
Determinants of Sales Tax Compliance Behaviour in Malaysia: A Theory of Planned Behaviour Perspective on Sustainable Tax Administration

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Abstract: Sales tax compliance continues to pose challenges within self-assessment systems, particularly where tax laws are complex. This study used the Theory of Planned Behaviour to examine how tax morale, perceived social media norms, and tax penalties influence sales tax compliance behaviour, with the intention to comply acting as a mediator. A survey of registered manufacturers produced 400 usable responses from 480 questionnaires distributed, representing an 83.3 per cent usable response rate. The data were analysed using Partial Least Squares Structural Equation Modelling. The findings show that tax morale positively influences both intention and compliance behaviour, with complementary partial mediation. Tax penalties significantly influence intention but have no significant direct effect on compliance behaviour, indicating indirect-only mediation. Perceived social media norms do not significantly influence intention but have a weak, significant direct effect on compliance behaviour, resulting in no mediation. The study extends the Theory of Planned Behaviour to organisational sales tax compliance and highlights behavioural interventions, taxpayer education, and proportionate enforcement as practical approaches to promoting voluntary compliance, fiscal sustainability, and sustainable tax administration.

Keywords: Intention to comply, perceived social media norms, sales tax compliance behaviour, self-assessment tax system, sustainable tax administration, tax morale, tax penalties, theory of planned behaviour.

Article info: Received 5 June 2026 | revised 28 August 2026 | accepted 9 September 2026 | published 1 October 2026

Recommended citation: Nasri, A., Yusoff, Y. H., & Juliardi, D. (2026). Determinants of Sales Tax Compliance Behaviour in Malaysia: A Theory of Planned Behaviour Perspective on Sustainable Tax Administration. *Indonesian Journal of Sustainability Accounting and Management*, 10(2), 304–321. <https://doi.org/10.20448/ijSAM.v10i2.9443>



INTRODUCTION

Taxpayers who voluntarily comply with their tax obligations have been identified as essential to an effective tax system and its continued sustainability. Specifically, under a self-assessment regime, taxpayers voluntarily assume primary responsibility for determining their tax liability and accurately computing, reporting, and paying the correct amount of tax due without immediate examination by the tax authority. Hence, voluntary compliance is essential to applying tax law correctly and ensuring that the government can legitimately raise public revenue. In Malaysia, responsible taxpaying through voluntary compliance became even more pertinent when the Sales and Service Tax (SST) was reintroduced in September 2018, marking a return to the self-assessment taxation model for indirect taxes and solidifying SST's place as a critical pillar of Malaysia's tax system. Since then, the government has taken steps to further strengthen the administration of indirect taxes as part of its agenda to promote fiscal sustainability through domestic revenue generation and reduce fiscal deficits. Recently, the Ministry of Finance Malaysia (2025) announced adjustments to selected sales tax rate(s) and a broadening of the scope of service tax, effective in July 2025, to increase Malaysia's revenue sources. Tax revenue from indirect taxes was also noted to have provided the federal government with approximately RM58.8 billion (Ministry of Finance Malaysia, 2025). As such, these initiatives further emphasise the effective administration of indirect taxes and highlight the need to promote voluntary tax compliance in Malaysia's self-assessment tax system.

Promoting sales tax compliance also advances the wider goals of sustainable tax development and good governance. An effective tax system empowers governments to collect revenue from sustainable domestic financial sources to provide citizens with the public goods they require to fulfil their social and economic needs, including quality education, affordable healthcare, safe infrastructure, environmental conservation, poverty alleviation initiatives, and more. Taxation can therefore help achieve fiscal sustainability by generating income that governments can use to facilitate long-term growth and cover increasing expenditure. Well-administered tax policy also has the potential to increase taxpayers' sense of responsibility, institutional trust, and confidence, which have been cited as pillars of good governance. Therefore, improving voluntary compliance with sales tax will help increase revenue and encourage sustainable economic growth and good governance in Malaysia.

Despite the Malaysian authorities' continued initiatives to strengthen tax compliance efforts, persistent tax non-compliance remains an ongoing challenge in the nation's tax environment. The Royal Malaysian Customs Department (RMCD) has redoubled its audit and enforcement efforts to combat recurrent non-compliance issues, such as under-declaration of sales, abuse of exemption certificates, incorrect tariff classifications, and misdeclarations of tax by taxable persons (RMCD, 2023). The National Audit Department Malaysia (2023) similarly identified shortcomings in tax administration and controls that could lead to revenue losses. RMCD (2024) also reported a total operative value of RM23.03 million collected through a Special Integrated Compliance Operation on Non-Submission of Returns. Of this amount, RM7.48 million was recovered through its combined enforcement efforts, while the remainder is considered estimated unpaid tax for unsubmitted returns. Additionally, enforcement efforts identified previously unregistered businesses, bringing in approximately RM58.86 million in recovered tax (RMCD, 2024). These examples highlight that, despite the continued focus on enforcement, tax non-compliance will likely remain an issue in the nation's self-assessment regime. Therefore, enforcement-first strategies will likely be inadequate to support voluntary tax compliance in the long term.

Tax compliance has traditionally been discussed from a deterrence-based standpoint using economic predictors, such as audit rates, penalty fees, and investigation and enforcement efforts. While many deterrence strategies are still implemented today, they do not resolve the central issue of what causes taxpayers to comply voluntarily. Alm (1999) concluded that compliance was too complex to be explained by enforcement through economic means alone, and Kirchler, Hoelzl, and Wahl (2008) found that taxpayer behaviour is simultaneously affected by psychological, institutional, and social factors. With a growing literature on taxpayer behaviour, tax compliance is seen less as an enforcement strategy and more as a voluntary action based on taxpayers'

perceptions of and reactions to variables that may affect their decisions to comply. Viewing tax compliance as a behavioural decision helps provide context for why people decide to pay taxes or not in today's tax systems.

Taxation research focusing on human behaviour has begun to identify several predictors of tax compliance behaviour beyond traditional deterrence theory. Tax morale, an intrinsic motivation to do what is right, has been found to influence taxpaying behaviour by affecting taxpayers' voluntary compliance decisions based on their ethical standards and values (Torgler, 2007). Ajzen (1991) suggested that behavioural intention is one of the strongest predictors of behaviour. From the Theory of Planned Behaviour (TPB) perspective, taxpayers' compliance behaviour is not influenced by enforcement mechanisms alone. Taxpayers' attitudes towards paying taxes, subjective norms, and perceived behavioural control (PBC) determine their intention to comply. This intention eventually helps determine taxpayers' compliance behaviour. The argument above acknowledges that taxpayers have both behavioural and economic reasons for complying with tax laws. Informed by TPB, this study aimed to explore the behavioural predictors of sales tax compliance behaviour.

