

FOR THE GREATER GOOD: THE SOCIODEMOGRAPHIC CHARACTERISTICS OF THE WHISTLEBLOWERS, THE HOTLINE CHANNEL ADMINISTRATION AND WHISTLEBLOWING INTENTION

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ABSTRACT

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As an effective tool for disclosing misconduct in organizations, whistleblowing has been championed worldwide. A well-designed whistleblowing mechanism and proper process will enhance the integrity of organizations and society. This study examines bystanders' sociodemographic characteristics, internal whistleblowing choices, and reporting intentions. The paper-and-pencil survey research method was conducted among 109 administrative employees working for a company located in Thailand. The findings reveal that a hotline externally administered is preferred to an internally administered channel due to the concern for whistleblower protection and non-disclosed identity. Age and marital status were significantly associated with a positive experiential attitude and intention toward whistleblowing functions, consistent with prior research. Whistleblowing experiences through existing hotlines established in the organization matter in terms of how employees perceive the outcomes of the whistleblowing process. This research substantiates the idea that the choices of the whistleblowing administration and procedures regarding the misconduct reporting process influence the extent to which employees evaluate the potential outcomes of whistleblowing. The findings also confirm that whistleblower protection and non-disclosed identity are critical for employees. This research suggests the preferred choice of hotline administration as a guideline for designing whistleblowing procedures and offers realistic insights regarding whistleblowing administration from respondents working full time where a hotline is in place and is actively monitored. Generalizability may however be limited.

Keywords: Whistleblowing; sociodemographic; internal reporting channel; hotline administration

1. INTRODUCTION

Misconduct and questionable behaviors in workplace settings have caused considerable financial and nonfinancial damage and losses to organizations and to the entire society. Possible types of wrongdoing are, but not limited to, stealing funds or property, accepting bribes or kickbacks, employee abuse, waste of organizational assets, mismanagement, safety problems, sexual harassment, illegal discrimination, and legal violations. Although some organizations may never encounter serious wrongdoing, this does not mean that a small rogue group of employees will not engage in illegal actions. Some organizations often learn of wrongdoing only when an organization member “blows the whistle” about the wrongdoing (Near and Miceli, 2016).

As an effective tool for uncovering misconduct in organizations, whistleblowing has been prevalently championed among for-profit, non-profit organizations, and government agencies (Miceli and Near, 1994; Bowen et al., 2010). Formal hotline or whistleblowing channels have been established and administered in order to ensure that there are channels available to receive complaints and reports about misconduct or unethical acts. Bystanders must weigh the costs and benefits of whistleblowing. When the misconduct or unethical behaviors are effectively stopped, the entire organization gains the most benefits from whistleblowing. Even if the outcome of whistleblowing is satisfactory, the whistleblowers must spend time and effort as informants. However, when the whistleblowing is handled inappropriately and cannot end the misconduct, whistleblowers risk their well-being and reputation and are subject to retaliation as well as revenge from the wrongdoers; bystanders must sacrifice their time and effort and may face undesirable consequences of whistleblowing at their own cost. The whistleblowing decision thus requires a complex process of awareness, judgement, and intention, and the decision is influenced by individual, situational, and contextual factors (Culiberg and Mihelič, 2017; Francalanza and Buttigieg, 2016).

In this study, the researchers examine the sociodemographic characteristics of the whistleblowers, the internal whistleblowing characteristics, the intention to report, and the choices among administrative employees at a particular company in Thailand. Previous research reports inconclusive relation between sociodemographic factors and whistleblowing intention (Gao and Brink, 2017; Seifert et al., 2010). Thus, we aim to investigate whether sociodemographic characteristics relate to the extent to which respondents agree with the instrumental outcomes of the whistleblowing channels, especially the whistleblower protection, and intention to report any misconduct. Furthermore, we seek to explore how experience in whistleblowing relates to whistleblowing outcomes and whistleblowing intention.

We organize the remainder as follows: First, the background and theoretical development review relevant literature in whistleblowing research. Second, the research methodology and procedure are presented. Third, the results are discussed. The paper ends with the conclusion and limitations of the study.

