

Theory of Planned Behaviour and Whistleblowing Intention on Academic Misconduct: The Moderating Role of Gender

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ABSTRACT

Academic misconduct affects academic integrity. In response, universities have introduced internal control mechanisms, including whistleblowing, to address academic misconduct. Therefore, this research aimed to investigate the factors derived from the Theory of Planned Behavior (TPB), namely attitude, subjective norms, and perceived behavior control, as well as gender, and their impact on the intention of Malaysian university students to blow the whistle on perceived academic misconduct. Furthermore, this study explored the moderating role of gender in the relationship between the TPB factors and the intention to blow the whistle on academic misconduct. The sample for this study comprised 315 undergraduate accounting students from three universities in Malaysia. By employing structural equation modeling techniques to analyze the collected data, the findings revealed that students' attitudes towards whistleblowing and their gender were the primary predictors of whistleblowing intention. Moreover, the results indicated that gender moderated the relationship between perceived behavior control and whistleblowing intention. This study provided valuable insights for implementing effective whistleblowing practices in academic settings to control academic misconduct by considering all factors that influence students' intentions.

Keywords: Academic Misconduct, Whistleblowing, Theory Planned Behavior, Gender

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INTRODUCTION

Academic misconduct, often referred to as academic fraud, is widely recognized as a deliberate deception (Achmada et al., 2020) and a specific violation of rules within higher education institutions (Dendir & Maxwell, 2020). Examples of academic misconduct include plagiarism (presenting someone else's work as one's own), fabrication (manipulating facts in academic assignments), facilitation (assisting another student in academic misconduct), and general misconduct (using unauthorized resources or engaging in unapproved collaboration) (Dendir & Maxwell, 2020). The consequences of academic misconduct can be detrimental not only to students' future professional careers but also to the reputation of educational institutions and the quality of their graduates. Burke and Sanney (2018) highlighted the crucial role of higher education institutions in cultivating students' moral character and integrity as they prepare for the workforce. However, Widianingsih (2013) argued that academic misbehavior can undermine a university's ability to produce graduates who possess valuable knowledge and exhibit ethical attitudes. Furthermore, previous studies (Sabli et al., 2016; Nonis & Swift, 2001) have demonstrated that students who engage in academic infractions are more likely to display dishonest behavior in the workplace. Additionally, academic misconduct compromises the reliability of online assessment results, leading to inaccurate indicators of students' actual understanding and academic achievements.

Whistleblowing research in academic settings has grown in importance in recent years in response to the increasing academic misconduct in universities around the world (Iwai et al., 2021; Bernardi et al., 2021). In Malaysia, a majority of higher education institutions are dedicated to implementing whistleblowing policies aimed at addressing diverse forms of misconduct within their establishments. As an example, Universiti Teknologi Petronas (UTP) has instituted a whistleblowing policy to offer a channel for all UTP employees, students, and members of the public to report any inappropriate behavior in accordance with the established procedures. Additionally, the policy is designed to safeguard employees, students, and members of the public who come forward to report such allegations.

Bernardi et al. (2021) stressed that whistleblowing is one of the internal control mechanisms to curb unethical behavior including academic misconduct. Kisamore et al. (2007) added that nurturing whistleblowing enables the universities to produce graduates with integrity and enhance the integrity culture of the institution. Generally, whistleblowing is defined as disclosure by organization members of illegal, immoral or illegitimate practices to persons or organizations that may be able to effect action (Nayır et al., 2018). Nevertheless, the decision either to blow or not to blow the whistle (to report or not to report the misconduct) is a difficult and complex decision making (Vinten, 2000) as it exposes the whistleblower to several risks (Xiao & Wong-On-Wing, 2021; Rothschild & Miethe, 1999; Rothschild, 2013; Iwai et al., 2021; Hersh, 2002). For instance, in a corporate environment, they suffer from termination, demotion, unfavorable job performance evaluation, involuntary transfer, assignment of unmanageable tasks, professional blacklisting and social ostracism. Meanwhile, in academic settings, whistleblowers face social ostracism,

name-calling and other forms of social sanctions from their academic peers (Iwai et al., 2021). Due to that, although a relatively large number of employees (students) are exposed to organization fraud (academic misconduct) a majority of them usually remain silent, which in turn leads to the incidence of fraud as well as academic misconduct is continuously high.

The growth in academic misconduct in recent years (Srirejeki et al., 2022; Janke et al., 2021) actually shows that universities' whistleblowing programmes are ineffective. Prior research have also shown that universities' efforts to stop the spread of the coronavirus during the pandemic by converting traditional face-to-face education to remote learning had increased academic misconduct because new cheating methods have been developed, such as online "help" sites in addition to common intentional act of deception (Khan et al., 2022) and rule violation in higher education institutions, which includes plagiarism, assessment or examination cheating, illegal cooperation or collusion, and ghostwriting. Given the situations, research on effective whistleblowing procedures in academic settings is urgently required to reduce the occurrence of academic misconduct.

Despite the significance of whistleblowing in preventing academic misconduct, a review of the literature on the topic revealed that the majority of earlier research focused more on whistleblowing practice in corporate settings (Vian et al., 2022; Khan et al., 2022; Nuswantara, 2023; Sugiariyanti et al., 2017; Brink et al., 2017). Meanwhile, studies on classroom whistleblowing are very limited (Waltzer et al., 2021; Culiberg & Mihelič, 2020; Pupovac et al., 2019; Kam et al., 2018; Lee & Xiao, 2018; Radulovic, 2017; Stone et al., 2012; Bernardi et al., 2016; Trevino, 1996; Bernardi et al., 2014; Bernardi et al., 2012), especially in Malaysia. Thus, this study aimed to expand prior works by examining student's intentions to report wrongdoing in Malaysian universities. The following section discusses prior studies on TPB's factors, gender and whistleblowing intention. Section 3 provides an explanation on the research method. Meanwhile, Section 4 discusses the results of this study. Finally, section 5 concludes the study and discusses future research directions.

