individuals with higher levels of moral reasoning are more likely to blow the whistle than those with lower levels. ◦ Whistleblower's sex influences the relationship moral reasoning and whistleblowing intentions. Specifically, the effect of moral reasoning on whistleblowing intentions was greater for female participants. ◦ Experiencing weaker levels of retaliation for whistleblowing increased the likelihood of whistleblowing.
Liyanarachchi and Adler (2011)	98 accountants in Australia (39 females, 50 males, 9 unidentified).	Participants were randomly assigned to one of two conditions that varied retaliation level (weak or strong). The participants were presented with hypothetical scenarios with questions focused on whistleblowing likelihood.	Quantitative experimental	Unclear	◦ For accountants aged 25 to 34 years, males were more likely to blow the whistle. ◦ For accountants between 35 and 44 years of age, they were not only more likely to blow the whistle when there was retaliation but tend to be more willing to do so when the retaliation involved a direct personal loss. ◦ For accountants that were 45 years or older, females' whistleblowing intentions declined as the retaliation threat increased. As for males, changes in retaliation threat had little impact on their whistleblowing intentions.

Lowe et al. (2015)	54 M.B.A. students from a university in the U.S. (31% were female).	Participants were presented with a scenario that varied according to sub-certification of financial results (present or absent) and fraud discovery timing (before filing or after filing). The participants were asked to indicate the whistleblowing intentions, personal responsibility, management responsiveness, seriousness, general perceptions of the wrongdoing, accountability, and personal cost.	Quantitative experimental	Unclear	◦ The presence of a sub-certification process reduced whistleblowing intentions. ◦ Personal responsibility partially mediated the relationship between sub-certification and whistleblowing intentions.
Lyndon et al. (2012)	120 obstetricians and registered nurses at two U.S.-based hospitals (108 females and 6 males).	A questionnaire comprised of scenarios and questions assessing potential harm and likelihood of speaking up, along with measures of safety climate, teamwork climate, disruptive behavior, work stress, and personality traits of bravery and assertiveness.	Quantitative observational	Low	◦ Communication quality was positively related to the likelihood to speaking up about potential harm to patients. ◦ Exposure to disruptive behavior, frequent exposure to rudeness and intimidation, and feeling intimidated by physicians were negatively related to the likelihood of speaking up. ◦ After controlling for bravery and assertiveness, a higher perception of harm, respondent role, specialty experience, and location predicted the likelihood of speaking up.
MacGregor and Stuebs (2014)	79 postgraduate accounting students from a U.S.-based university (47% were male).	A questionnaire comprised of scenarios with questions focused on assessing whistleblowing attitudes.	Quantitative observational	Unclear	◦ Awareness, community, and moral competence dimensions most influence the willingness to remain silent. ◦ The importance of these factors is associated with the severity of the rule-violation. Awareness and moral competence are more important factors with clear, severe rule violations. Community influences and personal concerns become more important for less severe and more ambiguous rule violations.

MacNab et al. (2007)	1187 participants from Canada (n = 476; 40% were female), Mexico (n = 248; 40% were female) and the U.S. (n = 463; 43% were female).	A questionnaire that measured culture and whistleblowing intentions.	Quantitative observational	Low	◦ Uncertainty avoidance was positively related to both internal reporting and whistleblowing. ◦ High power distance discouraged internal reporting among U.S. and Canadian individuals, but not Mexican individuals.
MacNab and Worthley (2008)	939 individuals from Canada (n = 476; 40% were female) and the U.S. (n = 463; 43% were female).	A questionnaire that measured self-efficacy and internal whistleblowing propensity.	Quantitative observational	Low	◦ Self-efficacy influenced the propensity to blow the whistle internally.
Mbago et al. (2018)	127 staff of procuring and disposing entities in Uganda (33% were female).	The quantitative data was collected using a questionnaire assessing legitimacy and whistleblowing intentions. The qualitative data was collected through an in-depth interview.	Mixed Methods observational	Unclear	◦ Legitimacy is a significant predictor of whistleblowing intentions and behavior.
McCutcheon (2006)	77 employed adults from the U.S. (35 females, 42 males, and 1 unidentified).	This study was divided into two parts. First, the participants completed a survey containing scales assessing compliance towards supervisor directives, submissiveness to authority, self-righteousness, social desirability, and whistleblowing. Second, the participants watched three videos and answered questions about the ethicality of the observed behaviors.	Quantitative observational	Unclear	◦ None of the personality scales predicted whistleblowing intentions.
McManus et al. (2012)	156 accounting students from two Australian universities (80 females, 61 males, and 15 unidentified)	The participants completed either an internet-based or in-class textbook ethics instruction. At the end, they completed a questionnaire containing whistleblowing-related ethical dilemmas and questions measuring decision-making, ethical judgement, moral equity, relativism, and contractualism.	Quantitative experimental	High	◦ Exposure to a web-based ethics instruction module increased the likelihood of whistleblowing when compared the traditional in-class textbook ethics instruction approach.
Miceli et al. (1991)	653 Directors of Internal Auditing in	A questionnaire that assessed the details pertaining to an observed wrongdoing,	Quantitative observational	High	◦ Potential whistleblowers may not report wrongdoings if they had negative

	North America (86.3% were male).	along with pay satisfaction, personal job performance, moral reasoning, and organizational commitment, and bureaucratic climate.			evaluation of their own job performance, received a lower salary, or perceived their employer as highly bureaucratic. ◦ The likelihood of whistleblowing externally increased when there was perceived harm to the public or a peer by the wrongdoing, the wrongdoing involved theft by relatively low-level employee, there were few other observers, or the organization was highly regulated.
Miceli et al. (2012)	3288 military and civilian employees from a US military base.	A questionnaire that assessed perceived organizational support, perceptions of the distributive and procedural justice of whistle-blowing channels, and prosocial personality.	Quantitative observational	Low	◦ Whistleblowing is positively associated with strength of evidence, observer leverage, and proactive personality ◦ Whistleblowing is negatively associated with co-worker invalidation of wrongdoing for those employees who observe uncorrected or unreported wrongdoing.
Miceli et al. (1991)	295 students at a U.S.-based university (140 females and 155 males).	This experiment consisted of two parts. During the first part, the participants completed a questionnaire that measured their locus of control and moral judgment. For the second part, the participants were asked to complete a task. However, prior to its administration, the participants were asked informally by a confederate to adjust their responses to fit the hypothesis. The content of this message varied according to the threatened retaliation (high or low). After the completion of the task, a questionnaire was administered by another confederate asking the participants to	Quantitative experimental	Unclear	◦ Males were more likely than women to blow the whistle. ◦ Individuals with lower moral development scores were more likely to blow the whistle than those with higher scores. ◦ Whistleblowing behavior occurred when there were more observers of wrongdoing, versus few observers.