TPB is one of the most frequently used theories for understanding people's intentions and behaviour in numerous areas of study. Within TPB, behavioural intention comprises three constructs: attitude towards behaviour, subjective norms, and perceived behavioural control (PBC). Researchers have also adopted TPB in the tax compliance arena as a methodology to study tax compliance behaviour empirically. However, these studies were restricted to individual taxpayers and direct taxation. Palil (2010) also identified that organisational tax compliance deserves more attention, as there is a lack of empirical evidence in this area. This study helps bridge this gap by analysing sales tax compliance behaviour within organisations in Malaysia. Therefore, it further validates TPB in the area of taxation by applying it in an indirect taxation context. An organisation's decision-making differs vastly from that of an individual taxpayer. Many internal processes and decisions can affect taxable sales within a firm. These factors can include, but are not limited to, internal control, organisational structure, tax-motivated policies, corporate tax governance, tax law interpretations, and tax professional discretion (finance professionals, tax managers, and management). Thus, by investigating tax compliance in a business setting in Malaysia's self-assessment system using TPB, this study will shed light on TPB's effectiveness in measuring organisational sales tax compliance behaviour.

This study focused on TPB as applied to businesses operating within Malaysia's manufacturing sector. The sales tax provisions under the (Malaysia Sales Tax Act, 2018) can apply to any business within Malaysia. However, this study focused on taxable manufacturers. Manufacturing is one of the largest contributors to Malaysia's GDP, generating roughly 23% of Malaysia's GDP in 2024 and selling over RM1.9 trillion worth of goods in the same year (Department of Statistics Malaysia, 2024b). Registered manufacturers are required to adhere to sales tax regulations regarding exemption certificates, taxable and exempt goods, importing and classifying taxable goods, and proper documentation procedures. Manufacturing businesses must comply with tax regulations with greater accountability than other sectors. Although there has been improvement, RMCD has stated that SST returns, documentation, incorrect tax classifications, and registration remain common issues in businesses. As a result of continued enforcement focus, voluntary compliance is likely to remain low if concerns about barriers to compliance persist. This further emphasises the importance of understanding organisational tax compliance behaviour specifically in manufacturing businesses in Malaysia.

Organisational decisions seldom exist in a vacuum, as decisions made by organisations are sometimes influenced by others after receiving information through interactions with outside parties in the industry in which the focal organisation operates. As such, this study applied PSMN to model social influence, following past research. With increasing internet and social media use in Malaysia, firms are expected to turn to online media to seek information, observe how others in the industry operate, and learn from others' experiences. Social interactions will gradually shift their perceptions over time and could influence compliance-related decisions. The Department of Statistics Malaysia (2024a) found that roughly 90.7% of Malaysians use the internet regularly, and 72.6% had used social media in the month before the survey. Social media allows users to share information and their experiences with others. Social media platforms are commonly used to discuss how businesses operate and can influence how businesses view taxation. Tax information can be found on social media and through general internet searches. When searching, businesses can be influenced by their

peers or others who post about their understanding of tax rules. As more Malaysians continue to use social media, users can develop their own attitudes towards taxes by being exposed to others' opinions. Even though TPB has been used extensively to understand tax compliance behaviour, few studies have investigated the role of PSMN in the sales tax compliance behaviour of firms in Malaysia. To address this gap in the literature, this study integrated PSMN into TPB to understand its effect on explaining sales tax compliance behaviour.

Prior research has studied tax compliance through both economic and behavioural lenses. However, few studies have examined organisational-level sales tax compliance behaviour within Malaysia's SST regime. Similar studies have focused only on individual tax compliance intentions, not actual behaviour. They also have not focused on sales and service tax. Past behavioural research has focused on tax compliance intentions rather than behaviour itself. While previous studies have mainly examined each element of tax morale, PSMN, and tax penalties separately, this study differs by targeting registered taxable manufacturers in Malaysia and focusing on their actual sales tax compliance behaviour. It addresses gaps in the literature by examining how these behavioural constructs relate to sales tax compliance behaviour and testing the mediating effect of intention.

Although this study was conducted in Malaysia, its findings may provide useful insights for other jurisdictions that operate under similar self-assessment tax systems; these insights can be applied to many countries. Self-assessment tax systems and dependence on indirect taxes are highly prevalent in countries in the Global South. Like Malaysia, these countries also struggle to balance tax enforcement with voluntary compliance. Malaysia's improvement in tax compliance behaviour through behaviourally informed strategies can provide valuable insights for similar developing countries that wish to achieve the same. Thus, the findings from this study can help inform other tax authorities about strategies to consider when aiming to improve tax compliance.

The conceptual model was designed based on the four research questions, in parallel with the objectives of this study. Namely, this study investigated whether tax morale, PSMN, and tax penalties affect sales tax compliance behaviour among registered manufacturers in Malaysia and whether intention to comply mediates these effects. Drawing on the TPB, four hypotheses were developed, positing that tax morale, PSMN, and tax penalties positively predict sales tax compliance behaviour, and that intention to comply is the mediation mechanism between these behavioural constructs and compliance behaviour.

The developed conceptual framework, anchored by the TPB, posits sales tax compliance behaviour among registered manufacturers in Malaysia based on the direct relationships between tax morale, PSMN, tax penalties, and intention to comply. Conceptually, the study offers two major contributions to the existing body of literature. First, the application of the TPB is extended beyond individual taxpayers to an organisational context, with registered manufacturers as the focal participants. Second, this study contributes to deepening the understanding of organisational sales tax compliance behaviour within Malaysia's self-assessment tax regime. The findings may also assist the RMCD and policymakers in developing suitable behavioural instruments to enhance voluntary sales tax compliance among businesses. The outcomes of this study will also be useful to the RMCD and policymakers when creating more effective behavioural interventions to improve businesses' voluntary sales tax compliance behaviour.

LITERATURE REVIEW

The Theory of Planned Behaviour

The TPB has been widely applied to examine compliance and behavioural intention in multiple organisational contexts in Malaysia. Yee, Al-Mulali, and Ling (2022) found that the TPB can explain the intention to invest in renewable energy among investors in Malaysia, with the evaluation of regulatory frameworks being the strongest predictor. Ting, Zailani, Sidek, and Shaharudin (2024) successfully applied the TPB within a manufacturing context, showing that the TPB explains the adoption of circular economy business models, with motivators having positive relationships and barriers having negative relationships with adoption intentions. The TPB also explains environmental behaviour in Malaysian organisations, as shown by studies examining the TPB as a predictor of green behaviour (Ogiemwonyi, Harun, Hossain, & Karim, 2023), sustainable waste

management behaviour (Sapawi, Ahmad, Valeri, & Azman, 2024), and corporate environmental behaviour (Chan, Chong, & Ng, 2022). Harinurdin, Safitri, and Kountur (2024) showed that the TPB can be applied in tax compliance studies, suggesting that PBC, subjective norms, and compensation predict managers' intention to comply with tax obligations. Malaysian taxpayers' compliance behaviour has also been shown to be predicted by perceived fairness, tax penalties, and tax awareness (Hayat, Salameh, Mamun, Helmi Ali, & Makhbul, 2022). Although differences exist across application areas, researchers have built on the TPB by adding other constructs (i.e., moral obligation, trust, and tax complexity) to TPB models to enhance the prediction of compliance behaviour (Garg, Narwal, & Kumar, 2024). Overall, these articles indicate that the TPB can explain decision-making behaviour within different organisational scenarios and can be applied to tax compliance research. The TPB is suitable for explaining sales tax compliance behaviour, as SST in Malaysia is managed under the self-assessment system. Tax morale indicates the attitude factor, PSMN indicates the subjective norm, and tax penalties are used to indicate perceived behavioural control (PBC) under the TPB. In line with the TPB, intention is treated as the direct antecedent of sales tax compliance behaviour, which is the key behaviour of interest in this study.