2. BACKGROUND AND THEORETICAL DEVELOPMENT

2.1 Whistleblowing and the whistleblowing process

The term “whistleblowing,” coined almost five decades ago (Nader et al., 1972), has been defined as “the disclosure by organization members of illegal, immoral, or illegitimate practices under the control of their employers, to persons, or organizations that may be able to affect action” (Near and Miceli, 1985). This definition limits the specification of whistleblowers to former and current organizations’ members, not outsiders, while including the use of both internal and external channels to report misconduct.

Whistleblowing begins with an individual or bystander witnessing misconduct or a questionable act and deciding whether to report the wrongdoers. The individual needs to choose whether to report internally within the organization or report the even externally to outside parties, stakeholders, or to the public, such as media, regulators, etc. Then, the organization will react and respond to the whistleblowing reports. Satisfactory consequences of whistleblowing reports include proper investigation, correction of misconduct, protection of the whistleblowers against retaliation, or rewarding the whistleblowers. On the other hand, the reaction may be unfavorable: that is, failing to conduct a proper, adequate investigation, failing to take corrective actions, or retaliating against the whistleblowers. The whistleblowing process commonly ends when the outcome of the whistleblowing is acceptable to the whistleblowers. If the outcome of whistleblowing is not satisfactory, the whistleblowers may make a subsequent attempt and will typically choose to report the misconduct externally. Alternatively, the whistleblower may remain silent and end the whistleblowing process. Regarding the costs for organizations, improper and untimely reactions to whistleblowing can lead to reduced organizational commitment, higher job turnover rates, and lower productivity (Near and Miceli, 2016).

Implementing and administering a reporting hotline have become a common corporate governance practice among major organizations. Extant research on whistleblowing classifies whistleblowing channels according to the internal and external. Firms, management, as well as employees in general prefer the internal

channel over the external channel since the internal whistleblowing channel helps firms maintain their reputation, minimize the cost of misconduct, limit the costs of whistleblowing, and this can lead to timely correction. Internal whistleblowing is associated with lower amounts of fines and lawsuits (Stubben and Welch, 2020). Bowen et al. (2010) document that public whistleblowing allegation announcements are associated with a negative market-adjusted stock price reaction, and even worse for the allegations involving earnings management. The external whistleblowing channel is chosen when internal whistleblowing has not resulted in any effective investigation or corrective action. Whistleblowers thus use external whistleblowing when the internal whistleblowing process is not transparent and does not correct the problem. This study concentrates on internal whistleblowing in a specific organizational setting. The determinants explaining internal whistleblowing are discussed in terms of the sociodemographic characteristics of the whistleblowers and the characteristics of the reporting channels.

2.2 Sociodemographic characteristics of the whistleblowers

Whistleblowers in terms of the present study are current or former employees that have observed serious wrongdoing and would like to stop it. Sociodemographic variables, such as gender, age, work experience, and education level, are extensively investigated and inconclusively indicative of the potential characteristics of the whistleblowers (Gao and Brink, 2017; Seifert et al., 2010). Prior research provides inconsistent results regarding the effect of gender on whistleblowing intentions (Lee and Xiao, 2018). Studies have reported that male accountants are more likely to report accounting-related misconduct (Liyanarachchi and Adler, 2011), and some studies have found that female witnesses have higher whistleblowing intentions (Erkman et al., 2014; Seifert et al., 2010), while some survey research has indicated that there is no gender difference in whistleblowing propensity (Francalanza and Buttigieg, 2016). Moreover, age has been seen to be significantly related to a high degree of whistleblowing intentions (Erkman et al., 2014; Liyanarachchi and Adler, 2011; Curtis and Taylor, 2009). Further, job tenure is likely to be related to whistleblowing intentions; long job tenure has been found to be significantly associated with whistleblowing intention (Mesmer-Magnus and Viswesvaran, 2005) possibly because witnesses with longer job tenure are more economically secure, well respected, and have sufficient experience to defend the values of whistleblowing outcomes throughout the lengthy and cumbersome whistleblowing process (Curtis and Taylor, 2009). Whistleblowing mostly affects whistleblowers' well-being and job security, and they must consider whether the costs of whistleblowing outweigh the benefits (Miceli, 2004). Thus, it is important to understand the association between the sociodemographic characteristics of the whistleblowers and internal whistleblowing intention.