LITERATURE REVIEW

Theory of Planned Behaviour

In this study, academic misconduct and whistleblowing of Malaysian universities students was explored using the Theory of Planned Behavior (TPB) as the underpinning theory. The TPB, developed by Ajzen (Ajzen & Driver, 1991), posits that a person's intention to perform a behavior is determined by three independent predictors: attitude, subjective norms, and perceived behavioral control (PBC). Attitude refers to the individual's evaluation of a specific behavior, subjective norms refer to the perceived social pressure to engage in the behavior, and PBC refers to the ease or difficulty that the individual expects to encounter when performing the behavior. Prior studies have widely accepted the TPB as a reliable model for

students' ethical behavior (Wang et al., 2022; Aderibigbe et al., 2021; Marmat, 2022; Kam et al., 2018) and corporate/ institution misconduct whistleblowing intention (Wan Mahmood et al., 2022; Tuan Mansor et al., 2022; Mustafida, 2020; Tuan Mansor et al., 2020; Zakaria et al., 2020; Park & Blenkinsopp, 2009). However, its effectiveness in exploring whistleblowing intentions in higher educational institutions has not been examined. In this study, the TPB was extended by incorporating respondent's gender into the conventional TPB framework in order to determine the student's intentions. Figure 1 presents the research framework of this study.

Attitude and Whistleblowing Intention on Academic Misconduct

The first factor was student attitude toward whistleblowing of academic misconduct. According to the TPB, attitude refers to an individual's assessment of the extent of favorable or unfavorable of a specific behavior (Ajzen & Driver, 1991). Ajzen and Driver (1991) stress that a favorable attitude towards a behavior influences a person's intention to perform the behavior. Empirically, prior studies have suggested that attitude significantly affected whistleblowing intention in corporate settings (Zakaria et al., 2020; Park & Blenkinsopp, 2009). For instance, Zakaria et al., (2020) found a significant positive effect of attitude on whistleblowing intention among public officers in Indonesia. Using Korean settings, Park and Blenkinsopp (2009) also found that attitudes positively affected whistleblowing intentions of 296 police officers of the country. Within the realm of research on student ethical conduct, Wang et al. (2022) examined TPB factors that influence students' intention to engage in ethical behavior on the Internet. Their findings revealed a significant influence of students' attitudes towards ethical behavior on their intention. Likewise, Sousa et al. (2022) observed a similar trend, noting that green attitudes played a significant role in shaping the green purchase intentions of 432 students within a higher education institution (HEI) in Portugal. In the context of this study, students with a favorable attitude towards whistleblowing are more likely to blow the whistle on perceived academic misconduct than those with unfavorable attitudes. Thus, this study hypothesized that:

H1: Attitude positively influences the academic misconduct whistleblowing intention of students

Subjective Norms and Whistleblowing Intention on Academic Misconduct

The TPB suggests subjective norms as another factor to predict whistleblowing intention (Ajzen & Driver, 1991). Subjective norm relates to the social influence perception that important people in the life of an individual have on the person's decision to either perform or not to perform a particular behavior (Tuan Mansor et al., 2020). With regards to this study, the decision of a student to either blow the whistle or not can be influenced by the perceived approval or disapproval by important people in his/her life such as family members, friends and lecturers. If

students believe that their peers, colleagues, or the academic community in general support and encourage whistleblowing, they are more likely to act accordingly. Conversely, if there is a prevailing norm of silence or fear of retaliation, they may be hesitant to report academic misconduct.

Prior studies have generally highlighted that subjective norms affect the whistleblowing intention (Zakaria et al., 2020; Park & Blenkinsopp, 2009). For example, Zakaria et al. (2020) found that subjective norm had a significant positive effect on the whistleblowing intention of Indonesian public officers. Nevertheless, a study by Tuan Mansor et al. (2020) failed to find a relationship between subjective norm and whistleblowing intention among external auditors in Malaysia. In the context of higher education institutions, previous research has highlighted the significance of subjective norms in shaping student ethical conduct. For instance, Owusu et al. (2020) explored the factors influencing the intentions of Ghanaian university students to report workplace misconduct using the Theory of Planned Behavior. Through a questionnaire survey involving 524 accounting students from the University of Ghana Business School, their study identified subjective norms as crucial predictors of internal whistleblowing intentions. Similarly, Wang et al. (2023) employed an extended TPB to investigate factors influencing food waste behavior on campuses. Their findings indicated that subjective norms significantly impacted the intention to reduce food waste. Therefore, this study hypothesized:

H2: Subjective norm positively influences the academic misconduct whistleblowing intention of students

Perceived Behavioural Control and Whistleblowing Intention on Academic Misconduct

Perceived behavioral control (PBC) was the third factor in this study. According to Ajzen and Driver (1991), PBC is related to the individual's perception of the degree of ease or difficulties in performing the specific behavior. There are two distinct components of PBC namely self-efficacy and perceived controlling. The former measures the individual's belief on the capability to perform a specific behavior. Meanwhile, perceived controlling is related to the individual control over a behavior (Ajzen & Driver, 1991). In the context of whistleblowing academic misconduct, it relates to the students' confidence in their ability to report misconduct effectively and overcome potential barriers or consequences. Higher levels of PBC, such as having knowledge of reporting mechanisms or legal protections, can positively influence students' intentions to blow the whistle.