TPB offers a suitable framework for conceptualising sales tax compliance behaviour. Since SST in Malaysia is enforced through a self-assessment regime, tax morale indicates the taxpayer's attitude, PSMN indicates the subjective norm, and tax penalties indicate PBC within the TPB. Consistent with the TPB, intention is posited as the proximal predictor of sales tax compliance behaviour in this study.

Tax Morale (Attitude)

Tax morale has been identified as one of the key behavioural factors that determine tax compliance behaviour under self-assessment tax regimes. Tax morale essentially captures taxpayers' voluntary willingness to pay taxes. Empirical evidence has repeatedly linked tax morale to higher tax compliance and reduced tax evasion (Puklavec, Kogler, Stavrova, & Zeelenberg, 2026). Previous research has indicated that tax morale is influenced by ethical norms, trust in government, and taxpayers' perceptions of fairness. Ciziceno and Pizzuto (2022) found that life satisfaction positively influenced tax morale through the mediation of institutional trust and subjective financial satisfaction. Andriani, Bruno, Douarin, and Stepien-Baig (2022) discovered that cultural values also affect tax morale, such that individualism and femininity are positively correlated with tax morale, while power distance and uncertainty avoidance are negatively correlated with tax morale.

Tax morale can be placed under the TPB as the attitudinal component. Taxpayers with higher tax morale would evaluate paying taxes more positively than taxpayers with low tax morale (Ajzen, 1991). Previous research on tax compliance discovered that tax morale decreased taxpayers' willingness to evade taxes (Andriani et al., 2022). Fajarwati (2023) showed that tax fairness is also important in determining individuals' intentions not to comply with taxes. Hayat et al. (2022) demonstrated that taxpayers' intention to comply is strengthened by perceived fairness, tax penalties, and tax awareness, which subsequently contribute to higher levels of tax compliance behaviour. Extending the discussion to an organisational setting, Harinurdin et al. (2024) suggested that compensation and the reduction of counterproductive workplace behaviour strengthened managers' intention to fulfil their tax obligations. Drawing on these perspectives, this study conceptualised tax morale as registered manufacturers' ethical values, moral responsibility, honesty, and intrinsic willingness to comply with Malaysia's sales tax legislation. Tax morale is placed under the TPB as the attitude towards complying with sales tax obligations, as organisations with high tax morale would be more likely to view compliance behaviour positively. According to the TPB, favourable attitudes towards a behaviour strengthen behavioural intention, which subsequently increases the likelihood of performing that behaviour (Ajzen, 1991). Tax morale indicates an organisation's willingness to honour its sales tax responsibilities. Therefore, higher organisational tax morale should be associated with greater intention to comply and higher sales tax compliance behaviour. Although prior studies have acknowledged tax morale as a significant predictor of tax compliance intention and behaviour, empirical evidence on Malaysia's sales tax system among registered manufacturers is scarce.

Perceived Social Media Norms (Subjective Norms)

Social media can influence users' perceptions of social norms and increase certain behaviours offline. Research shows that social media may cause unrealistic perceptions of norms, otherwise known as a “funhouse mirror” effect, in which perceptions of norms online are exaggerated compared to reality. This causes pluralistic ignorance and false polarisation (Robertson, del Rosario, & Van Bavel, 2024). Borg (2022) found that watching the news increased the strength of injunctive norms, while using social media first weakened descriptive norms and then weakened injunctive norms. According to Masur, DiFranzo, and Bazarova (2021), behavioural information is transmitted efficiently through the extensive networks created by social media platforms. When users can see the actions of their peers, they can infer which social norms are common within their community. Once these inferred norms become salient to individuals, they may change their behaviour to fit in. Chinn and Hasell (2024) found that increased utilisation of social media for information-seeking and social connectedness causes individuals to adopt healthier behaviours, as social media use strengthened users' perceptions of offline norms. Overall, these studies show that PSMN can influence how individuals behave and evaluate actions within social media contexts.

PSMN can fit under the TPB as subjective norms. Prior TPB studies in Malaysia show that subjective norms are important in predicting behaviour across various settings. Fauzi, Hanafiah, and Kunjuraman (2024); Hamzah and Tanwir (2021), and Yeow and Loo (2022) found that subjective norms significantly predict intentions to buy green computers, visit green hotels, and utilise hybrid vehicles. Previous studies consistently highlight the importance of subjective norms in shaping behavioural intentions. Findings from previous studies align with the significance of subjective norms in affecting behavioural intention. Muniandy et al. (2021) found that subjective norms positively affect academics' intentions to perform sustainable waste management behaviour. Sapawi et al. (2024) also found similar results regarding oil palm mill managers' intentions to perform sustainable waste management practices. Moreover, subjective norms and consumer involvement on social media platforms strengthened consumers' intentions to buy green products when supported by social media marketing (Nekmahmud, Naz, Ramkissoon, and Fekete-Farkas (2022)). Building on this evidence, this study conceptualised PSMN as registered manufacturers' perceptions of sales tax-related opinions, discussions, experiences, and expectations communicated through social media. Subjective norms in the TPB are defined as individuals' beliefs about whether people important to them think they should perform the behaviour. As such, registered manufacturers who are more likely to perceive strong, positive social media norms toward sales tax compliance should exhibit a higher intention to comply, resulting in higher levels of compliance behaviour. While prior research has established the effect of subjective norms on behavioural intention and behaviour, limited empirical research has examined the impact of PSMN on sales tax compliance behaviour specifically among registered manufacturers in Malaysia.

Tax Penalties (PBC)

Empirical studies have found that taxpayers' compliance behaviour is significantly influenced by the tax penalties imposed (Hayat et al., 2022). Researchers agree that tax penalties are among the most effective predictors of taxpayers' compliance intentions and behaviours. Tax penalties support deterrence theory, as empirical evidence shows that financial penalties reduce individuals' intentions to evade taxes (Ntiamoah, Agyenim-Boateng, Opoku-Asante, Kusi, & Arhenful, 2025). Non-monetary penalties can also influence taxpayers. Organ, Ruda, Slemrod, and Turk (2022) found that when taxpayers were unable to receive passport services from the United States passport certification programme because of tax noncompliance, there were significant compliance effects. Tax penalties can influence behaviour in different ways. Kettlewell and Zhang (2024) found that, despite high-income earners facing an extremely large penalty for not investing in Australia's private health insurance system, there was only a small decrease in noncompliance. Tax penalties can influence taxpayers' perceptions of their ability to comply within self-assessment taxation systems.