		indicate their whistleblowing intentions and conformity.			
Miceli and Near (1984)	8587 U.S. federal government officials.	The 1980 US Merit Systems Protection Board survey.	Quantitative observational	Low	◦ Those individuals who blow the whistle internally were more likely to be highly educated supervisors and/or employees in positions where whistleblowing was role-prescribed, had a strong approval of whistleblowing, more likely to report that knowing others would not think badly of them would encourage them to blow the whistle, and were less convinced that anonymity would encourage them to blow the whistle than were other employees. ◦ External whistleblowers were less likely to be in supervisory positions, less likely to believe that anonymity, approval of other organization members, and financial incentives would encourage them to blow the whistle, believed that they had more knowledge of where to report wrongdoing, were more likely to believe that knowing the organization would take action on their complaint would motivate them, and were more approving of whistleblowing than were other organization members.
Miceli and Near (1985)	8587 U.S. federal government employees.	The 1980 US Merit Systems Protection Board survey, plus archival data and aggregate measures of organizational climate.	Quantitative observational	Low	◦ Strength of evidence, serious wrongdoings, being personally affected by the wrongdoing increased the likelihood of whistleblowing. ◦ For wrongdoings that were serious, the organization depended upon, and threatened with retaliation, observers

					were more likely to blow the whistle externally.
Miceli and Near (1988)	4897 U.S. federal government employees.	The 1983 US Merit Systems Protection Board survey.	Quantitative observational	Low	◦ Higher level professional staff were more likely to blow the whistle. ◦ An observer with a more positive job response was more likely to blow the whistle. ◦ Males were more likely to blow the whistle. ◦ Whistleblowers were more likely to members of larger work groups. ◦ Organizational responsiveness was positively associated with whistleblowing.
Milliken et al. (2003)	40 M.B.A. students from a university in the U.S.	An in-depth interview exploring the level of comfort speaking with a superior and others about problems or issues in their current employer.	Qualitative observational	High	◦ Reasons that discouraged whistleblowing were the fear of being labelled or viewed negatively, fear of damaging a relationship, feelings of futility, fear of retaliation or punishment, concerns about the negative impact on others, lack of experience and/or tenure, organizational characteristics (hierarchical structure and unsupportive culture), and a poor relationship with superior.
Moore and McAuliffe (2010)	152 nurses in Ireland.	A questionnaire that assessed experiences and attitudes to reporting poor care.	Quantitative observational	Unclear	◦ The major factors discouraging whistleblowing fears of retribution, not wanting to cause trouble, not being sure if reporting an incident is the right thing to do, and hurting a colleague.
Moore and McAuliffe (2012)	152 nurses in Ireland.	A questionnaire that assessed experiences and attitudes to reporting poor care.	Quantitative observational	Unclear	◦ The major factors discouraging whistleblowing fears of retribution, not wanting to cause trouble, and not being sure if reporting an incident is the right thing to do.

Nawawi and Salin (2018)	63 employees of a large company (35 females and 28 males).	A questionnaire that consisted of scenarios and questions that measured whistleblowing intentions.	Quantitative observational	High	◦ Executive-level employees were more likely to blow the whistle than those a non-executive position. ◦ Seriousness of the wrongdoing was positively related to whistleblowing intentions.
Nayir et al. (2018)	732 private (n = 327; 64.2% were male) and public sector (n = 405; 79.5% were male) employees in Turkey.	A questionnaire that measured ethical values and whistleblowing intentions.	Quantitative observational	Low	◦ Idealism was positively related to internal whistleblowing and negatively associated with anonymous whistleblowing intentions. ◦ Relativism was positively related to external and anonymous whistleblowing intentions. ◦ More relativistic private sector employees were more likely to prefer external whistleblowing and less likely to prefer internal whistleblowing.
Near et al. (1993)	8587 U.S. federal government employees	1980 U.S. Merit Systems Protection Board Survey	Quantitative observational	Unclear	◦ Knowledge about whistleblowing channels was positively related to the incidence of whistleblowing.
Near et al. (2004)	3288 employees of a military based in the U.S.	A questionnaire that assessed types and characteristics of wrongdoings observed, whistleblowing behaviors, reasons for not reporting, and retaliation experienced.	Quantitative observational	High	◦ Observed wrongdoings involving mismanagement, sexual harassment, or unspecified legal violations were more likely to blow the whistle than those that involved stealing, waste, safety problems, or discrimination. ◦ Primary reason for discouraging whistleblowing was that the observers thought nothing could be done to rectify the situation.
Nurhidayat and Kusumasari (2019)	5 whistleblowers along with document and regulations pertaining to whistleblowing in Indonesia.	In-depth interviews and a document analysis	Qualitative observational	High	◦ The attitude of whistleblowers is an important factor influenced whistleblowing intention or action. ◦ Self-integrity, self-confidence, professionalism, and passion for one's occupation were factors that influenced whistleblowing

Oelrich (2019)	39 university students (48.7% were female).	A multistage experiment where the participants had to decide on the monetary value (i.e., payoff) that would make the two presented choices indifferent. At one stage of the experiment, the participants were asked for their whistleblowing intentions with respects to answer provided previously.	Quantitative experimental	Unclear	◦ Whistleblowing intentions is more strongly decreased by monetary losses than increased by monetary gains.
Olesen et al. (2019)	21 researchers from universities in Malaysia.	A semi-structured interview focused on experiences with research misconduct.	Qualitative observational	High	◦ Factors discouraging whistleblowing were the lack of protection of whistleblower's identity, fear of retaliation, close relationship with wrongdoer, the tedious investigative process, and the notion of avoiding confrontation.
Omotoye (2017)	22 employees from a district council in Botswana.	A multi-methods questionnaire that assessed whistleblowing perceptions and reporting of corrupt activities.	Mixed Methods observational	High	◦ Factors encouraging whistleblowing were identity protection, protected from retaliation, if the wrongdoing posed a threat to people's lives or suppresses social justice. ◦ Factors discouraging whistleblowing were absence of a whistleblowing policy that protects whistle-blowers, fear of losing job, and fear of punishment.
Park et al. (2008)	159 students from a U.S.-based university (55% were female)	Participants were presented with one of four scenarios that varied according to which party was responsible for the fault (external or internal) and time urgency (high or low). The participants were asked questions that willingness to blow the whistle, perceived fault responsibility, and perceived time urgency.	Quantitative experimental	Unclear	◦ The assessment of personal responsibility to report had a direct positive effect on the willingness to report bad news. ◦ The assessment of whether the status ought to be reported had an indirect positive influence on reporting bad news through the assessment of personal responsibility to report. ◦ Fault responsibility exerted both direct and indirect influence on willingness to report bad news, ◦ Time urgency exerted an indirect