2.3 Characteristics of internal reporting channels

Internal whistleblowing is more likely to be chosen than external whistleblowing due to the characteristics and consequences of the internal reporting channels. The overall design of the internal whistleblowing system as well as the higher quality of the audit committee, which indicates in a stronger internal whistleblowing system, results in a lower likelihood of external whistleblowing (Lee and Fargher, 2018). The whistleblowing system with high levels of organizational justice, which includes procedural justice, interactional justice, and interactional justice, increases the likelihood of internal reporting (Seifert et al., 2010). Not only do whistleblowing procedures and policies play roles in increasing internal whistleblowing, but anonymity and identity protection are useful in certain circumstances. Anecdotally, anonymity should encourage more whistleblowing because anonymity can reduce the probability of retaliation and protect whistleblowers. Research however provides inconclusive results whether anonymous channels are chosen over non-anonymous channels. Auditors prefer internal whistleblowing through non-anonymous rather than anonymous channels (Robertson et al., 2017). The intention to report among auditors is significantly lower when the identity of the whistleblower is disclosed, while the anonymity and protected identity reporting channels are not significantly different in reporting intentions (Curtis and Taylor, 2009).

Whistleblowing outcome experience, especially in terms of organizational responsiveness to whistleblowing, is another important determinant of internal whistleblowing. Auditors are more likely to report unethical behavior when prior organization response is strong regardless of power distance (Taylor and Curtis, 2013). Negative outcomes of non-anonymous whistleblowing reduce non-anonymous reporting intentions but do not decrease anonymous reporting intention (Kaplan et al., 2012). Therefore, anonymous reporting channels encourage whistleblowing, especially when the costs of whistleblowing are high.

Previous research has examined the types of whistleblowing channel administrators and recipients. Internal whistleblowing channels within organizations can be administered internally or externally. Kaplan et al. (2009) report that internally administered whistleblowing channel elicits more internal whistleblowing. On the other hand, the externally administered whistleblowing channel encourages more internal whistleblowing intentions among lower-tier employees (Gao et al., 2015) because third-party internal whistleblowing may represent a stronger procedural safeguard of non-disclosed identity and whistleblower protection. It is for this

reason that this study aims to investigate the characteristics of internal whistleblowing channels and internal reporting intentions. More specifically, we examine whether a third party administered hotline would be preferred to an internally administered hotline because of whistleblower protection and confidentiality.

3. RESEARCH METHODOLOGY

Since publicly available data for exploring the research questions do not exist, we collected our own data using a survey method in order to examine the proposed associations among internal reporting characteristics, sociodemographics, and internal whistleblowing choices in a particular industry setting (Van der Stede et al., 2005).

3.1 Sample and data collection

One hundred and nine full-time administrative employees at a company voluntarily participated in the self-administered survey study. The company, located in Thailand, is a subsidiary of a global Japanese company listed on the Tokyo Stock Exchange. The sample firm serves as a center of production, research, and development in the Asia Pacific region. The firm continually communicates and emphasizes the value of being responsible citizens and stakeholders, as well as its ethics—the company continuously demonstrates the improvement of its ethical practices by ensuring that its employees carry out the company's code of conduct and fulfill their social responsibilities. The survey was conducted when the company was considering evaluating and improving its hotline practice. The sociodemographic characteristics of the respondents are presented in Table 1.

Table 1: Sociodemographics Summary (n = 109)

	Sociodemographic variables	n (%)
Gender	Male	17 (15.6)
	Female	90 (82.6)
	Prefer not to say	2 (1.8)
Current job level	Staff	3 (2.8)
	Officer	29 (26.6)
	Senior Supervisor	52 (47.7)
	Assistant Manager	16 (14.7)
	Manager	6 (5.5)
	Director	3 (2.8)
Age	18-25	15 (13.8)
	26-36	72 (66.1)
	37-50	21 (19.3)
	51 or over	1 (0.9)
Marital status	Married	78 (71.6)
	Single	31 (28.4)
Education	Associate degree	4 (3.7)
	Undergraduate degree	57 (52.3)
	Graduate degree	48 (44.0)
Tenure at the current workplace	Mean (number of years)	8.23
	Standard deviation	6.18
	Median	7
	Mode	7
	Maximum years	38