The Literature suggests that PBC positively affects whistleblowing intention (Mustafida, 2020; Tuan Mansor et al., 2020). Tuan Mansor et al. (2020) aimed to examine the whistleblowing intention of external auditors in Malaysia. Using 274 external auditors throughout Malaysia, the results showed that PBC had a positive influence on whistleblowing intention. Meanwhile, a review of literature documented significant association between PBC and students' intentions or behaviors regarding ethical conduct. Wang et al. (2022) affirmed this connection by

demonstrating that students' intentions to engage in ethical behavior on the Internet are shaped by PBC. Additionally, recent research by Owusu et al. (2020) indicated that PBC positively influenced students' intentions to externally report workplace misconduct. Building on this literature, the following hypothesis was formulated:

H3: Perceived behavioral control positively influences the academic misconduct whistleblowing intention of students

Gender and Whistleblowing Intention on Academic Misconduct

The fourth factor was gender. According to Kray and Haselhuhn (2012) females tend to have stronger ethical beliefs, and a greater sense of moral responsibility compared to males. This higher ethical orientation may make females more inclined to report misconduct when they witness it, as they may prioritize honesty, fairness, and upholding integrity. In addition, females are often found to have higher levels of empathy and a stronger interpersonal orientation. This may lead them to be more sensitive to the potential harm caused by academic misconduct, such as unfair advantages or harm to the academic community. This heightened empathy and concern for others may motivate females to take action and report misconduct to protect the integrity of the academic environment.

In line with the argument, Kray and Haselhuhn (2012) and Erkmen et al. (2014) indicated that female employees are more likely to blow the whistle of misconduct in their organization. In an academic setting, Andon et al. (2018) and Simon et al. (2004) found that female students were more likely to report cheating than male students. Further, a study by Stone et al. (2012) on 172 college students in chemistry classrooms which examined the factors that influence whether or not students will disclose cheating, found that females will report such misconduct. Given that, this study predicted that:

H4: Gender significantly influences the academic misconduct whistleblowing intention of students

Further this study examined the moderating effect of student gender on TPB factors; attitude, subjective norms, perceived behavioral control-the academic misconduct whistleblowing intention relationship. In particular, this study predicted that:

H5: Gender moderates the relationship between attitude and academic misconduct whistleblowing intention of students

H6: Gender moderates the relationship between subjective norms and academic misconduct whistleblowing intention of students

H7: Gender moderates the relationship between perceived behavioral control and academic misconduct whistleblowing intention of students

All the hypotheses discussed above were constructed based on this research model, which consisted of four independent variables, one moderating variable and one dependent variable as illustrated in Figure 1.

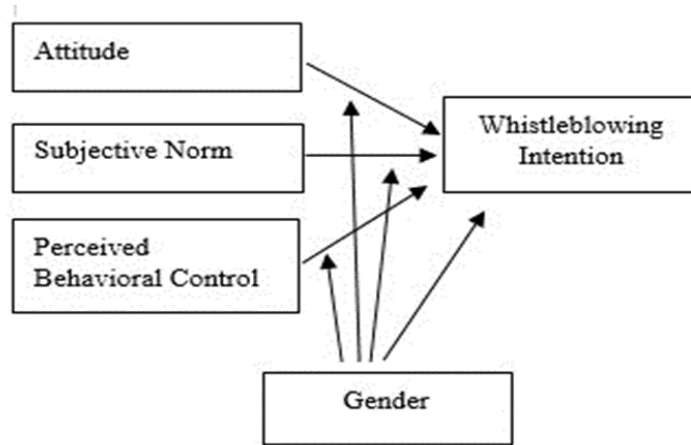


Figure 1: Research Model

Source: Author illustration

METHODOLOGY

This study, focusing on the whistleblowing intention related to academic misconduct, targeted final-year undergraduate accounting students from three universities in Malaysia. The selection of these three universities was based on their commitment to conducting affairs ethically, responsibly, and transparently, as evidenced by their whistleblowing policies. The sample was chosen using a probability sampling technique, specifically simple random sampling. Out of the 500 distributed questionnaires, 315 valid responses were utilized for analysis, representing a response rate of 63 percent. The questionnaires were administered in class, accompanied by reminders to ensure honesty in responses. Participants were assured of the complete anonymity and confidentiality of their answers, to be used solely for research purposes.

The structured questionnaire, adapted from Tuan Mansor et al. (2020) and Zakaria et al. (2020), employed a five-point Likert scale (1=strongly disagree to 5=strongly agree) and encompassed five latent constructs, including attitude, subjective norm, perceived behavioral control, and gender. The questionnaire was created using Google Form, with the link distributed through online platforms such as WhatsApp and Telegram. A pilot study was conducted to refine the questionnaire's content, structure, clarity, and readability for the Malaysian context, incorporating feedback from seven academics and making minor modifications, particularly in the wording of certain items, to enhance the understanding of Malaysian students.

This study employed the partial least-squares structural equation model (PLS-SEM) using the SmartPLS 4.0 software to examine the relationship between the latent variables. This study adopted a two-stage analysis; the measurement model analysis and the structural model analysis to validate the research model using reliability, convergent validity, discriminant validity and hypothesis testing.

Table 1 provides the demographic profile of the 315 respondents. The respondents were undergraduate accounting students from three universities in Malaysia. The sample consisted of 140 (44.5%) male and 175 (55.5%) female students. The majority of the respondents were aged 18-25 years old (96.3%). The majority of the respondents had a CGPA of more than 3.50 (62%).

FINDINGS AND ANALYSIS

Respondent Profile

Table 1 provides the demographic profile of the 315 respondents. The respondents were undergraduate accounting students from three universities in Malaysia. The sample consisted of 140 (44.5%) male and 175 (55.5%) female students. The majority of the respondents were aged 18-25 years old (96.3%). The majority of the respondents had a CGPA of more than 3.50 (62%).