					influence on willingness to report bad news.
Park and Keil (2009)	250 students at a university in the U.S. (45% were female).	Participants were presented with one of eight scenarios that varied according to the organizational structures/policies (conducive or non-conducive), managerial communication practices (open or closed), and the degree of demographic dissimilarity between employees and top managers (similar or dissimilar). The participants were asked to indicate their perceptions of the climate of silence, whistleblowing intentions, whether negative information should be reported, and personal responsibility to reporting information.	Quantitative experimental	Unclear	◦ Climate of silence influenced whistleblowing intentions directly and indirectly (through the assessment of whether wrongdoing should be reported and personal responsibility to report). ◦ Organizational structures/policies, managerial practices, and degree of demographic dissimilarity between employees and top managers influenced whistleblowing intentions through climate of silence.
Park et al. (2009)	155 undergraduate students at a U.S.-based university (55% were female).	In one of the four conditions, the participants were presented with a scenario that varied on the scope of impact (high vs low) and type of impact (bodily harm vs financial loss), then asked about their willingness to report bad new, perception of whistleblowing impact, whether the information ought to be reported, personal responsibility of reporting, personal morality, and willingness to communicate.	Quantitative experimental	Unclear	◦ The perceived impact of wrongdoing indirectly influenced willingness to blow the whistle through the assessment of whether the status ought to be reported ◦ Both morality and personal responsibility to report directly affected whistleblowing intentions. ◦ Willingness to communicate had no effect on whistleblowing willingness.

Park and Blenkinsopp (2009)	296 police officers in South Korea (217 males and 79 females).	A questionnaire that assessed whistleblowing intentions, attitudes, subjective norms, and perceived behavioral control.	Quantitative observational	High	◦ Attitudes towards whistleblowing, subjective norms, and perceived behavioral control affected internal whistleblowing intentions. ◦ Subjective norms affected external whistleblowing intentions.
Park et al. (2005)	343 public officials in South Korea (67% were male).	A questionnaire that measured whistleblowing attitudes and intentions, Confucian ethical beliefs, individualism, and collectivism.	Quantitative observational	Low	◦ Confucian ethics had an influence on internal and external whistleblowing intentions. Specifically, father-son affection had a negative effect on intentions, while the distinction between husband and wife roles had a positive effect on intentions. ◦ Horizontal collectivism had positive effects on internal and external whistleblowing.
Perry et al. (1997)	434 members of an organization focused on furthering education in Women's Studies (426 females and 8 males). 8523 employees of U.S. federal government.	One instrument was a questionnaire presenting a sexual assault scenario with questions assessing power position, personal power, and organizational efficacy. Another instrument in this study was the 1988 U.S. Merit Systems Protection Board survey.	Quantitative observational	Low	◦ Position power and personal power of the victim and the organization's efficacy at handling with previous incidents were positively associated with the whistleblowing intentions.
Pillay et al. (2012)	250 senior, middle and lower-level management/administration personnel from government agencies in South Africa (73 females and 177 males).	A questionnaire that measured the influence of factors on whistleblowing, perception of value to organization, and personal relationships in an organization.	Quantitative observational	Low	◦ Factors encouraging whistleblowing were professional ethics, personal morality and obedience to organizational policy. ◦ Factors that discouraged Factors that discourage whistleblowing were a strong legal, a strong internal control system, family priorities, and risk aversion. ◦ The societal impact of the wrongdoing increased the likelihood of whistleblowing. ◦ Perceptions of positive

					organizationalvalues positively affected whistleblowing intention.
Pillay et al. (2018)	387 national level of government services employees in South Africa (n=250; 177 males and 72 females) and Mauritius (n=137; 93 males and 44 females).	A questionnaire that assessed cultural values, ethics and morality, cultural reluctance, fear of retaliation, confidence in organizational systems, and whistleblowing intentions.	Quantitative observational	Low	◦ Factors discouraging whistleblowing include morality and ethics, fear of retaliation, levels of faith in organizational reporting systems, and an uncertainty avoidance cultural reluctance. ◦ Barriers to whistleblowing were stronger in Mauritius than South Africa.
Pillay et al. (2017)	200 employees of government organizations in South Africa (103 females and 97 males).	A questionnaire that measured whistleblowing intentions, perceptions of personal relationships with the organization, and the relationship between culture and whistleblowing.	Quantitative observational	High	◦ Factors that encouraged whistleblowing were that the wrongdoing violated personal morality or social justice, and that whistleblowing behavior was consistent with organizational policy. ◦ Factors that discouraged whistleblowing were a limited amount of available time, existence of a strong legal system, fear of retaliation, fear of media attention, loyalty, risk aversion, high power distance, uncertainty avoidance, and value success over quality of life.
Pope and Lee (2013)	97 MBA students at U.S.-based university (51% were male).	In one of the four conditions, the participants were presented with a scenario that varied on the reporting channel (anonymous vs non-anonymous) and financial reward (yes vs no). The participants were asked to indicate their whistleblowing intentions.	Quantitative experimental	Unclear	◦ The existence of a financial reward increased whistleblowing intentions. ◦ The availability of an anonymous reporting channel does not affect whistleblowing intentions.
Previtali and Cerchiello (2018)	365 reports of public administrations from hospitals, health agencies, universities, and municipalities in Italy.	Annual reports submitted to the National Anti-Corruption Agency.	Quantitative observational	Unclear	◦ The presence of a proceduralized system increased the likelihood of whistleblowing.

Proost et al. (2013)	278 employees in organizations in the Slovak Republic (67% were female).	A questionnaire comprised of a scenario with questions assessing whistleblowing intentions, supervisor procedural fairness, and moral identity.	Quantitative observational	Low	◦ Moral intensity was positively associated with whistleblowing intentions. ◦ High supervisor procedural fairness influenced the relationship between moral intensity and whistleblowing intentions.
Radulovic and Uys (2019)	405 undergraduate students at a university in South Africa.	A questionnaire that assessed whistleblowing intentions for academic dishonesty, general honesty, academic honesty, justification for dishonest behavior, and justification for reporting/non-reporting.	Quantitative observational	Unclear	◦ Fear of retaliation from wrongdoers decreased the whistleblowing likelihood for severe incidences. ◦ Whistleblowing intentions were positively related to general honesty, academic honesty, and adherence to principles.
Reckers-Sauciuc and Lowe (2010)	65 M.B.A. students at two universities in the U.S.	A questionnaire that consisted of ten scenarios with questions assessing whistleblowing intentions, tolerance to ambiguity, and dispositional affect.	Quantitative experimental	Unclear	◦ Negative (specifically sadness and fear) and positive affect (specifically happiness and arousal) influenced whistleblowing.
Rennie and Crosby (2002)	500 medical students at a university in Scotland. Study 1: 461 medical students at a university in Scotland. Study 2: Between 25 and 40 medical students at a university in Scotland.	Study 1: A questionnaire that consisted of scenarios and questions assessing whistleblowing attitudes and intentions. Study 2: Focus groups that addressed the reasons for and against whistleblowing.	Mixed Methods observational	Unclear	◦ Reasons for not whistleblowing were camaraderie, retaliation from peers, behaviorsis accepted despite being wrong, self-preservation, not responsible, no clear guidelines, futility, requirement of proof, and uncertain about what constitutes misconduct. ◦ Reasons for whistleblowing were consequences for patients, maintenance of standards, wrongdoer needing help, personal morality, being vindictive to wrongdoer, and to punish the wrongdoer.
Richardson et al. (2012)	259 members of social Greek organizations (e.g., fraternity, sorority) in the U.S. (49.8% were female).	Participants were presented with one of three scenarios that varied on the severity level of hazing (not severe, moderately severe, or most severe). The participants were asked to indicate behavioral beliefs, outcome evaluations,	Quantitative experimental	Unclear	◦ Attitudes towards whistleblowing and subjective norms was positively related to whistleblowing intentions. ◦ Level of severity influenced whistleblowing intentions.