3.2 Survey instrument and measures

The self-administered survey instrument was developed and revised. The instrument was pilot tested among 32 accounting graduate students who did not participate in the final survey. The participants were told to take approximately 15 minutes or less to complete the survey. The feedback and results from the pilot test led to minor revisions, including readability, the rating scale, anchoring words, and brevity. The final version of the survey questionnaire contained a cover page with the institutional letterhead and two parts of measures. The cover page explained the purpose of the study, instructions for filling out the survey, statements soliciting participation, and ensuring the respondents' anonymity.

The respondents were asked whether they were aware that there was a hotline available for reporting. Seven-point scales were used to increase the reliability and statistical strength of the test results (Lozano et al.,

2008; Lewis, 1993). The first part asked the respondents to provide their sociodemographic information (see Table 1). In the second part, items 1 to 5 asked the respondents to rate on seven-point scales (1 = strongly disagree to 7 = strongly agree) the extent to which they believed whether the hotline internally administered could (item 1) lead to investigation and truth revelation, (item 2) lead to penalizing wrongdoers, and (item 3) provide whistleblowers with protection and conceal their identity. The respondents were also asked to rate the extent to which they believed (item 4) whether a hotline administered by a third party could provide whistleblowers with protection and keep their identity confidential. Item 5 asked the respondents to rate their intentions to report or “blow a whistle” in general on a seven-point scale anchored from 1 = strongly disagree to 7 = strongly agree. Then, the respondents were asked (item 6) whether they had witnessed any wrongdoing in the company, and (item 7) whether they had reported any wrongdoing in the company. The last question, the channel choice question (item 8), asked the following: “If the company provides reporting hotline channels administered internally and externally by a third-party service provider, which channel would you choose to report?” The end of the survey instrument thanked the respondents and confirmed their confidentiality and anonymity. We also made it clear to all respondents that their answers would be kept strictly confidential and could not be linked to their identity.

4. RESULTS

4.1 Preliminary analysis

Table 2 indicates the descriptive statistics of the variables. Panel A shows the percentage distribution of items 1 to 5, median and mode. All of the respondents reported that they were aware that a company hotline was available and that it is administered internally by the ethics department. In general, as presented in Table 2, the respondents perceived that an internally administered hotline could lead to investigation and truth revelation ($Mdn = 5$), penalize wrongdoers ($Mdn = 5$), and provide whistleblowers with protection and conceal their identity ($Mdn = 5$). Overall, the efficacy of the current hotline internally administered was acceptable from respondents’ viewpoint. According to Panel B, thirty-one respondents have witnessed misconduct in the company but only twelve have reported questionable conduct in the company. Thirty-three respondents would choose the internally administered hotline. Forty-one respondents chose the hotline administered externally. Thirty-five respondents chose both channels.

Table 2: Frequency of Measurement Variables (n = 109)

Panel A: Percentage of frequency distribution, median and mode

Measurement items	1	2	3	4	5	6	7	Median	Mode
1. The hotline internally administered could lead to investigation and truth revelation.	6%	2%	4%	11%	28%	26%	23%	5	5
2. The hotline internally administered could lead to penalizing wrongdoers.	7%	6%	5%	15%	26%	21%	21%	5	5
3. The hotline internally administered could provide whistleblowers with protection and conceal their identity.	13%	17%	4%	17%	20%	16%	15%	5	5
4. The hotline administered by a third party could provide whistleblowers protection and conceal their identity.	13%	8%	8%	7%	17%	20%	26%	5	7
5. Intention to report	6%	11%	19%	17%	22%	11%	13%	4	5

Items 1 to 5 are seven-point scale measures anchored with 1 = strongly disagree and 7 = strongly agree