Table 1: Demographic Characteristics of Respondents

Characteristics	Items	Frequency	%
Gender	Male	140	44.5%
	Female	175	55.5%
Age	18-25 years old	303	96.3%
	26-30 years old	9	2.8%
	Above 31 years old	3	0.9%
CGPA	3.50-4.00	195	62%
	3.00-3.49	94	30.1%
	2.50-2.99	21	6.7%
	2.49 and below	5	1.2%

Source: Primary survey

Measurement Model

The data from the questionnaire was analyzed using Smart PLS, a two-step approach which involved evaluating both the measurement and structural models. The measurement model examined the relationship between items and constructs, while the structural model explored the relationship between exogenous and endogenous constructs in the research model. Figure 2 shows the path model, which consisted of

measurement models that met the criteria for convergent validity and discriminant validity. Convergent validity was tested to ensure that multiple items measuring the same concept agreed with each other. To assess the convergent validity of the measurement model, the loadings, composite reliability (CR), and average variance explained (AVE) were evaluated. As shown in Table 2, convergent validity of the construct was satisfactory as the loading, AVE, and CR values exceeded the recommended values. The loading varied from 0.621 to 0.950, AVE ranged from 0.611 to 0.837, and CR ranged from 0.903 to 0.976, indicating that convergent validity was achieved.

Once the convergent validity test requirements were met, the model's discriminant validity was tested. Discriminant validity was determined using the heterotrait monotrait (HTMT) ratio of correlations criterion to determine whether each construct was unique and not represented by other constructs in the model. All HTMT values were lower than the threshold value of 0.90 (Hair et al. 2014), indicating that discriminant validity was achieved for all the constructs in the model. Additionally, the Fornell and Larcker method was used to evaluate discriminant validity by determining whether all the constructs were free from unidimensionality. As shown in Table 4 the square value of AVE was greater than the correlation between the constructs, indicating that the model met the recommended requirements, and discriminant validity was confirmed for all the constructs in the study.

Table 2: The Measurement Model Assessment

Constructs	Measurement items	Loadings	Cronbach's α	CR	AVE
Attitude	A1	0.854	0.862	0.916	0.784
	A2	0.850			
	A3	0.949			
Subjective norm	N1	0.802	0.910	0.932	0.734
	N2	0.815			
	N3	0.865			
	N4	0.913			
	N5	0.885			
Perceived behavioral control	PBC1	0.797	0.873	0.903	0.611
	PBC2	0.815			
	PBC3	0.621			
	PBC4	0.855			
	PBC5	0.852			
	PBC6	0.726			
Whistleblowing intention on academic misconduct	WI1	0.897	0.972	0.976	0.837
	WI2	0.950			
	WI3	0.936			
	WI4	0.931			

WI5	0.927
WI6	0.931
WI7	0.920
WI8	0.819

Table 3: Discriminant Validity of Measurement Model (HTMT)

Constructs	1	2	3	4	5	6	7	8
Attitude (1)								
Gender (2)	0.041							
Perceived behavioral control (3)	0.622	0.040						
Subjective norm (4)	0.571	0.084	0.790					
Whistleblowing intention on academic misconduct (5)	0.332	0.127	0.240	0.232				
Gender x Perceived behavioral control (6)		0.004	0.491	0.316	0.165			
Gender x Subjective norm (7)		0.125	0.314	0.505	0.058	0.616		
Gender x Attitude (8)		0.026	0.231	0.203	0.098	0.463	0.396	

Table 4: Discriminant Validity of Measurement Model (Fornell and Larcker)

Constructs	1	2	3	4	5
Attitude (1)	0.886				
Gender (2)	0.016	1			
Perceived behavioral control (3)	0.540	0.002	0.782		
Subjective norm (4)	0.513	-0.080	0.699	0.857	
Whistleblowing intention on academic misconduct (5)	0.312	-0.129	0.248	0.229	0.915

Structural Model

After the measurement model had been validated, a structural model analysis was conducted to test the seven hypotheses. In the assessment of the structural model, the direction of the beta value, the significance level of the t-values and p-value were examined, as suggested by Hair et al. (2014). A bootstrapping procedure with resampling of 5,000 was performed to test the direct effect. Figure 2 depicts the path model which includes the structural model of this study. Table 5 provides the results of hypothesis testing. Specifically, in H1 it was hypothesized that attitude would have a positive influence on whistleblowing of academic misconduct intention. The results showed a significant and positive relationship ($\beta= 0.294$, $t = 3.028$, $p < 0.00$). Therefore, H1 was supported. As regards H2 in which it was posited that subjective norms would positively influence whistleblowing of academic misconduct intention,

the beta result showed a positive direction, yet the p-value showed insignificant results ($\beta= 0.124, t = 1.129, p >0.05$). Thus, H2 was not supported. As for H3, in which it was hypothesized that PBC would have a positive influence on whistleblowing of academic misconduct intention, the results showed a negative and insignificant relationship ($\beta=-0.035, t = 0.749, p > 0.05$). Therefore, H3 was not supported. As regards H4 in which it was predicted that gender will significantly influence on whistleblowing of academic misconduct intention, the results supported this prediction ($\beta= -0.334, t = 1.988, p < 0.05$), suggesting that female students are more likely to report such misconduct.

As for the interaction relationships, as shown in Table 5, only interaction effects of gender x perceived behavioral control ($b = 0.497, t = 1.970, p < 0.05$) on whistleblowing of academic misconduct intention is significant, while gender x attitude ($b = -0.190, t = 1.364, p > 0.05$) and gender x subjective norm ($b = -0.357, t = 0.831, p > 0.05$) had no effect. Therefore, only H7 was supported, while H5-H6 were not.