		attitude toward the behavior, normative beliefs, motivation to comply, subjective norms, and whistleblowing intentions.			
Richardson et al. (2008)	330 public school teachers in the U.S. (88% were female).	A questionnaire comprised of scenarios and questions measuring communication confidence, policy attitudes, supervisor receptivity, and participatory culture.	Quantitative observational	High	◦ Together, communication competence, policy attitude, supervisor receptivity, and participatory culture were positively related to whistleblowing intentions. ◦ Participatory culture was the primary contributor to the composite, while communication competence and policy attitude were moderate contributors.
Robertson et al. (2011)	190 individuals with auditing experience (109 males and 81 females).	A questionnaire comprised of a scenario that varied on the likeability of the wrongdoer (more or less likeable) and performance reputation (high vs low) along with questions measuring whistleblowing intentions.	Quantitative experimental	Unclear	◦ Likeability reputation is a significant determinant of whistleblowing intention. ◦ Performance reputation was marginally significant effect on whistleblowing intentions. ◦ The whistleblowing intentions were greatest whenwrongdoers were less likeable and a poor performer.
Robinson et al. (2012)	138 members of an internal auditor's association in the U.S. (59% were male).	Participants were presented with six scenarios that involved either financial statement fraud or theft of assets. The financial statement varied on the materiality of the statement. The theft scenarios varied whether the wrongdoer is aware that the potential whistleblower has knowledge of the theft (yes or no) and if others were aware (yes or no). For each scenario, the participants were asked to the likelihood that they would blow the whistle using an anonymous hotline and of other whistleblowing through anonymous hotline.	Quantitative experimental	Unclear	◦ Whistleblowing was less likely to occur for financial statement fraud (vs theft), for immaterial financial statement fraud (vs material), when the wrongdoer is aware that thepotential whistleblower has knowledge of the wrongdoing, and when others are not aware of the wrongdoing.

Rose et al. (2018)	115 MBA students from a U.S.-based university (43% were female).	All participants were randomly assigned to one of the four treatment conditions and presented with a scenario that varied on the form of compensation (restricted vs unrestricted stocks) and reward size (small vs large). The participants were asked to indicate their intentions to blow the whistle externally.	Quantitative experimental	Unclear	◦ Whistleblowing intentions were influenced by the interaction between size of financial rewards and the type of stock in compensation plans. ◦ Specifically, the reward size significantly influenced reporting intentions when they were paid with restricted stock but had little effect for unrestricted stock.
Rothwell and Baldwin (2006)	382 government employees and police officers from the U.S.	A questionnaire that assessed ethical climate, and whistleblowing willingness and frequency.	Quantitative observational	Unclear	◦ Supervisory status was positively related to whistleblowing intentions and whistleblowing frequency for minor wrongdoings. ◦ A mandatory reporting policy was positively related to blowing the whistle for minor, major and misdemeanor violations.
Rothwell and Baldwin (2007a)	382 police officers and state government employees from the U.S.	A questionnaire that assessed ethical climate, contextual independence, whistleblowing willingness, and frequency of whistleblowing.	Quantitative observational	High	◦ Supervisory status is the most consistent predictor of whistleblowing. ◦ A mandatory reporting policy predicted the willingness to report several violations.
Rothwell and Baldwin (2007b)	382 police officers and state government employees from the U.S.	A questionnaire that assessed ethical climate, whistleblowing willingness, and frequency of whistleblowing.	Quantitative observational	High	◦ Supervisory status is the most consistent predictor of whistle-blowing intentions and behavior. ◦ A friendship or team climate demonstrates a capacity to predict willingness to blow the whistle.
Rustiarini and Sunarsih (2017)	125 auditors from Indonesia (56.8% were male).	A questionnaire comprised of scales assessing attitudes towards whistleblowing, subjective norms, perceived behavioral control, and whistleblowing intentions.	Quantitative observational	High	◦ Perceived behavioral control was positively associated with whistleblowing intentions.

Satalkar and Shaw (2018)	33 researchers working in life science and medicine in Switzerland.	A semi-structured interview that explored on the importance of whistleblowing about scientific misconduct in their work environment and the reasons or circumstances that might deter them from doing so.	Qualitative observational	Unclear	◦ Factors that might discourage whistleblowing were hierarchical research structures, fear of retaliation and damaging professional relationships, not possessing evidence to support one's concerns/suspicions about misconduct, and prior negative whistleblowing experiences.
Scheetz and Fogarty (2019)	99 individuals with bookkeeping or accounting experience (51.5% were female).	First, participants completed a questionnaire about their preconceived beliefs about how reports of unethical conduct would be managed along with their reactions if these beliefs were broken. Second, participants were presented with a scenario that varied on the ethical climate (positive or negative) and outcomes of previous reports (strong or weak). The participants were asked to indicate their whistleblowing intentions.	Quantitative experimental	Unclear	◦ The failure to indicate a positive ethical environment increased whistleblowing intentions. ◦ A weak managerial reacts to previous reports of unethical activity increased whistleblowing intentions. ◦ Psychological contract violation mediates the relationship between previous reporting outcomes and whistleblowing intentions.
Scheetz and Wilson (2019)	107 individuals with bookkeeping or accounting experience (61.7% were male).	Participants were presented with a scenario that varied on the type of organization (for-profit vs not-for-profit) and wrongdoing (asset misappropriation and financial statement fraud). The participants completed a questionnaire measuring public service motivation, affective and normative commitment and whistleblowing intentions.	Quantitative experimental	Unclear	◦ Not-for-profit employees are more likely to blow the whistle regardless of the type of wrongdoing.
Schultz et al. (1993)	145 managers and professional staff from France, Norway, and the U.S.	A questionnaire comprised of scenarios with questions assessing seriousness, responsibility, personal cost of reporting, and likelihood of whistleblowing.	Quantitative experimental	Unclear	◦ National culture influenced whistleblowing intentions. ◦ Perceptions of responsibility and seriousness was positively related to whistleblowing likelihood. ◦ Personal cost was negatively related to whistleblowing intentions.