Panel B: Frequency (percentage) of categorical variables

	Frequency (percentage)
6. Have you witnessed any misconduct in the company? (Yes/No; Yes = 1)	31 (28.4%)
7. Have you reported any questionable conduct in the company? (Yes/No; Yes = 1)	12 (11%)
8. Choices of hotline channel (choose only one)	
- Internally administered by the ethics department	33 (30.2%)
- Externally administered (outsourced)	41 (37.6%)
- Both	35 (32.1%)

Cramer's V coefficients (Φ_{Cramer}) reported in Table 3 show the magnitude of association between two categorical variables¹ (Pett, 1997; Siegel and Castellan, 1988; Rea and Parker, 2005). The characteristics of the internally administered hotline currently used were rated in a congruent direction. The extent to which an internally administered hotline would lead to investigation and truth revelation (item 1) was associated with the extent to which it could penalize wrongdoers (item 2). The extent to which an internally administered channel would provide protection and confidentiality (item 3) was associated with it leading to investigation and truth revelation (item 1) as well as penalizing wrongdoers (item 2). The intention to report was not associated with any characteristics of the internally administered hotline (items 1 to 3) but marginally correlated with the extent to which a hotline administered by a third party provides protection and identity concealment. Experience in reporting in the company (item 7) was seen to be significantly correlated with the efficacy of an internally administered hotline: investigation and truth revelation (item 1), penalizing wrongdoers (item 2), and protection and confidentiality (item 3).

Witnessing any misconduct in the company (item 6) was not correlated with any characteristics of the hotline (items 1 to 4) nor reporting intentions (item 5). The choices of whistleblowing channels (item 8) were correlated with the whistleblower's protection and identity concealment provided by the hotline administered by a third party and administered internally (item 4). That is, Cramer's V statistic implies that the respondents choose to report through an externally administered hotline or both channels for the whistleblower's protection and confidentiality. The degree of intention to report was not seen to be related to the choices of whistleblowing. Overall, the respondents consistently viewed the internally administered hotline channel as quite effective in responsiveness and outcome regarding whistleblowing. The Wilcoxon signed-ranks test indicates that choosing the hotline administered externally provides an advantage in terms of the protection of whistleblowers and non-disclosure of the whistleblowers' identity over the hotline internally administered ($z = -2.434, p = .015$). This suggests that the whistleblower's protection and confidentiality are of importance when considering whether to report to a hotline and which channel is to be chosen. The respondents, therefore, are aware of threats of retaliation and vengeance from whistleblowing.

Table 3: Cramer's V Matrix

Item	2	3	4	5	6	7	8
1	.596 [‡]	.452 [‡]	.355 [‡]	.247	.124	.483 [‡]	.323 [†]
2		.540 [‡]	.403 [‡]	.249	.143	.426 [‡]	.324 [†]
3			.415 [‡]	.261	.249	.523 [‡]	.445 [†]
4				.298 [†]	.208	.377 [†]	.420 [‡]
5					.268	.349 [†]	.235
6						.428 [‡]	.133
7							.174

Note: The table shows Cramer's V coefficients, which range from 0 to 1. Item 1, the hotline internally administered, could lead to investigation and truth revelation. Item 2, the hotline internally administered, could lead to penalizing wrongdoers. Item 3, the hotline internally administered, could provide whistleblowers with protection and conceal their identity. Item 4, the hotline administered by a third party, could provide whistleblowers with protection and conceal their identity. Item 5 was the intention to report. Items 1 to 5 were placed on a seven-point scale. Item 6 was the following: Have you witnessed any misconduct in the company? (Yes/No; Yes = 1) Item 7 was the following: Have you reported any questionable conduct in the company? (Yes/No; Yes = 1) Item 8 was the following: choices of hotline channel (1-3). [†] $p < .05$, [‡] $p < .01$.

¹ Cramer's V or Cramer's phi (Φ_{Cramer}) is a nonparametric test of association between categorical variables once a χ^2 statistic has been determined to be significant. Cramer's V based on the χ^2 statistic is a modified version of the phi coefficient, which adjusts for the number of levels of the categorical variable for a contingency table larger than 2×2 , therefore allowing the coefficient to retain its range of 0 and 1. The procedure to derive Cramer's V is summarized as follows: (1) arrange the frequency data in an $r \times c$ contingency table; (2) compute a χ^2 statistic; and (3) compute Cramer's V coefficient using the following equation:

$$\text{Cramer's V} = \sqrt{\frac{\chi^2}{N(L-1)}}$$

where

L = the smaller number of rows or columns in the contingency table, and
N = the total sample size.