Table 6 presents the values of the coefficient of determination (R²) and effect size (f²) of the exogenous variables on the endogenous variable. The R² value represents the amount of variance in the endogenous construct explained by all the exogenous constructs in the research model. As can be seen from the table, the R² was 0.150, which denoted that the exogenous variables (attitude, subjective norms, PBC, and gender) explained 15 % of the variance in the endogenous variable (whistleblowing of academic misconduct intention). As regards the effect size, f², this represents the value of R² that is changed when a specific construct is omitted from the model. Following Hair et al (2014), the impact of the effect size was judged to be small if the value of f², was 0.02, medium if it was 0.15 and large if it was 0.35. The results as in Table 6 indicated that the supported exogenous variables (attitude, f², = 0.051; gender, f², = 0.024 and gender x perceived behavioral control, f², = 0.026) had a small effect size on the endogenous variable.

Table 5: Structural Model Assessment and Hypothesis Testing

Hypothesis	Relationship	Beta	Std Deviation	t value	p value	Decision
H1	Attitude -> Whistleblowing intention on academic misconduct	0.294	0.097	3.028	0.002	Supported
H2	Subjective norm -> Whistleblowing intention on academic misconduct	0.124	0.11	1.129	0.259	Rejected
H3	Perceived behavioral control -> Whistleblowing intention on academic misconduct	-0.035	0.109	0.321	0.749	Rejected

Theory of Planned Behaviour and Whistleblowing Intention on Academic Misconduct

Hypothesis	Path	β	t	p	Decision	
H4	Gender -> Whistleblowing intention on academic misconduct	-0.336	0.181	1.988	0.039	Supported
H5	Gender x Attitude -> Whistleblowing intention on academic misconduct	-0.190	0.261	1.364	0.173	Rejected
H6	Gender x Subjective norm -> Whistleblowing intention on academic misconduct	-0.357	0.228	0.831	0.406	Rejected
H7	Gender x Perceived behavioral control -> Whistleblowing intention on academic misconduct	0.497	0.278	1.970	0.041	Supported

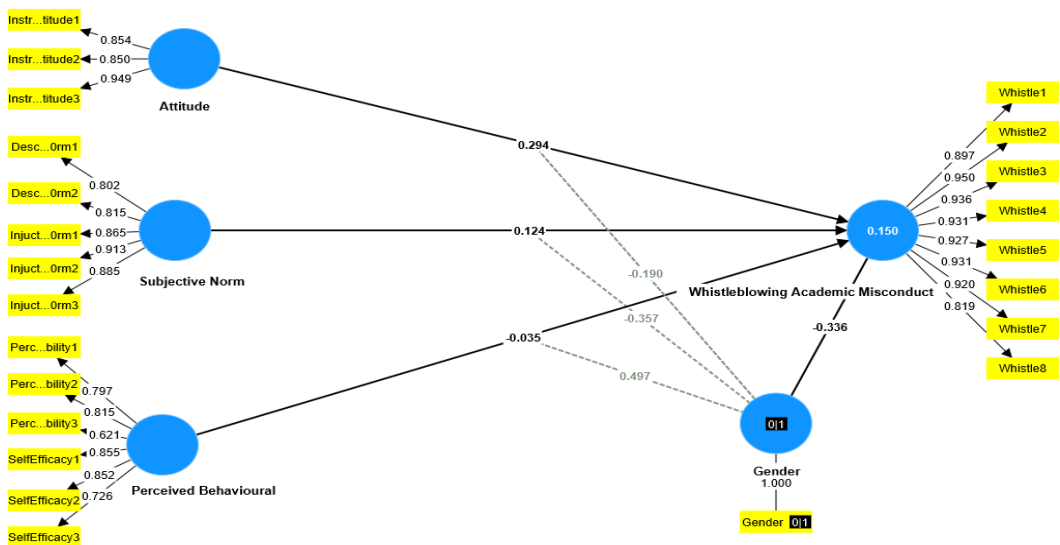


Figure 2: Path Model

Table 6: Result of R^2 and f^2

Constructs	R^2	f^2	Decision
Whistleblowing intention on academic misconduct	0.15		
Attitude		0.051	Small
Gender		0.024	Small
Gender x Perceived behavioral control (3)		0.026	Small

DISCUSSION

The objective of this research was to investigate the intention of undergraduate accounting students in Malaysia to report academic misconduct. The study incorporated individual factors; gender into the Theory of Planned Behavior (TPB). The results of the study contribute new insights to the literature on whistleblowing of academic misconduct.

The empirical findings demonstrated that TPB factor; attitude exerts a significant and positive effect on student intention on whistleblowing of academic misconduct. This finding thus suggested that students with a favorable attitude towards whistleblowing are more likely to report academic misconduct. As pointed out by Ajzen and Driver (1991), within the TPB framework, a favorable attitude towards a behavior influences a person's intention to perform the behavior, whereas an unfavorable attitude limits one's intention to perform the behavior. Empirically, this finding were consistent with previous research on whistleblowing intentions in both corporate settings (Zakaria et al., 2020; Brown et al., 2016; Park & Blenkinsopp, 2009) and higher education contexts (Owusu et al., 2020; Abd Manaf, 2022), highlighting the significance of a positive attitude towards whistleblowing as a good predictor of the intention to blow the whistle.

However, this study found that subjective norm and perceived behavioral control was an insignificant factor on whistleblowing of academic misconduct intention. The TPB posits that the subjective norm, representing the perceived social pressure to engage in a behavior, can influence one's intention to act (Ajzen and Driver (1991)). In the context of reporting academic misconduct, if students perceived a weak social expectation or normative pressure to report, it may insignificantly impact their intention to do so. This could be due to a prevailing culture that downplays the importance of reporting misconduct, creating a disconnect between individual beliefs and perceived societal expectations. If students believe that their peers or the academic community does not consider reporting a priority or socially desirable, the subjective norm may not exert a significant influence on their intention to report academic misconduct. This finding thus signals the need for improvement for the current whistleblowing policies of the Malaysian related universities. In such cases, interventions and educational efforts may be needed to reshape the perceived social norms surrounding the reporting of academic wrongdoing, emphasizing the importance of ethical behavior and collective responsibility within the academic community. While the outcome regarding subjective norm contradicts the results reported by Owusu et al. (2020), Kam et al. (2018), and Wang et al. (2023), it aligns with the findings of Ringelstein et al. (2023). The latter study concluded that the subjective norm does not exert a significant effect on the intention of accounting students to participate in ethical behavior.