Seifert et al. (2014)	226 internal auditors and management accountants (52% were female).	Participants completed a survey containing of scenarios that varied on whistleblowing procedure fairness (fair vs unfair), whistleblowing process outcome fairness (fair or unfair), and management interaction fairness (fair or unfair). The participants were asked to indicate the likelihood of internal whistleblowing and trust of supervisor and organization.	Quantitative experimental	Unclear	◦ Whistleblowing intentions is significantly correlated with organizational justice (procedural, distributive, and interactive). ◦ Whistleblowing intentions is significantly correlated with organizational and supervisor trust. ◦ Trust in both the supervisor and organization mediated the process between organizational justice and the likelihood of internal whistleblowing.
Seifert et al. (2010)	447 internal auditors and management accountants (230 females and 216 males).	Participants completed a survey containing of scenarios that varied on procedural justice (fair vs unfair), distributive justice (fair or unfair), and interaction justice (fair or unfair). The participants were asked to indicate the likelihood of internal whistleblowing.	Quantitative experimental	Unclear	◦ High levels of each form of organizational justice (i.e., procedural, interactional, and justice) increased the perceived likelihood of whistleblowing.
Shawver (2008)	57 accounting students from a U.S.-based university (26 females and 31 males).	A questionnaire comprised of scenarios and questions assessing ethics and moral sensitivity, and whistleblowing intentions.	Quantitative observational	High	◦ Whistleblowing intention had a positive relationship with materiality levels. ◦ The guarantee of a job increased whistleblowing intentions.
Shawver (2011a)	40 accounting students from a U.S.-based university.	The participants completed a questionnaire at the start and the end of a twelve-week accounting ethics module/course. The questionnaire consisted of a scenario with questions assessing its ethicality and likelihood of whistleblowing to different organizations.	Quantitative experimental	Unclear	◦ Ethics training increased whistleblowing intentions.
Shawver (2011b)	157 attendees of a management accounting association meeting (91 males, 63 females, and 3 undisclosed).	A questionnaire consisted of scenarios and questions that measured moral intensity, moral judgment, and whistleblowing behavior.	Quantitative observational	High	◦ The perceived overall harm and social pressure negatively influenced whistleblowing intentions.

Sims and Keenan (1999)	86 managers from the U.S. (n = 44; 86% were male) and Jamaica (n = 42; 34% were female).	A questionnaire that measured moral perceptions for different types of wrongdoings, whistleblowing intentions, organizational and individual propensity for whistleblowing, and degree of fear of retaliation for whistleblowing	Quantitative observational	Low	∘ Whistleblowing likelihood for major fraud was greater among U.S.-based managers than Jamaican managers.
Sims and Keenan (1998)	248 business students (55% were male).	A questionnaire that consisted of scenarios with questions measuring whistleblowing responses, the impact of formal and informal policies, ideal values, supervisor expectations, job satisfaction, and organization commitment.	Quantitative observational	Low	∘ Supervisor support and informal policies were predictors of external whistleblowing. ∘ Females were less likely to blow the whistle externally. ∘ Those individuals who believe a particular ethical situation should be resolved externally were more likely blow the whistle externally when they encounter that particular situation. ∘ External whistleblowing was not predicted by formal policies, organizational tenure, age, education, satisfaction, or commitment.
Singer et al. (1998)	133 individuals. Study 1: 53 employees at a large international baking firm based in New Zealand (30 females and 20 males). Study 2: 80 undergraduate students at a university in New Zealand (34 males and 46 females).	Study 1: Participant were presented with one of two sets of scenarios that varied according to proximity (high or low). The participants were asked to assess their moral intensity, empathy for the potential victim, and whistleblowing intentions. Study 2: A questionnaire that consisted of scenarios and questions assessing moral intensity, likelihood of action, perceived fairness, overall ethicality of the decision, and the need-for-cognition.	Quantitative experimental and observational	Unclear	∘ Whistleblowing intentions had a positive relationship with empathy for the potential victim and magnitude of consequences. ∘ Whistleblowing intentions had a negative relationship with likelihood of consequences.

Smith et al. (2001)	163 students from a U.S.-based university (55% were female).	Participants were presented with one of four scenarios that varied according to the level of impact (high or low) and level of wrongdoing (high or low). The participants were asked questions that assessed personal responsibility to report, perceived impact of reporting, perception of wrongdoing, perceived risk propensity, perceived project risk, and whistleblowing intentions.	Quantitative experimental	Unclear	◦ Personal responsibility to report was negatively associated with the reluctance to blow the whistle through various internal channels. ◦ The assessment of whether the status ought to be reported had an indirect influence on the reluctance to blow the whistle through the assessment of personal responsibility to report. ◦ Perceived risk of negative consequences was negatively related to reluctance to blow the whistle through various internal and external channels.
Somers and Casal (2011)	613 management accountants in the U.S. (81% were male).	A questionnaire that measured the participants' awareness and reporting of organizational wrongdoings.	Quantitative observational	High	◦ The type of observed wrongdoing influenced the likelihood of whistleblowing.
Somers and Casal (1994)	613 management accountants (81% males).	A questionnaire that assessed awareness of organizational wrongdoing, whistleblowing intentions, and organizational commitment.	Quantitative observational	High	◦ Moderate levels of commitment were most likely to blow the whistle.
Soni et al. (2015)	157 trainee accountants at a large audit firm in South Africa (80 males and 77 females).	A questionnaire that consisted of three scenarios with questions that assessed the whistleblowing likelihood. Each scenario varied according to the state of one form of organizational justice (procedural, distributive and interactional; high or low)	Quantitative experimental	Unclear	◦ High levels of distributive, procedural and interactional justice were associated with an increased likelihood of whistleblowing.
Stansbury and Victor (2009)	1417 individuals	2003 National Business Ethics Survey	Quantitative observational	High	◦ Perceptions of informal prosocial control had a relationship with whistleblowing.
Stikeleather (2016)	118 individuals in the U.S.	Participants were assigned randomly to a fixed role of either an employer or a worker in one of three conditions (no whistleblowing, rewarded whistleblowing, and unrewarded whistleblowing). In all conditions, the employers are tasked with offering a	Quantitative experimental	Unclear	◦ Offering a financial reward for internal whistleblowing increased the rate of reporting wrongdoings. ◦ The amount of compensation paid and the strength of moral convictions about whistleblowing influenced whistleblowing intentions.