A larger value of Cramer's V coefficient indicates a greater magnitude of association between two categorical variables. Rea and Parker (2005) provide a guideline for interpreting Cramer's V as follows: Cramer's V values of under .20 are interpreted as having a weak association. The values between .20 and under .40 indicate a moderate association. The values between .40 and under .60 indicate a relatively strong association. The values between .60 and under .80 indicate a strong association, while the values between .80 and under 1 have a very strong association. Although the value of 0 indicates no association, a Cramer's coefficient value of 1 does not imply a perfect relationship. If the contingency table has more rows than columns, the coefficient value of 1 suggests a perfect association in one direction, e.g., from the row to column variable (Siegel and Castellan, 1988; Rea and Parker, 2005).

4.2 Sociodemographic characteristics of the whistleblowers

The Kruskal-Wallis tests were performed in order to explore the sociodemographic effects on how the respondents evaluate internally administered whistleblowing (items 1-3), the externally administered hotline (item 4), and the intentions to report (item 5). The tests showed that gender effect did not explain any variation in how the respondents rated the characteristics of the hotline or the intention to whistle blow (χ^2_{K-W} were not tabulated). Consistent with prior research, age was a significant factor explaining whether the internally administered channel can lead to truth investigation and revelation ($\chi^2_{K-W} = 11.032$, $df = 2$, $p = .012$) and whether the respondents would report the observed misconduct, $\chi^2_{K-W} = 7.303$, $df = 3$, $p = .063$ (Erkman et al., 2014; Liyanarachchi and Adler, 2011). Single individuals were more likely to agree that an internally administered channel was able to help investigate facts ($\chi^2_{K-W} = 10.486$, $df = 1$, $p = .001$) and penalize wrongdoers ($\chi^2_{K-W} = 3.424$, $df = 1$, $p = .064$) than married individuals were. Education levels played a marginally significant role in predicting the intention to report ($\chi^2_{K-W} = 7.241$, $df = 2$, $p = .027$) but not to the extent to which they believed in the channel's efficacy.

4.3 Characteristics of internal whistleblowing channels and responsiveness

The results of the Kruskal-Wallis tests indicated that the experience of the bystanders was not significantly different in terms of the perceptions of the characteristics of internally administered and externally administered hotlines. Respondents with prior whistleblowing experience with a current internally administered hotline (item 7) viewed organizational responsiveness to internal whistleblowing more positively than respondents without prior whistleblowing experience (see Table 4): investigation and truth revelation ($\chi^2_{K-W} = 10.981$, $df = 1$, $p = .001$), penalizing wrongdoers ($\chi^2_{K-W} = 6.345$, $df = 1$, $p = .012$), and protection and identity concealment ($\chi^2_{K-W} = 9.460$, $df = 1$, $p = .002$). There was no difference in the perception of the benefits of the externally administered hotline ($\chi^2_{K-W} = .299$, $df = 1$, $p = .585$, *ns.*) and intention to report ($\chi^2_{K-W} = .722$, $df = 1$, $p = .396$, *ns.*) between the respondents with prior whistleblowing experience and those without such experience.

Table 4: Kruskal Wallis Tests of Respondents' Experience Using the Current Internally Administered Hotline (Item 7)

Measurement items	Mean rank: Have you reported any questionable conduct in the company?		χ^2_{K-W}	
	No (n = 97)	Yes (n = 12)	df = 1	p
1. The hotline internally administered could lead to investigation and truth revelation.	51.57	82.75	10.981	.001
2. The hotline internally administered could lead to penalizing wrongdoers.	52.37	76.25	6.435	.012
3. The hotline internally administered could provide whistleblowers with protection and conceal their identity.	51.77	81.13	9.460	.002
4. The hotline administered by a third party could provide whistleblowers with protection and conceal their identity.	55.57	50.38	.299	.585
5. Intention to report	54.11	62.21	.722	.396

The choices of whistleblowing channels were seen to be marginally significantly associated with how the respondents perceived the extent to which the internally administered hotline can lead to investigation and truth revelation ($\chi^2 = 7.333$, $df = 2$, $p = .026$) and protect whistleblowers and conceal their identity ($\chi^2 = 8.915$, $df = 2$, $p = .012$). The extent to which the externally administered hotline can protect whistleblowers and protect their identity was significantly associated with the choices of whistleblowing channels, $\chi^2 = 21.464$, $df = 2$, $p = .000$ (Zhang et al., 2013).