In addition, the results suggested that students' belief in their ability to report academic misconduct does not affect their intention towards it. In the context of reporting academic misconduct, the TPB suggests that perceived behavioral control,

reflecting an individual's perception of the ease or difficulty in performing a behavior (Ajzen & Driver, 1991), may insignificantly affect student intention to report misconduct. If students believe that external factors, such as fear of retaliation, lack of anonymity in the reporting process, or inadequate institutional support, deter their ability to report academic misconduct effectively, their perceived behavioral control may be low. In such instances, even if students have a positive attitude towards reporting and recognize the importance of doing so, the perceived barriers may outweigh their intention to engage in the behavior. Again, this finding differed from the results documented in Owusu et al. (2020), Kam et al. (2018), and Wang et al. (2023). Nevertheless, it aligned with the conclusion reached by Ringelstein et al. (2023), which stated that perceived behavioral control has an insignificant impact on the ethical behavior of accounting students. To enhance the impact of students' perceived control over reporting academic misconduct, universities can take steps to refine reporting mechanisms, ensure confidentiality, and implement supportive measures, thereby fostering a more proactive approach against instances of academic misconduct.

Furthermore, the findings revealed that female accounting students were more inclined to report academic misconducts. Haas et al. (1988) suggested that women often exhibit a strong sense of ethical responsibility and are more attuned to ethical considerations in professional settings. In addition, Miles et al. (2022) stressed that female students may be motivated by a heightened commitment to upholding academic integrity and maintaining fairness in educational environments. Moreover, studies on gender differences in ethical decision-making indicated that women tend to prioritize collective welfare (Fernandez et al., 2019; Francoeur et al., 2019) and may view reporting misconduct as a means of promoting a fair and just academic community. The cultural and social expectations placed on women regarding responsibility and moral accountability may contribute to their greater likelihood of reporting academic misconduct. This finding support prior studies by Andon et al. (2018) and Simon et al. (2004) who found that female students were more likely to report cheating than male students.

CONCLUSION

This study investigated the factors affecting students' intention to report academic dishonesty. Specifically, this study focused on the TPB elements of attitude, subjective norms, perceived behavior control, and gender that influence students' intentions to report suspected academic misconduct at Malaysian universities. The role of gender as a moderator in the association between the aforementioned TPB elements and academic misconduct whistleblowing is also examined in this study. 315 undergraduate accounting students from three Malaysian universities made up the sample. The data were analyzed using structural equation modeling approaches, and the results demonstrate that gender and students' attitude toward reporting wrongdoing are the main predictors of whistleblowing intention. Additionally, the findings showed that gender moderate the relationship between perceived behavioral control and whistleblowing intention of academic conduct.

This research has some profound implications for both theoretical and practical aspects. Theoretically, the findings enrich the literature on academic misconduct whistleblowing by using TPB factors and introducing gender as a moderator variable to increase intention. Furthermore, to the best of the researchers' knowledge, the present study is one of little research that investigates the whistleblowing intention in educational institutions, as the existing studies have extensively focused on corporate as well public institutions setting. In practice, the results of this study can also deliver important information and guidance for higher education institutions in developing effective policies and strategies to improve whistleblowing intention and behavior.

Although this study makes positive contributions, it also has limitations. Some of the limitations of this study are: First, only three Malaysian universities made up the sample for this study. Future studies should include a larger sample of participants from both private and public universities, as each university has its own whistleblower policy. Second, the focus of this study was only Malaysia, allowing for future research to compare whistleblowing intentions among university students throughout developing countries.

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REFERENCES

- Abd Manaf, K. (2022). Analysis on the factors that influence students' perception towards whistleblowing intention. *Journal of Contemporary Social Science Research*, 7(1), 45-52.
- Achmada, T., Ghozali, I., Pamungkas, I. D., & Nuswantoro, U. D. (2020). Detection of Academic Dishonesty: A Perspective of the Fraud Pentagon Model. *International Journal of Innovation, Creativity and Change*, 13(12), 266-282.
- Aderibigbe, N., Ocholla, D., & Britz, J. (2021). Differences in ethical cyber behavioural intention of Nigerian and South African students: A multi-group analysis based on the theory of planned behaviour. *Libri*, 71(4), 389-406.
- Ajzen, I., & Driver, B. L. (1991). Prediction of leisure participation from behavioral, normative, and control beliefs: An application of the theory of planned behavior. *Leisure sciences*, 13(3), 185-204.
- Andon, P., Free, C., Jidin, R., Monroe, G. S., & Turner, M. J. (2018). The impact of financial incentives and perceptions of seriousness on