		wage to the worker, who can either could either accept or reject it. In the rewarded and unrewarded whistleblowing conditions and when the wage is accepted, the worker could observe a theft of revenue and then offered the opportunity to report it.			
Stöber et al. (2019)	1005 managers from a multinational European company.	After randomly assignment to one of two conditions (code and training vs no code and no training), the participants were presented with a series of ethical dilemmas, where they had to decide how to respond.	Quantitative experimental	Unclear	◦ A compliance program code increased whistleblowing intentions.
Su et al. (2010)	549 accounting students from universities in the U.S. (n=286; 60.3% were female) and Taiwan (n=263; 39.7% were female).	A questionnaire that consisted of scenarios with questions related to whistleblowing intentions and ethical attitudes.	Quantitative observational	High	◦ Members of a society described as collectivist, with high power distance, and strong uncertainty avoidance values are less likely to blow the whistle. ◦ Male are less willing to blow the whistle when there are no legal violations.
Surya et al. (2017)	90 police officers in Indonesia.	A questionnaire measuring whistleblowing intentions, perceived behavioral control, and professional commitment.	Quantitative observational	Unclear	◦ Perceived behavioral control was positively associated with whistleblowing intentions. ◦ Professional commitment was positively related to whistleblowing intentions.
Tan et al. (2003)	354 working professionals from the U.S. (n = 162; 44% were female) and Singapore (n = 192; 40% were female).	The participants were presented with one of four scenarios that varied according to organizational climate (conducive or non-conducive) and information asymmetry (sustainable or unsustainable). The participants were asked to indicate their whistleblowing intentions.	Quantitative experimental	Unclear	◦ The relationship between organizational climate and whistleblowing intentions were stronger in an individualistic (i.e., U.S.) than in a collectivistic culture (i.e., Singapore). ◦ The relationship between information asymmetry and whistleblowing intentions were stronger in a collectivistic (i.e., Singapore) than in an individualistic culture (i.e., U.S.).

Tavakoli et al. (2003)	292 managers from firms in Croatia (n = 106; 51% were male) the U.S. (n = 186; 73% were male)	A questionnaire that measured moral perceptions, likelihood of whistleblowing, organizational and personal propensity for whistleblowing, and the degree of fear of retaliation.	Quantitative observational	Low	◦ U.S. managers had stronger individual and organizational tendencies to blow the whistle, less fear of retaliation for whistleblowing, and more likely to blowing the whistle on major fraud than Croatian managers
Taylor and Curtis (2010)	120 senior auditors (50% were female).	A questionnaire comprised of scenarios with questions assessing whistleblowing intentions, perseverance of reporting intent, professional identity, locus of commitment, and moral intensity.	Quantitative observational	High	◦ Moral intensity was related to whistleblowing intentions and reporting perseverance. ◦ High levels of professional identity increased the likelihood of initially reporting a wrongdoing. ◦ Commitment to the organization influenced a whistleblower's perseverance in reporting a wrongdoing.
Taylor and Curtis (2013)	106 senior auditors based in the U.S. (57% were male).	Participants were asked to complete one of four questionnaires consisting of a scenario that varied on the dimensions of prior organizational response (responsive or unresponsive) and relative position wrongdoer (peer or superior). The participants assessed on their whistleblowing intentions and moral intensity	Quantitative experimental	Unclear	◦ Individuals are more likely to blow the whistle on their peers than on their superiors. ◦ The reporting of a superior was more likely to occur when prior organizational response was strong (vs a weak response). ◦ Males were less sensitive to variations in power distance or prior organization response than women in terms of whistleblowing intentions. ◦ Moral intensity was related to whistleblowing intentions. ◦ Power distance (peer vs superior) moderated the effect of moral intensity on whistleblowing intentions. Specifically, those individuals with a lower moral intensity are more influenced by power distance.

Taylor and Curtis (2018)	120 public accountants from the U.S. (45% were female).	A questionnaire comprised of a scenario with questions measuring whistleblowing intentions, satisfaction with mentor relationships, ethical climate, trust in whistleblowing process, and organizational commitment.	Quantitative observational	Low	∘ High quality mentoring relationship increased whistleblowing intentions. ∘ Trust in organizational response to reporting and affective organizational commitment mediated the relationship between mentor relationship quality and whistleblowing intention. ∘ The caring dimension of ethical climate was related to whistleblowing intentions. ∘ Trust in organizational response to reporting and affective commitment mediated in the relationship between caring dimension of ethical climate and whistleblowing intentions.
Taylor (2018)	10685 employees in the Australian Public Service in 2013 (n = 7639) and 2016 (n = 3046)	Australian Public Service Employee Census from 2013 and 2016.	Quantitative observational	Low	∘ Reasons for not blowing the whistle internally included the organization might ignore their reporting, the organization failed to take corrective action against ethical violations, and a fear of retaliation/reprisal. ∘ Perception of trustworthiness of senior managers was positively related to internal whistleblowing.
Taylor (2019)	3495 respondents who witnessed corruption in the past 12 months (57.6% were female).	2016 Australian Public Service Employee Census.	Quantitative observational	Low	∘ Most types of corruption were found to be positively related to internal whistleblowing, with exception of theft of official assets, cronyism, and nepotism. ∘ Whistleblowing was found to be less prevalent in a hierarchy organizational culture (i.e., rules and procedures govern what people do). ∘ Individuals who have blown the whistle (active observers) after witnessing someone else being bullied were three times more likely to internally report

					corruption than an inactive observers of bullying.
Teichmann (2019)	35 public officials who committed corruption and 35 anti-bribery experts from Austria, Germany, Liechtenstein, and Switzerland.	Informal and formal interviews.	Qualitative observational	High	◦ Significant financial reward increased whistleblowing.
Thoroughgood et al. (2011)	302 undergraduate students from a U.S.-based university (218 females and 84 males).	Participants were randomly assigned to one of 12 conditions that varied on the dimensions of organizational climate (tolerant or intolerant), leader sex (male or female), and organizational performance (negative, average, and positive). The participants were assessed on their perception of aversive leadership, whistleblowing intentions, moral intensity, trait cynicism, need for leadership, locus of control, and ambivalent sexism.	Quantitative experimental	Unclear	◦ Aversive leaders elicited greater whistle-blowing intentions in financially unstable organizations that had ethical climates that were intolerant to negative behaviors of leaders.
Trevino and Victor (1992)	721 individuals. Study 1: 478 business students from a college (270 males and 208 females). Study 2: 115 students with fast-food experience (61 males and 54 females).	Study 1 and 2: A questionnaire that consisted of a scenario with questions related to perceptions of whistleblowing behavior, the ethicality and likability of the whistleblower, emotional reactions to whistleblowing, and whistleblowing intentions. A different scenario was used in study 1 and 2. Study 3: A questionnaire that measured	Quantitative observational	Unclear	◦ Whistleblowing intentions increased with the establishment of a code of conduct that makes whistleblowing the responsibility of group members. ◦ Whistleblowing intentions increased when other group members suffered negative consequences from the wrongdoing.