This study placed tax penalties under PBC in TPB because they represent taxpayers' perceptions of the consequences of being caught not complying with tax laws. Prior research applying TPB to tax compliance and behavioural intentions in Malaysia supports placing tax penalties under PBC. Research conducted across various disciplines has consistently shown that perceived behavioural control (PBC) contributes significantly to

the formation of behavioural intention. Hayat et al. (2022) identified tax penalties as one of the strongest determinants of taxpayers' intention to comply in Malaysia. Similarly, Wong, Wong, Lau, Lee, and Kok (2024) reported that attitude and PBC are the only TPB constructs that significantly predict individuals' intention to invest in renewable energy. Evidence from Harinurudin et al. (2024) indicates that, within an organisational context, perceived behavioural control (PBC) strengthens managers' intention to comply with tax obligations. Beyond TPB, previous studies have also identified personality traits and trust in tax authorities as important determinants of compliance behaviour. For example, Jassem, Al-Rawi, and Hussein Ali (2022) found that conscientiousness and agreeableness are negatively associated with the intention not to comply, while Owusu, Bekoe, and Mintah (2023) demonstrated that greater trust in tax authorities strengthens compliance behaviour. Hayat et al. (2022) also found that tax penalties, perceived fairness, and tax awareness are significant predictors of compliance intention and behaviour in Malaysia. This study operationalised tax penalties as registered manufacturers' perceptions of the likelihood and severity of the repercussions they would face if they did not comply with Malaysia's Sales Tax Act 2018.

Tax penalties fit within the TPB framework under PBC because they influence taxpayers' perceptions of whether they can avoid being caught not complying with tax regulations. Within the TPB, PBC determines behavioural intention by affecting an individual's belief about their ability to perform a behaviour and their perception of control over performing that behaviour. Tax penalties have a greater effect on sales tax compliance, as stronger perceptions of tax penalties increase an organisation's awareness of the potential consequences of non-compliance. This results in an increased intention to comply with tax rules and follow compliant behaviours. Therefore, it is expected that organisations that view tax penalties as severe will have a higher intention to comply and will perform sales tax compliance behaviours. Despite extensive evidence supporting the role of tax penalties in shaping taxpayers' compliance intentions and behaviours, relatively few empirical studies have examined this relationship within Malaysia's sales tax system, especially among registered manufacturers.

Intention to Comply and Sales Tax Compliance Behaviour

Behavioural intention has been identified as a significant predictor of behaviour across multiple organisational contexts. Hayat et al. (2022) identified perceived fairness, tax penalties, and tax awareness as making positive contributions to taxpayers' intention to comply, which then mediated their effects on compliance behaviour. Saptono et al. (2023) showed that an increase in e-tax system service quality and a decrease in compliance costs strengthen tax compliance intention through increased user satisfaction. Beyond the taxation context, Asadi et al. (2021) demonstrated that managers' interpretations of environmental issues and responsibility attribution positively influence their intention to adopt green IT practices. Ting et al. (2024) showed that motivators positively influence manufacturers' intentions to adopt circular economy business models despite barriers to adoption. Wong et al. (2024) discovered that attitude and PBC positively influence intentions to invest in renewable energy. Together, these studies indicate that the intention to comply is important in regulating how individuals and organisations act based on their perceptions.

Within the TPB framework, intention to comply acts as the intermediate variable that directly causes sales tax compliance behaviour. This study measured sales tax compliance behaviour as registered manufacturers' behaviour when calculating, reporting, declaring, and remitting sales tax correctly, as outlined by the Malaysia Sales Tax Act (2018). Consistent with TPB assumptions, tax morale, PSMN, and tax penalties should predict intention to comply, which would then predict sales tax compliance behaviour. The TPB asserts that behavioural intention is the immediate antecedent of behaviour and describes the processes through which attitudes, subjective norms, and perceived behavioural control (PBC) are translated into behaviour (Ajzen, 1991). Consistent with this theory, this study aimed to identify whether intention to comply mediates the relationships between tax morale, PSMN, tax penalties, and sales tax compliance behaviour. While research on compliance behaviours has started to accumulate evidence supporting the mediating role of intention to comply, limited evidence exists on the Malaysian sales tax system among registered manufacturers.

Overall, the reviewed literature supports TPB as an appropriate theory for explaining compliance behaviour in organisational and taxation contexts. Cumulatively, the reviewed literature identifies tax morale, PSMN, tax penalties, and intention to comply as key factors affecting compliance behaviour. Although TPB has been widely used in the tax compliance literature, previous studies have been limited to individual taxpayers, direct taxation, or taxation in general. Minimal empirical evidence has focused on organisational sales tax compliance under Malaysia's self-assessment system. Despite the growing body of TPB research, relatively few studies have examined the combined effects of tax morale, PSMN, tax penalties, and intention to comply on sales tax compliance behaviour. By addressing these gaps, this study broadens the application of TPB to organisational indirect tax compliance among registered manufacturers in Malaysia while contributing additional behavioural evidence to support future tax policy and compliance strategies.

CONCEPTUAL FRAMEWORK

Grounded in the TPB, this study hypothesised that the sales tax compliance behaviour of registered manufacturers in Malaysia is determined by tax morale, PSMN, and tax penalties, with intention to comply acting as the mediating variable. Drawing on the TPB, tax morale relates to attitude, while PSMN is associated with subjective norms, and tax penalties align with PBC. Thus, organisations with higher tax morale, ethical values, and intrinsic motivation are expected to have a higher intention to comply with sales tax obligations, which will lead to higher sales tax compliance behaviour. Similarly, organisations facing stronger social media norms are expected to exhibit stronger tax compliance norms, while organisations with stronger perceptions of tax penalties are expected to have greater awareness of the consequences of non-compliance, leading to compliant behaviour. Drawing from the Theory of Planned Behaviour (Ajzen, 1991), behavioural intention serves as the means through which attitude, subjective norms, and PBC affect behaviour. Hence, intention to comply is hypothesised to mediate the effects of tax morale, PSMN, and tax penalties on sales tax compliance behaviour (Harinurudin et al., 2024; Hayat et al., 2022). Based on these arguments, the following hypotheses were developed.

H₁: Tax morale significantly influences sales tax compliance behaviour.

H_{1a}: Tax morale significantly influences the intention to comply.

H_{1b}: Intention to comply mediates the significant influence of tax morale on sales tax compliance behaviour.

H₂: PSMN significantly influences sales tax compliance behaviour.

H_{2a}: PSMN significantly influences intention to comply.

H_{2b}: Intention to comply mediates the significant influence of PSMN on sales tax compliance behaviour.

H₃: Tax penalties significantly influence sales tax compliance behaviour.

H_{3a}: Tax penalties significantly influence intention to comply.

H_{3b}: Intention to comply mediates the significant influence of tax penalties on sales tax compliance behaviour.

H₄: Intention to comply significantly influences sales tax compliance behaviour.