- whistleblowing intention. *Journal of Business Ethics*, 151, 165-178.
- Bernardi, R. A., Bilinsky, S. A., Chase, C. H., Giannini, L. D., & MacWhinnie, S. A. (2021). Decreasing Cheating and Increasing Whistle-Blowing in the Classroom: A Replication Study. In *Accounting Ethics Education* (pp. 3-24). Routledge.
- Bernardi, R. A., Goetjen, E. S., & Brax, J. M. (2014). Whistle-blowing in the classroom: The influence of students' perceptions of whistleblowers. *Accounting for the Public Interest: Perspectives on Accountability, Professionalism and Role in Society*, 247-271.
- Bernardi, R. A., Landry, A. C., Landry, E. E., Buonafede, M. R., & Berardi, M. E. (2016). What actions can be taken to increase whistle-blowing in the classroom?. *Accounting Education*, 25(1), 88-106.
- Bernardi, R. A., Larkin, M. B., LaBontee, L. A., Lapierre, R. A., & Morse, N. C. (2012). Classroom cheating: Reasons not to whistle-blow and the probability of whistle-blowing. In *Research on professional responsibility and ethics in accounting* (pp. 201-231). Emerald Group Publishing Limited.
- Brink, A. G., Lowe, D. J., & Victoravich, L. M. (2017). The public company whistleblowing environment: Perceptions of a wrongful act and monetary attitude. *Accounting and the Public Interest*, 17(1), 1-30.
- Brown, J. O., Hays, J., & Stuebs Jr, M. T. (2016). Modeling accountant whistleblowing intentions: Applying the theory of planned behavior and the fraud triangle. *Accounting and the Public Interest*, 16(1), 28-56.
- Burke, D. D., & Sanney, K. J. (2018). Applying the fraud triangle to higher education: Ethical implications. *J. Legal Stud. Educ.*, 35, 5.
- Culiberg, B., & Mihelič, K. K. (2020). The impact of mindfulness and perceived importance of peer reporting on students' response to peers' academic dishonesty. *Ethics & Behavior*, 30(5), 385-399.
- Dendir, S., & Maxwell, R. S. (2020). Cheating in online courses: Evidence from online proctoring. *Computers in Human Behavior Reports*, 2, 100033.
- Erkmen, T., Çalışkan, A. Ö., & Esen, E. (2014). An empirical research about whistleblowing behavior in accounting context. *Journal of Accounting & Organizational Change*, 10(2), 229-243.
- Fernandez, W. D., Burnett, M. F., & Gomez, C. B. (2019). Women in the boardroom and corporate social performance: negotiating the double bind. *Management Decision*, 57(9), 2201-2222.
- Francoeur, C., Labelle, R., Balti, S., & EL Bouzaidi, S. (2019). To what extent do gender diverse boards enhance corporate social performance?. *Journal of Business Ethics*, 155, 343-357.
- Haas, L. J., Malouf, J. L., & Mayerson, N. H. (1988). Personal and professional

- characteristics as factors in psychologists' ethical decision making. *Professional Psychology: Research and Practice*, 19(1), 35.
- Hair Jr, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European business review*, 26(2), 106-121.
- Hersh, M. A. (2002). Whistleblowers—heroes or traitors?: Individual and collective responsibility for ethical behaviour. *Annual reviews in Control*, 26(2), 243-262.
- Iwai, T., Yeung, L., & Artes, R. (2021). Voice or silence: antecedents of whistleblowing intentions. *RAUSP Management Journal*, 56, 186-201.
- Janke, S., Rudert, S. C., Petersen, Ä., Fritz, T. M., & Daumiller, M. (2021). Cheating in the wake of COVID-19: How dangerous is ad-hoc online testing for academic integrity?. *Computers and Education Open*, 2, 100055.
- Kam, C. C. S., Hue, M. T., & Cheung, H. Y. (2018). Academic dishonesty among Hong Kong secondary school students: Application of theory of planned behaviour. *Educational Psychology*, 38(7), 945-963.
- Khan, J., Saeed, I., Zada, M., Ali, A., Contreras-Barraza, N., Salazar-Sepúlveda, G., & Vega-Muñoz, A. (2022). Examining whistleblowing intention: The influence of rationalization on wrongdoing and threat of retaliation. *International journal of environmental research and public health*, 19(3), 1752.
- Khan, J., Saeed, I., Zada, M., Ali, A., Contreras-Barraza, N., Salazar-Sepúlveda, G., & Vega-Muñoz, A. (2022). Examining whistleblowing intention: The influence of rationalization on wrongdoing and threat of retaliation. *International journal of environmental research and public health*, 19(3), 1752.
- Kisamore, J. L., Stone, T. H., & Jawahar, I. M. (2007). Academic integrity: The relationship between individual and situational factors on misconduct contemplations. *Journal of Business Ethics*, 75, 381-394.
- Kray, L. J., & Haselhuhn, M. P. (2012). Male pragmatism in negotiators' ethical reasoning. *Journal of Experimental Social Psychology*, 48(5), 1124-1131.
- Lee, G., & Xiao, X. (2018). Whistleblowing on accounting-related misconduct: A synthesis of the literature. *Journal of Accounting Literature*, 41(1), 22-46.
- Marmat, G. (2022). Predicting intention of business students to behave ethically in the Indian context: From the perspective of Theory of Planned Behaviour. *Higher Education, Skills and Work-Based Learning*, 12(3), 437-458.
- Miles, P. J., Campbell, M., & Ruxton, G. D. (2022). Why students cheat and how understanding this can help reduce the frequency of academic