	Study 3: 128 fast-food restaurant employees (58% were female).	group interests, role responsibility, evaluation of peer reporting, and whistleblowing intentions.			
Trongmateerut and Sweeney (2013)	302 accounting students from universities in the U.S. (n=78; 45 males and 33 females) and Thailand (n=224; 206 females and 17 males).	A questionnaire that consisted of a scenario with questions that measured whistleblowing subjective norms, attitudes, and intentions.	Quantitative experimental	High	◦ Subjective norms for whistleblowing not only had a direct effect on whistleblowing attitudes but also a direct and indirect (via attitudes) effect on whistleblowing intentions. ◦ The whistleblowing intentions of participants from a collectivist culture were more strongly influenced by subjective norms for whistleblowing.
Tumuramye et al. (2018)	222 employees of procuring and disposing entities in Uganda (56.3% were female).	A questionnaire that assessed ethical climate, whistleblowing expectancies, and whistleblowing support institutions.	Quantitative observational	High	◦ The whistleblowing supporting institutions and ethical climate were significant predictors of whistleblowing intentions and behavior. ◦ Whistleblowing expectancy was a significant predictor to whistleblowing intentions and behavior.
Ugaddan and Park (2019)	8000 respondents who observed wrongdoings.	The Merit Principles Survey (MPS) 2010 questionnaire.	Quantitative observational	High	◦ Trustful administrative leadership was associated with whistleblowing intentions. ◦ Procedural justice was positively associated with whistleblowing intentions. ◦ Organizational fairness may increase whistleblowing likelihood. ◦ A positive relationship between public service motivation and whistleblowing intentions. ◦ The relationship between whistleblowing intentions and both trust in leadership and organizational justice was partially mediated by public service motivation and extrinsic motivation.

Victor et al. (1993)	169 fast food restaurant employees (68% were female).	A questionnaire that measured whistleblowing intentions and behavior, perceptions of justice, role responsibility, and interests of group members.	Quantitative observational	High	◦ Whistleblowing intentions were positively associated with procedural justice evaluations, role responsibility, and interests of group members. ◦ Whistleblowing behavior was associated with whistleblowing intentions and retributive justice evaluations.
Vincent et al. (1999)	198 obstetricians (n = 42) and midwives (n = 156).	A questionnaire that assessed knowledge of incident-reporting system, staff estimates of whistleblowing likelihood, and the potential reasons for not reporting.	Quantitative observational	High	◦ Reasons for not whistleblowing were fears that junior staff would be blamed, high workload, and the belief that the circumstances or outcome of a particular case did not warrant a report despite it being designated as reportable.
Wainberg and Perreault (2016)	68 university students with significant auditing experience.	Participants were presented with one of four scenarios that varied on the dimensions of explicitness of mentioning protection from retaliation (explicit or non-explicit) and job security (high or low). The participants were asked to indicate the likelihood of whistleblowing and the perception of risk.	Quantitative experimental	Unclear	◦ The likelihood of whistleblowing when the retaliation protection policy was explicitly stated was lower than the whistleblowing likelihood in the non-explicit condition.
Wen and Chen (2016)	172 managers enrolled in business courses a university in China (89 males and 83 females).	Two questionnaires separated by 4 months. The first questionnaire assessed ethical leadership of direct supervisor and power distance. The second questionnaire measured moral intensity and whistleblowing intentions.	Quantitative observational	Low	◦ Ethical leadership was positively related to whistleblowing intention. ◦ Moral identity mediated the relationship between ethical leadership and whistleblowing intentions ◦ Power distance orientation positively moderated the relationship between ethical leadership and whistleblowing intentions.
Whitaker et al. (2014)	9 national level athletes from track and field (n=4) and rugby league (n=5; 2 females and 7 males).	A semi-structured interview that focused on the athletes' perceptions about reporting doping.	Qualitative observational	Unclear	◦ Negative emotions had a positive influence on their willingness to blow the whistle. ◦ Factors discouraging willingness to report doping were lack of knowledge,

					the potential repercussions, feelings of helplessness to stop others, and loyalty to teammates and their sport.
Wilson et al. (2018)	235 individuals (54% were female).	Participants were presented with a scenario that varied on the dimensions of firm tenure (new, 2, 7, and 15 years) and auditor familiarity (met or never met). The participants were asked to indicate whistleblowing intentions and level of trust in the firm and the auditor.	Quantitative experimental	Unclear	◦ Trust in an individual and trust in a firm were positively associated with whistleblowing intentions. ◦ The relationship between of auditor familiarity and whistleblowing intentions was mediated by auditor trust.
Xu and Ziegenfuss (2008)	201 internal auditors (77 females and 108 males).	A questionnaire comprised of a scenario in which an internal auditor discovered the occurrence of wrongdoing and a scale that measure of an individual's ethical reasoning and judgement. For the scenario, the participants were asked to indicate if the individual should report the wrongdoing and predict whether they would report. The situations in the scenario were modified to include details about the employer's reward systems.	Quantitative experimental	Unclear	◦ The availability of monetary incentives and employment protections encouraged whistleblowing. ◦ Whistleblowers with relatively low levels of moral reasoning are more likely to be influenced by the monetary incentives than those with relatively high levels of moral reasoning.
Yu et al. (2019)	1040 food processing and food service employees in the U.S. and Canada (42% were female).	A questionnaire that measured job satisfaction, food safety self-efficacy, perceived food safety training effectiveness, and food safety whistleblowing.	Quantitative observational	Low	◦ Perceived effectiveness of training increased food processing employees' whistleblowing by increasing food safety self-efficacy. ◦ Perceived effectiveness of training increased food service employees' whistleblowing by increasing job satisfaction. ◦ Males were more likely to blow the whistle than females with the same level of food safety self-efficacy and job satisfaction.