METHODOLOGY

This study used a quantitative cross-sectional design to test the hypothesised relationships among its variables. Quantitative methods were deemed suitable because they allow objective assessment of the relationships between TPB constructs and organisational sales tax compliance behaviour (Ajzen, 1991). Cross-sectional questionnaire data were collected from registered manufacturers at one point in time. While cross-sectional surveys have frequently been used in behavioural taxation research and are appropriate for testing TPB-based models, causal conclusions cannot be drawn from this research design.

The target population comprised manufacturers registered with the RMCD under the Sales Tax Act 2018. According to the RMCD (2024), there were 124,682 registered sales tax registrants in Malaysia in 2025. This study focused exclusively on registered manufacturers because they are legally responsible for charging,

collecting, reporting, and remitting sales tax under Malaysia's self-assessment system (Palil, 2010). The sampling frame was developed using publicly available online directories maintained by the RMCD and the Federation of Malaysian Manufacturers (FMM) portal. Purposive sampling was employed to ensure that only organisations directly involved in sales tax administration were selected. Eligible respondents comprised tax managers, finance managers, accountants, tax executives, finance executives, and other personnel responsible for preparing, reporting, or administering sales tax, whereas organisations not registered under the Sales Tax Act 2018 and respondents without direct sales tax responsibilities were excluded. To enhance representativeness, data collection focused on the five regions with the largest concentrations of registered sales tax registrants, namely Selangor, Johor, Kuala Lumpur, Pulau Pinang, and KLIA, which collectively accounted for approximately 79.2% of the 124,682 registered sales tax registrants in Malaysia (RMCD, 2024).

The data were collected from January to March 2026. The sampling frame consisted of manufacturers listed in the public registers of the RMCD and the FMM. Four hundred and eighty (480) eligible registered manufacturers were identified for this study. Of these, 432 completed questionnaires were received, resulting in a response rate of 90.0%. During data preparation, 32 questionnaires were excluded due to incomplete answers or missing values. This resulted in a total of 400 questionnaires being used for analysis (usable response rate = 83.3%). No missing values were found in the measurement constructs. The sample size was well above the recommended minimum sample size required for PLS-SEM, demonstrating that the sample provided sufficient statistical power to achieve stable parameter estimates, as suggested by (Hair, Hult, Ringle, & Sarstedt, 2022). Following the suggestion of Armstrong and Overton (1977), an independent-samples t-test was conducted to assess non-response bias by comparing differences between early and late respondents. Since no statistically significant differences were observed in any measurement items ($p > 0.05$), it was concluded that non-response bias was not an issue.

The survey questionnaire was developed using measurement items adapted from prior TPB and behavioural taxation studies. These items were slightly modified to suit the Malaysian sales tax context while retaining the conceptual definitions of the variables. The instrument was subsequently reviewed by taxation experts, including both academics and tax practitioners, to establish face and content validity. A pilot study involving 55 respondents was conducted to assess the instrument's clarity, readability, and appropriateness. Comments received during the pilot study were addressed through minor adjustments. The questionnaire was then administered for data collection. The final instrument consisted of five constructs: tax morale, PSMN, tax penalties, intention to comply, and sales tax compliance behaviour. In accordance with the Theory of Planned Behaviour (Ajzen, 1991), tax morale was used to operationalise attitude towards behaviour, PSMN as subjective norms, and tax penalties as PBC. The measurement instrument used in this study is outlined in Table 1. It identifies each construct and its respective TPB dimension, the number of measurement items, a sample questionnaire item, its measurement source, and modifications specific to the Malaysian sales tax context. All measurements were reported on a seven-point Likert scale, where 1 = Strongly Disagree and 7 = Strongly Agree.

Analyses were conducted using Partial Least Squares Structural Equation Modelling (PLS-SEM) via WarpPLS 7.0. As this study focused on prediction, explaining organisational sales tax compliance behaviour while assessing the interplay among constructs of interest, including mediation effects, PLS-SEM was considered the appropriate analysis technique. Relative to covariance-based structural equation modelling (CB-SEM) approaches, PLS-SEM allows for greater flexibility when testing prediction-oriented research with complex structural models (Hair et al., 2022). Assessment of the measurement model consisted of indicator loadings, composite reliability, average variance extracted (AVE), and discriminant validity. Afterwards, the structural model was evaluated using path coefficients, coefficients of determination (R^2), effect sizes (f^2), mediation analysis, and WarpPLS model fit indices (APC, ARS, AARS, AVIF, AFVIF, and GoF).

To reduce concerns about common method bias, procedural remedies were employed. These remedies involved voluntary participation, anonymity, confidentiality, and the use of clear, unambiguous items (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). After data collection, common method bias was assessed using collinearity diagnostics based on the Average Variance Inflation Factor (AVIF) and Average Full Collinearity Variance Inflation Factor (AFVIF) produced by WarpPLS 7.0.

Table 1: Measurement Instrument

Construct	No. of Items	Sample Item	Source of Scale	Adaptation
Tax Morale (TM)	9	Our company believes it has a moral obligation to report and pay sales tax honestly, even when there is an opportunity to underreport.	Adapted from Torgler (2007) and Hayat et al. (2022)	Wording modified to reflect (Malaysia Sales Tax Act, 2018) and organisational sales tax compliance.
Perceived Social Media Norms (PSMN)	6	Opinions shared on social media shape our company's views regarding sales tax compliance.	Adapted from TPB subjective norm literature and social media studies: Ajzen (1991) and Nekomahmud et al. (2022)	Items contextualised to social media influences on organisational sales tax compliance.
Tax Penalties (TP)	7	Sales tax penalties discourage our company from underreporting taxable sales.	Adapted from Hayat et al. (2022) and Harinurdin et al. (2024)	Items modified to reflect the enforcement provisions of Malaysia Sales Tax Act (2018).
Intention to Comply (IC)	7	Our company intends to fully comply with all sales tax laws and regulations in the future.	Adapted from Ajzen (1991) and Hayat et al. (2022)	Wording adapted to organisational sales tax compliance intentions.
Sales Tax Compliance Behaviour (SCB)	6	Our company consistently submits SST-02 returns before the statutory deadline.	Adapted from Palil (2010) and Hayat et al. (2022)	Items adapted to measure organisational compliance behaviour under the (Malaysia Sales Tax Act, 2018).

RESULTS

Sample Characteristics and Data Screening

Of the 480 questionnaires distributed to registered manufacturers that registered for sales tax in Malaysia, 432 usable questionnaires were received, yielding a response rate of 90.0%. Of these questionnaires, 400 screened questionnaires were used for analysis. The actual usable response rate was 83.3%. The respondents were distributed widely throughout the major regions of manufacturing operations in Malaysia. Based on tests conducted for common method bias and non-response bias, the dataset met the quality criteria for proceeding with PLS-SEM.