- misconduct in higher education: a literature review. *Journal of Undergraduate Neuroscience Education*, 20(2), A150-A159.
- Mustafida, N. (2020). Determinants of employee whistleblowing intentions in Indonesia: Applying theory of planned behavior. *The Indonesian Journal of Accounting Research*, 23(2), 241-262.
- Nayır, D. Z., Rehg, M. T., & Asa, Y. (2018). Influence of ethical position on whistleblowing behaviour: do preferred channels in private and public sectors differ?. *Journal of Business Ethics*, 149, 147-167.
- Nonis, S., & Swift, C. O. (2001). An examination of the relationship between academic dishonesty and workplace dishonesty: A multicampus investigation. *Journal of Education for business*, 77(2), 69-77.
- Nuswantara, D. A. (2023). Reframing whistleblowing intention: An analysis of individual and situational factors. *Journal of Financial Crime*, 30(1), 266-284.
- Owusu, G. M. Y., Bekoe, R. A., Anokye, F. K., & Okoe, F. O. (2020). Whistleblowing intentions of accounting students: An application of the theory of planned behaviour. *Journal of Financial Crime*, 27(2), 477-492.
- Park, H., & Blenkinsopp, J. (2009). Whistleblowing as planned behavior—A survey of South Korean police officers. *Journal of business ethics*, 85, 545-556.
- Pupovac, V., Popović, S., & Blažina, V. (2019). What prevents students from reporting academic misconduct? A survey of Croatian students. *Journal of academic ethics*, 17, 389-400.
- Radulovic, U. (2017). Academic dishonesty and whistleblowing in a higher education institution: A sociological analysis (Doctoral dissertation, University of Johannesburg (South Africa)).
- Ringelstein, D., Cooper, S., & Kirkham, R. (2023). A Structural Equation Model to Examine Expected Ethical Behaviour by Accounting Students Using the Theory of Planned Behaviour. *e-Journal of Social & Behavioural Research in Business*, 14(2), 1-8.
- Rothschild, J. (2013). The fate of whistleblowers in nonprofit organizations. *Nonprofit and Voluntary Sector Quarterly*, 42(5), 886-901.
- Rothschild, J., & Miethe, T. D. (1999). Whistle-blower disclosures and management retaliation: The battle to control information about organization corruption. *Work and occupations*, 26(1), 107-128.
- Sabli, N. U. R. S. H. A. M. I. M. I., Rahim, N. M., Dangi, M. R. M., Hamid, N. A., Adnan, M. F., Wahab, R. A., & Haron, N. H. (2016). Erosion of academic integrity in higher education system: Symbolization of dishonesty. *Jurnal Pendidikan Malaysia*, 41(1), 53-64.

- Simon*, C. A., Carr, J. R., McCullough, S. M., Morgan, S. J., Oleson, T., & Ressel, M. (2004). Gender, student perceptions, institutional commitments and academic dishonesty: Who reports in academic dishonesty cases?. *Assessment & Evaluation in Higher Education*, 29(1), 75-90.
- Sousa, S., Correia, E., Viseu, C., & Larginho, M. (2022). Analysing the influence of companies' green communication in college students' green purchase behaviour: An application of the extended theory of planned behaviour model. *Administrative Sciences*, 12(3), 80.
- Srirejeki, K., Faturokhman, A., Praptapa, A., & Irianto, B. S. (2022). Academic misconduct: Evidence from online class. *Int J Eval & Res Educ*, 11(4), 1893-1902.
- Stone, T. H., Kisamore, J. L., Kluemper, D., & Jawahar, I. M. (2012). Whistle-blowing in the classroom?. *Journal of Higher Education Theory and Practice*, 12(5), 11-26.
- Sugriyanti, S., Swaraswati, Y., & Sari, W. A. (2017). PERAN THE BIG FIVE PERSONALITY TRAITS TERHADAP ACADEMIC DISHONESTY PADA MAHASISWA. *Intuisi: Jurnal Psikologi Ilmiah*, 9(3), 267-275.
- Trevino, L. K. (1996, July). Whistleblowing in the academic community: Personal reflections of a victim of plagiarism. In *Proceedings of the International Association for Business and Society* (Vol. 7, pp. 883-890).
- Tuan Mansor, T. M., Ariff, A. M., Hashim, H. A., & Ngah, A. H. (2022). Whistleblowing intentions among external auditors: an application of the moderated multicomponent model of the theory of planned behaviour. *Meditari Accountancy Research*, 30(5), 1309-1333.
- Tuan Mansor, T. M., Mohamad Ariff, A., & Hashim, H. A. (2020). Whistleblowing by auditors: the role of professional commitment and independence commitment. *Managerial Auditing Journal*, 35(8), 1033-1055.
- Vian, T., Agnew, B., & McInnes, K. (2022). Whistleblowing as an anti-corruption strategy in health and pharmaceutical organizations in low-and middle-income countries: a scoping review. *Global health action*, 15(1), 2140494.
- Vinten, G. (2000). Whistleblowing towards disaster prevention and management. *Disaster Prevention and Management: An International Journal*, 9(1), 18-28.
- Waltzer, T., Samuelson, A., & Dahl, A. (2021). Students' reasoning about whether to report when others cheat: Conflict, confusion, and consequences. *Journal of Academic Ethics*, 1-23.
- Wan Mahmood, W. A., Mat Jusoh, Y. H., Wan Mohamad Noor, W. N. B., Abd Razak, S. N. A., & Wan Mustafa, W. M. (2022). Predicting whistleblowing

intentions among Ar-Rahnu institutions' employees in Malaysia: theory of planned behaviour perspectives. *Esteem Journal of Social Sciences and Humanities*, 6, 79-98.

Wang, H., Ma, B., Cudjoe, D., Farrukh, M., & Bai, R. (2023). What influences students' food waste behaviour in campus canteens?. *British Food Journal*, 125(2), 381-395.

Wang, Y. Y., Wang, Y. S., & Wang, Y. M. (2022). What drives students' Internet ethical behaviour: an integrated model of the theory of planned behaviour, personality, and Internet ethics education. *Behaviour & Information Technology*, 41(3), 588-610.

Widianingsih, L. P. (2013). Students cheating behaviors: The influence of fraud triangle. *Review of Integrative Business and Economics Research*, 2(2), 252.

Xiao, F., & Wong-On-Wing, B. (2021). Employee sensitivity to the risk of whistleblowing via social media: The role of social media strategy and policy. *Journal of Business Ethics*, 1-24.

Zakaria, M., Omar, N., Rosnidah, I., Bustamana, H. A., & Hadiyati, S. N. (2020). Adopting the planned behavioural theory in predicting whistleblowing intentions among Indonesian public officials. *Management & Accounting Review (MAR)*, 19(3), 25-47.