Zarefar and Zarefar (2017)	123 professionals (52 auditors and 71 non auditor).	A questionnaire that measured the participants' ethics and locus of control.	Quantitative observational	High	◦ Locus of control was negatively associated with whistleblowing intentions ◦ Ethics was positively related to whistleblowing intentions. ◦ An individual's profession moderated the relationship between whistleblowing intentions and both ethics and locus of control.
Zhang et al. (2016)	83 supervisors (74.2% were male) and 412 (52.2% were male) subordinates from a bank in China.	For leader–member dyads, a questionnaire was distributed that assessed ethical leadership, collective moral potency, ethical climate, personal identification, and whistleblowing.	Quantitative observational	High	◦ Ethical leadership was positively associated to internal whistleblowing. ◦ After controlling for ethical climate, collective moral potency and personal identification with a superior mediated the relationship between ethical leadership and internal whistleblowing.
Zhang et al. (2013)	130 M.B.A. students (87 males and 43 females).	Participants were presented with a scenario that varied on the dimensions of the anonymous hotline administrator (internal or external) and previous whistleblowing outcomes (negative or positive). The participants were asked to indicate their proactivity trait and whistleblowing intentions.	Quantitative experimental	Unclear	Externally administered hotline resulted in higher whistleblowing intentions when previous whistleblowing outcomes were negative. Individuals that were more passive and less proactive had a greater likelihood of whistleblowing to an externally administered hotline. High proactive individuals were more likely to blow the whistle than low proactivity individuals.
Zhang et al. (2009a)	364 bank employees from China (48.6% were female).	A questionnaire that measured whistleblowing judgment, whistleblowing intentions, organizational ethical culture, and mood.	Quantitative observational	Low	◦ Whistleblowing judgment was positively related to whistleblowing intentions. ◦ Organizational ethical culture positively moderated the relationship between whistleblowing judgment and intentions.

Zhang et al. (2009b)	364 bank employees from China (48.6% were female).	A questionnaire that measured whistleblowing judgment, whistleblowing intentions, organizational ethical culture, and mood.	Quantitative observational	Low	◦ Whistleblowing judgment was positively related to whistleblowing intentions. ◦ Organizational ethical culture positively moderated the relationship between whistleblowing judgment and intentions. ◦ Interaction between organizational ethical culture and positive mood had a moderating effect on the whistleblowing judgment and intention relationship.
Zhang (2008)	60 undergraduate business students.	After randomly assigning the participants to the role of principal and agent, the latter individuals were tasked with reporting their 'production costs' and whether a peer has overstated their costs to the former. The principal decided on the issued wages. Under one condition, the agents were able to communicate with each other before their reports, whereas in the other condition, there was no communication between agents.	Quantitative experimental	Unclear	◦ Perceived fairness of the principal and communication between peers influenced whistleblowing behavior.
Zheng et al. (2019)	371 internal auditors in China (188 males and 183 females).	A questionnaire that contained a scenario with questions assessing whistleblowing intentions, ethics, and self-construal.	Quantitative observational	High	◦ Those individuals with interdependent self-construals were less likely to engage in whistleblowing.
Zhou et al. (2018)	667 employees of organizations in China (51.1% were male).	Two questionnaires separated by 2 months. The first questionnaire assessed ethical climate, organizational identification, moral identity, and risk aversion. The second questionnaire measured whistleblowing intentions.	Quantitative observational	low	◦ Perceived ethical climate was positively related to whistleblowing intention. ◦ The relationship between perceived ethical climate and whistleblowing intentions was mediated by organizational identification and moral identity. ◦ Risk aversion negatively affected on the influence of

					organizationalidentification on the perceived ethical climate-whistleblowing intention relationship.
Zhuang et al. (2005)	159 accounting students from Canada (n = 77; 42 females and 34 males) and China (n = 82; 40 females and 42 males).	Participants were presented with one of two sets of three cases. Two of the cases varied according to the perpetrator of the wrongdoing (peer or supervisor). The participants were asked to indicate their whistleblowing intentions, seriousness of the wrongdoings, personal responsibility to report, and personal cost of reporting.	Quantitative experimental	Unclear	∘ The likelihood of blowing the whistle on a peer was higher among Chinese respondents than Canadians. ∘ Chinese respondents were more likely to blow the whistle on their peers than supervisors.
Zipparo (1999)	800 public officials from Australia.	A questionnaire that measured knowledge of whistleblowing channels, attitudes towards reporting, and factors that deter whistleblowing.	Quantitative observational	High	∘ Factors that discouraged whistleblowing were the absence of 'sufficient' proof and the absence of protective legislation. ∘ Different groups were deterred from blowing the whistle by different circumstances.

Table 3. Dimensions, Higher Order, and Lower Order Themes

Dimension	Higher-Order Theme	Lower-Order Theme
Personal Factors	Demographics	Age Gender Culture Education Religion Experience Work History Managerial Experience Duration with Organization
	Morality	Moral Intensity Moral Identity Moral Reasoning Moral Competence Moral Perception Moral Conviction Moral Development Moral Obligation Moral Courage Moral Disengagement
	Attitudes	Whistleblowing Policy Wrongdoing Money
	Personality	Honesty Risk Aversion Locus of Control Traits Personal Disposition Mood Individual Propensity
	Beliefs	Self-Confidence Self-Efficacy Perceived Behavioral Control
	Emotion	Anger Anxiety Hopelessness
	Ethical	Personal Ethics Legitimacy Adherence to Principals Ethical Training Professional Ethics

	Feelings towards organization	Trust Commitment Intentions to stay/leave Role identity Value of whistleblowing within organization
	Responsibility	Personal Responsibility Role responsibility Displacement of responsibility Need to correct wrongdoing Justice
	Job	Job Security Job Satisfaction Workload Role Benefits Salary Performance Evaluation
Organizational Factors	Characteristics	Structure Size Unionization Type of industry Stability Reputation Professional Standards Identification Dependence on Wrongdoing Attachment to Project
	Leadership	Ethical Management Managerial Reactions Communication Manager Practices Dissimilarity Between Manager and Employee
	Moral Code	Ethics Climate Regulations
	Protection	Legal protection Previous Incidents Policies/procedures
Costs and Benefits	Costs	Perceived Personal Costs
	Benefits	Financial Incentives Personal Societal

		Benefit-to-cost differential
Outcome Expectancies	Organizational	Impact
		Effectiveness
		Expectancy
	Personal	Future Career
		Hostility
The Offence	Characteristics	Severity
		Type
		Frequency
		Intentionality
		Duration
Reporting	Mechanisms	Anonymized vs. Non-anonymized Reporting System
		Channel of communication
		Processes
		Opportunities
The Wrongdoer	Demographics	Status/Rank
		Fault
		Reputation
	Relationship	Status/Rank of Whistleblower in relation to wrongdoer
		Wrongdoer's Knowledge of Potential Whistleblower
		Relationship with Wrongdoer
	Purposes	Punish/Hurt Wrongdoer
		Help
Social Factors	Group	Presence of bystanders
		Cohesion
		Interests
		Social Confrontation
		Peer Invalidation of Wrongdoing
		Approval
	Support	Social Support
		Supportive Communication among Peers
	Norms	Cultural Norms
		Social Norms
		Subjective