Table 2: Descriptive Statistics of the Study Constructs

Construct	Mean	Standard Deviation (SD)
Tax Morale	5.72	1.23
Perceived Social Media Norms	5.20	1.37
Tax Penalties	5.50	1.12
Intention to Comply	5.76	1.19
Sales Tax Compliance Behaviour	5.77	1.12

Descriptive Statistics

Table 2 reports the descriptive statistics for the variables. Registered manufacturers exhibited the highest mean scores for sales tax compliance behaviour ($M = 5.77$, $SD = 1.12$), intention to comply ($M = 5.76$, $SD = 1.19$), and tax morale ($M = 5.72$, $SD = 1.23$). These results indicate that registered manufacturers have positive perceptions of sales tax compliance behaviour and are highly likely to comply with their sales tax obligations. In contrast, PSMN-registered respondents had the lowest mean score ($M = 5.20$, $SD = 1.37$), suggesting greater

dispersion in respondents' perceptions of social media use as an influencing factor in sales tax compliance behaviour. The descriptive statistics show that respondents are generally positive about all the variables.

Measurement Model Assessment

Table 3 presents the results for construct reliability and convergent validity, while Table 4 presents the discriminant validity assessment using the Fornell–Larcker criterion. The results show that the measurement model met the recommended criteria for reliability and validity. Table 3 shows that all indicator loadings exceed the threshold of 0.60 and are statistically significant ($p < 0.001$), indicating acceptable indicator reliability. Furthermore, internal consistency and reliability were established by Cronbach's alpha values between 0.910 and 0.963 and composite reliability values between 0.929 and 0.970, which are well above the recommended threshold of 0.70. Convergent validity was demonstrated by AVE values ranging from 0.654 to 0.821, which are above the recommended threshold of 0.50. Discriminant validity was assessed using the (Fornell & Larcker, 1981) criterion. Table 4 illustrates that the square root of each construct's AVE (bold diagonal values) is higher than the inter-construct correlations (off-diagonal values), supporting adequate discriminant validity. Taken together, these results provide evidence that the measurement model demonstrated acceptable psychometric properties and could be used to test the structural model.

Table 3: Construct Reliability and Convergent Validity Results

Construct	Loading Range	Cronbach's α	Composite Reliability	AVE
Tax Morale	0.848–0.898	0.963	0.968	0.770
Perceived Social Media Norms	0.800–0.923	0.944	0.956	0.782
Tax Penalties	0.667–0.878	0.910	0.929	0.654
Intention to Comply	0.845–0.937	0.963	0.970	0.821
Sales Tax Compliance Behaviour	0.728–0.920	0.931	0.946	0.747

Table 4: Discriminant Validity Assessment (Fornell–Larcker Criterion)

Construct	TM	PSMN	TP	IC	SCB
Tax Morale	0.877				
Perceived Social Media Norms	0.438	0.884			
Tax Penalties	0.677	0.612	0.808		
Intention to Comply	0.832	0.404	0.727	0.906	
Sales Tax Compliance Behaviour	0.826	0.422	0.675	0.818	0.864

Note: Bold diagonal values indicate the square roots of AVEs for each construct. Discriminant validity exists when the square root of the AVE value for each construct is higher than its respective correlations with other constructs (Fornell & Larcker, 1981).

Structural Model Assessment

Before hypothesis testing, the structural model was evaluated using WarpPLS 7.0. Table 5 presents the standardised path coefficients (β) together with their corresponding p-values. A significance level of 5% ($p < 0.05$) was adopted to determine whether the hypothesised relationships were statistically significant.

Table 5: Structural Model Results

Hypothesis	Relationship	β	p-value	Result
H1a	TM $\rightarrow$ IC	0.629	<0.001	Supported
H2a	PSMN $\rightarrow$ IC	0.005	0.462	Not Supported
H3a	TP $\rightarrow$ IC	0.316	<0.001	Supported
H1	TM $\rightarrow$ SCB	0.475	<0.001	Supported

Hypothesis	Relationship	β	p-value	Result
H2	PSMN $\rightarrow$ SCB	0.115	0.010	Supported
H3	TP $\rightarrow$ SCB	0.046	0.178	Not Supported
H4	IC $\rightarrow$ SCB	0.332	<0.001	Supported

The coefficient of determination in the proposed TPB model was 0.759 for intention to comply and 0.769 for sales tax compliance behaviour, indicating that 75.9% of the variance in intention to comply and 76.9% of the variance in sales tax compliance behaviour were explained by the model. Although these coefficients of determination are relatively large, they are not unusual because all the constructs in the model are conceptually related behavioural constructs specified a priori by the TPB (Ajzen, 1991). In addition, the acceptable model-fit indices presented in Table 7 provide further evidence that the structural model fits the data well.

Tax morale significantly and positively influences the intention to comply ($\beta = 0.629$, $p < 0.001$) and sales tax compliance behaviour ($\beta = 0.475$, $p < 0.001$), therefore supporting H1a and H1. Further, intention to comply positively and significantly influences sales tax compliance behaviour ($\beta = 0.332$, $p < 0.001$), supporting H4. These results indicate that organisations embracing stronger ethical values and possessing higher moral commitments develop stronger compliance intentions, ultimately resulting in higher levels of sales tax compliance behaviour.

PSMN does not have a significant effect on the intention to comply ($\beta = 0.005$, $p = 0.462$); as such, H2a is not supported. However, PSMN does significantly and positively influence sales tax compliance behaviour ($\beta = 0.115$, $p = 0.010$), supporting H2. These results imply that social media norms may have a direct effect on organisational sales tax compliance behaviour that does not operate through increased organisational intention to comply with tax laws.

Tax penalties, however, significantly and positively affect the intention to comply ($\beta = 0.316$, $p < 0.001$), supporting H3a. Tax penalties do not have a significant direct effect on sales tax compliance behaviour ($\beta = 0.046$, $p = 0.178$); as such, H3 was not supported. These results suggest that tax penalties affect organisational sales tax compliance behaviour by increasing the intention to comply rather than directly affecting behaviour.

Effect Size Assessment

Effect size (f^2) and statistical significance were used to determine the relative importance of structural relationships in the model. Using (Cohen, 1988) benchmark criteria, values of 0.02, 0.15, and 0.35 represent small, medium, and large effects, respectively. Of all the predictor constructs, tax morale has the largest influence on the model, with large effects on intention to comply ($f^2 = 0.526$) and sales tax compliance behaviour ($f^2 = 0.400$). Tax penalties have a moderate effect on intention to comply ($f^2 = 0.230$). Intention to comply also has a moderate effect on sales tax compliance behaviour ($f^2 = 0.271$). The remaining two paths, PSMN ($f^2 = 0.067$) and tax penalties ($f^2 = 0.031$), have small effects on sales tax compliance behaviour. Overall, these results support the practical significance of tax morale as having the strongest behavioural influence on organisational sales tax compliance in the TPB model.

Mediation Analysis

Table 6 presents the mediation analysis results for the indirect effects of tax morale, PSMN, and tax penalties on sales tax compliance behaviour through intention to comply. The results reveal complementary partial mediation for tax morale, no mediation for PSMN, and indirect-only mediation for tax penalties.