Taken together, the findings imply that respondents at this specific organization evaluate the current internal whistleblowing system and its outcomes as favorable, consistent with the study of Taylor and Curtis (2013). The hotline administration (internal vs. external) results in different perceptions regarding whistleblower protection and confidentiality, consistent with the work of Zhang et al. (2013).

5. CONCLUSION AND LIMITATIONS OF THE STUDY

This study examines the sociodemographic characteristics of potential whistleblowers, the characteristics of internal reporting channels, the experience of the respondents, the choices of reporting channels, and whistleblowing intention. The results of the study indicate that certain sociodemographic factors reinforce the whistleblowing intention in line with prior research; that is, sociodemographic factors, age, and marital status, are associated with whistleblowing intention. Our respondents were more likely to choose to

report through a hotline externally administered because they were concerned about whistleblower protection and identity concealment. When experience in whistleblowing is considered, the choices between internal and external administration is not significantly different. Respondents with whistleblowing experience satisfactorily rate the instrumental outcomes relative to participants without the experience.

This study presents evidence of a well-designed system that handles and responds to whistleblowing reports properly and that satisfies the whistleblowers' intention to stop and correct misconduct. The study findings provide both academic and practical implications. Academically, the results add evidence to the body of whistleblowing research. This study highlights the importance of whistleblower protection as well as identity concealment in administering hotlines. This research offers practical implications for management. First, the results suggest that whistleblowing system design choices can affect the likelihood of whistleblowing among employees. The cautious design of the whistleblowing procedure, policy, and system, as well as perception management, is critical for assisting employees make better judgements about misconduct and questionable acts in the organizations. Specifically, procedural safeguards, protection of whistleblowers, and non-disclosure of identity represent vital input for bystanders to reach a whistleblowing decision. Second, satisfactory organization responsiveness significantly increases the likelihood of whistleblowing, reinforces employees' organizational commitment and loyalty, and reduces employee turnover. Effective whistleblowing administration will promote the standard of business ethics and empower employees to properly act on incidences of misconduct. Management needs to clearly communicate the investigation and corrective actions taken to present fair procedures and outcomes. That is, whistleblowing is widely accepted as a prosocial behavior and can be encouraged and reinforced through organizational culture and subjective norms (Trongmateerut and Sweeney, 2013; Seifert et al., 2010). Third, a well-designed hotline administration should significantly reduce the sociodemographic effects on whistleblowing intention. Lastly, policymakers and regulators should be informed about the necessary characteristics of effective internal whistleblowing channels. Regulators then can encourage publicly accountable entities to develop their guidelines and procedures for effective whistleblowing system administration.

Our cross-sectional survey research design is not without limitations. First, the respondents are full-time administrative employees that can offer realistic viewpoints. This research setting also limits the generalizability of the findings since certain workplace generally has cultivated its own company culture and norms (Trongmateerut and Sweeney, 2013). Second, instead of observing the actual whistleblowing response, we use the self-reported whistleblowing intention as a proxy of behavioral response which is commonly found in whistleblowing research (e.g., Gao et al., 2015; Gao and Brink, 2017; Mesmer-Magnus and Viswesvaran, 2005; Trongmateerut and Sweeney, 2013). Future research on whistleblowing should investigate the whistleblowing process from the viewpoint of the report recipients—how recipients make judgements and approach the whistleblowing reports to reach conclusions. Another research avenue could examine the different degrees of wrongdoing or severity of misconduct in order to find cutoff points that instigate the whistleblowing decisions, as the seriousness of wrongdoing was ranked as the most important situational factor among public accountants in Malta (Francalanza and Buttigieg, 2016).

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