Table 6: Mediation Results

Path	Indirect Effect (β)	p-value	Mediation Type
TM $\rightarrow$ IC $\rightarrow$ SCB	0.209	< 0.001	Complementary partial mediation
PSMN $\rightarrow$ IC $\rightarrow$ SCB	0.002	0.482	No mediation
TP $\rightarrow$ IC $\rightarrow$ SCB	0.105	0.001	Indirect-only mediation

The mediation analysis revealed that intention to comply is a complementary partial mediator of the association between tax morale and sales tax compliance behaviour ($\beta = 0.209$, $p < 0.001$), because both direct and indirect effects are significant. However, intention to comply does not mediate the association between PSMN and sales tax compliance behaviour because the indirect effect is not significant ($\beta = 0.002$, $p = 0.482$). Regarding tax penalties, the results demonstrate an indirect-only mediation pattern in which intention to comply fully mediates the association between tax penalties and sales tax compliance behaviour ($\beta = 0.105$, $p = 0.001$), while the direct effect is non-significant.

Model Fit and Diagnostic Assessment

Table 7 reports the results of the model quality assessment. The results indicate that all recommended PLS-SEM criteria were met. For instance, the GoF value of 0.759 can be interpreted as a large effect size according to the criteria, indicating adequate overall model fit. The proposed TPB model has an acceptable overall fit because the APC, ARS, and AARS indices are statistically significant at $p < 0.001$. Similarly, all AVIF and AFVIF indices are below the recommended value of 5.0 (Hair et al., 2022). Thus, multicollinearity was not present in the study. Overall, the combination of the model fit indices and theoretically sensible R^2 values supports the robustness of the structural model.

Table 7: Model Fit and Quality Indices

Index	Value	Recommended Threshold	Assessment
APC	0.274 ($p < 0.001$)	$p < 0.05$	Supported
ARS	0.764 ($p < 0.001$)	$p < 0.05$	Supported
AARS	0.762 ($p < 0.001$)	$p < 0.05$	Supported
AVIF	2.485	≤ 5.0	Acceptable
AFVIF	3.424	≤ 5.0	Acceptable
GoF	0.759	> 0.36	Large
SPR	1.000	≥ 0.70	Acceptable
RSCR	1.000	≥ 0.90	Acceptable
SSR	1.000	≥ 0.70	Acceptable
NLBCDR	1.000	≥ 0.70	Acceptable

DISCUSSION

In summary, these results shed light on the research questions stated in the introduction by advancing deterrence-based explanations of tax compliance behaviour from an organisational behaviour standpoint. In doing so, the results presented herein also lend support to Ajzen (1991), specifically the hypothesis that intention to perform a behaviour is the immediate precursor to the behaviour itself. As would be expected based on this viewpoint, organisational sales tax compliance behaviour was predicted not only by deterrence variables but also by psychological and social predictors, further supporting previous findings reported elsewhere in the tax compliance literature (Torgler, 2007). Of the three TPB constructs tested in this study, tax morale is the best predictor of both intentions to comply with sales tax requirements and sales tax compliance behaviour. This finding aligns with previous literature demonstrating that taxpayers with stronger ethical values, greater institutional trust, and a stronger sense of moral obligation comply voluntarily with their tax obligations (Ciziceno & Pizzuto, 2022). Moreover, consistent with Hayat et al. (2022), intention to comply partially mediates the relationship between tax morale and sales tax compliance behaviour. Overall, these findings support the notion that taxpayers' attitudes ultimately drive organisational compliance behaviour in self-assessment tax regimes such as Malaysia's sales tax.

PSMN does not have a significant effect on intention to comply but has a small positive direct effect on sales tax compliance behaviour. This may indicate that subjective norms have a limited effect on behavioural intention in an organisational context where compliance decisions are influenced by formal policies, internal procedures, and institutional rules. While this finding contradicts those of studies that found subjective norms to have significant positive effects on behavioural intention in green purchasing behaviour (Sapawi et al., 2024), sustainable waste management practices (Wong et al., 2024), and environmental behaviour (Sapawi et al., 2024), they are consistent with Wong et al. (2024)'s study on intentions to adopt renewable energy, which found that subjective norms do not have a significant effect on intention to adopt. One explanation may be that PSMN acted more as a descriptive norm that has a direct effect on compliance behaviour rather than as an injunctive norm that would increase organisations' intention to comply.

Tax penalties have a significant effect on the intention to comply but do not have a significant direct effect on sales tax compliance behaviour. These findings align with prior tax compliance studies that have shown deterrence variables to primarily influence taxpayers' intentions to comply rather than directly affect compliance behaviour (Hayat et al., 2022). While tax penalties are an important tool for tax authorities to enforce compliance, this study's findings suggest that mere enforcement may not be enough to promote continuous organisational compliance. Therefore, tax authorities may want to pair enforcement with strategies that increase taxpayers' commitment and voluntary intention to comply (Ntiamoah et al., 2025). Additionally, the mediation analysis revealed that tax penalties have an indirect effect on sales tax compliance behaviour through the intention to comply, supporting an indirect-only mediation.

Intention to comply also has a strong positive influence on sales tax compliance behaviour. This finding supports (Ajzen, 1991) claim that behavioural intention is the most immediate determinant of behaviour. Furthermore, consistent with TPB, support was found for the hypothesised relationships between attitude, subjective norms, perceived behavioural control, intention to comply, and sales tax compliance behaviour. Overall, these findings show that TPB is useful for understanding organisational sales tax compliance in an indirect tax setting and align with prior research indicating that attitude, subjective norms, and perceived behavioural control influence tax compliance behaviour (Harinurdin et al., 2024). In addition, this study's results support extending TPB applicability beyond individual direct-tax compliance decisions and demonstrate TPB's relevance to understanding organisational indirect-tax compliance behaviour among Malaysian registered manufacturers. Overall, by incorporating tax morale, PSMN, tax penalties, and intention to comply within a tax-specific TPB model, the findings provide evidence that behavioural factors explain more variation in sales tax compliance behaviour than deterrence-based predictors alone. The results also reiterate intention to comply's role as the pathway through which psychological and regulatory factors affect behaviour.

The results offer implications for assisting the RMCD, policymakers, and businesses in increasing sales tax compliance efforts. Tax enforcement and penalties remain valid methods for improving tax compliance. However, interventions geared towards improving tax morale, trust between taxpayers and the tax authority, and voluntary compliance should also be considered when implementing strategies to increase compliance. Taxpayer education, communication, and recognition of compliant taxpayers could result in longer-lasting increases in compliance, as opposed to relying solely on increased enforcement efforts. The results align with the study by Yusoff, Isahak, Hashim, Khan, and Zuberi (2022), which found tax knowledge to be a significant factor in lowering indirect tax non-compliance. Improving taxpayers' awareness of their tax obligations through continuous tax education programmes can enhance voluntary compliance, as taxpayers become more capable of complying. Nonetheless, tax education programmes will yield better results when coupled with behavioural interventions that nudge taxpayers towards making compliant choices. Therefore, tax authorities in Malaysia should combine taxpayer education and behavioural interventions to enhance voluntary compliance with tax obligations under the self-assessment tax regime. In the long run, strong tax morale and high voluntary compliance will help ensure a steady stream of public revenue, good governance, and the sustainability of Malaysia's self-assessment tax system.

CONCLUSION

In this study, the TPB was used to examine the factors that determine sales tax compliance behaviour among registered manufacturers. The results revealed that tax morale and intention to comply are the strongest predictors of sales tax compliance behaviour, while PSMN has a small, direct, positive effect on compliance behaviour. Interestingly, although tax penalties significantly strengthen organisations' intention to comply, they do not have a direct effect on behaviour. Overall, these results suggest that organisational sales tax compliance behaviour under Malaysia's self-assessment system is largely driven by behavioural factors and voluntary motivation.

From a theoretical perspective, this study broadens the scope of behavioural taxation studies by expanding the use of TPB from micro-level to organisational-level tax compliance behaviour and from direct-tax compliance to indirect-tax compliance by testing it among Malaysian registered manufacturers. Theoretical advancements are also made by integrating tax morale, PSMN, tax penalties, and intention to comply into a tax-specific TPB model. The findings show that behavioural drivers explain organisational sales tax compliance better than deterrence-based models. This study also empirically supports the critical role of intention to comply as the behavioural pathway through which psychological and regulative factors affect compliance behaviour.

Behavioural factors identified in this study could enable the RMCD, policymakers, and business organisations to design better-targeted interventions and strategies to encourage sales tax compliance behaviour. Penalties are an important tool for deterring and correcting non-compliant behaviour. However, tax authorities should not focus exclusively on enforcement efforts to drive compliance. Improving tax morale, educating taxpayers, and fostering trust between taxpayers and institutions through behaviourally informed interventions can also promote voluntary compliance. As a result, behaviourally informed interventions centred on taxpayer education, effective communication, institutional trust, and proportionate enforcement are likely to more effectively encourage voluntary compliance and increase long-term compliance.

By improving voluntary compliance, governments can work toward achieving fiscal sustainability by increasing revenue collection to provide public services such as education, healthcare, infrastructure, and socioeconomic policies that aid national development. As self-assessment tax systems are commonplace around the world, these findings may serve as a reference for policymakers and tax authorities when crafting well-rounded, behaviourally informed, and sustainable compliance strategies in similar institutional environments.

LIMITATIONS AND FUTURE RESEARCH

While this study has yielded useful insights, some limitations should be addressed in future research. First, because this study was cross-sectional in nature, we could only observe a snapshot of organisational behaviour at a point in time. Causal relationships, therefore, could not be drawn from this study, as compliance-related decisions are likely formed over time. Second, this study was conducted using a sample of only registered manufacturers that are required to remit sales tax under Malaysia's Sales Tax Act 2018. Future studies should replicate this research across other industries, under different tax regimes and institutional environments, to determine whether the same relationships between TPB constructs and behaviour hold. Third, only selected TPB behavioural constructs were measured and analysed for explanatory purposes in this study. Other organisational and institutional factors that may influence tax compliance behaviour, such as corporate tax governance, tax complexity, tax knowledge, digital tax technology adoption, organisational culture, and internal control effectiveness, were not included in this study's proposed model. Fourth, this study is limited by response bias that may be present as a result of self-reported survey questions on compliance behaviour.

Research should be conducted in the future to address some of the limitations mentioned above. Future studies should consider employing longitudinal research designs to better understand how organisational

compliance behaviour develops over time and enable researchers to make causal inferences. In addition, future studies may replicate this study across different industries, jurisdictions, and types of indirect tax to determine whether there are any institutional differences in taxpayer behaviour. To build upon this study's theoretical contributions, future research should identify other organisational and institutional drivers of tax compliance and attempt to incorporate them into the TPB. Organisational demographics, such as firm size, ownership demographics, and industry type, could also be examined as potential moderators or mediators to identify when TPB constructs have a greater or lesser influence on compliance behaviour. Lastly, future studies should consider using a mixed-methods approach to complement the survey results with interviews or organisational case studies to gain a better understanding of the organisational decision-making process that occurs when taxpayers comply with their tax obligations under a self-assessment regime.

FUNDING: This study received no specific financial support.

INSTITUTIONAL REVIEW BOARD STATEMENT: This study was approved by the Research Ethics Committee (REC) of Universiti Teknologi MARA (UiTM), Malaysia under [Approval No. REC(PG/MR/334)]. All participants provided informed consent before data collection commenced. Participation was voluntary, and all information provided by the participants was anonymised and treated confidentially to ensure that neither the participating organisation nor the individuals could be identified in this research.

TRANSPARENCY: The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

COMPETING INTERESTS: The authors declare that they have no competing interests.

AUTHORS' CONTRIBUTIONS: All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.

DISCLOSURE OF AI USE: ChatGPT was used for editing the language and grammar of the manuscript and improving the readability of the sentences. All edits were reviewed and verified by the authors. The authors take full responsibility for the content of the manuscript.

REFERENCES

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Alm, J. (1999). Tax compliance and administration. In W. B. Hildreth & J. A. Richardson (Eds.), *Handbook on taxation* (pp. 741–768). New York, NY: Marcel Dekker.
- Andriani, L., Bruno, R., Douarin, E., & Stepien-Baig, P. (2022). Is tax morale culturally driven? *Journal of Institutional Economics*, 18(1), 67–84. <https://doi.org/10.1017/S1744137421000072>
- Armstrong, J. S., & Overton, T. S. (1977). Estimating nonresponse bias in mail surveys. *Journal of Marketing Research*, 14(3), 396–402. <https://doi.org/10.1177/002224377701400320>
- Asadi, S., Nilashi, M., Samad, S., Rupani, P. F., Kamyab, H., & Abdullah, R. (2021). A proposed adoption model for green IT in manufacturing industries. *Journal of Cleaner Production*, 297, 126629. <https://doi.org/10.1016/j.jclepro.2021.126629>
- Borg, K. (2022). Media and social norms: Exploring the relationship between media and plastic avoidance social norms. *Environmental Communication*, 16(3), 371–387. <https://doi.org/10.1080/17524032.2021.2010783>
- Chan, K. H., Chong, L.-L., & Ng, T. H. (2022). Integrating extended theory of planned behaviour and norm activation model to examine the effects of environmental practices among Malaysian companies. *Journal of Entrepreneurship in Emerging Economies*, 14(5), 851–873. <https://doi.org/10.1108/JEEE-08-2021-0317>
- Chinn, S., & Hasell, A. (2024). How different uses of social media inform perceptions of offline social norms and changes in vaccine intentions. *Health Communication*, 39(6), 1198–1208. <https://doi.org/10.1080/10410236.2023.2207284>
- Ciziceno, M., & Pizzuto, P. (2022). Life satisfaction and tax morale: The role of trust in government and cultural orientation. *Journal of Behavioral and Experimental Economics*, 97, 101824. <https://doi.org/10.1016/j.soccec.2021.101824>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Department of Statistics Malaysia. (2024a). *ICT use and access by individuals and households survey report 2024*. Putrajaya, Malaysia: Department of Statistics Malaysia.
- Department of Statistics Malaysia. (2024b). *Monthly manufacturing statistics Malaysia 2024*. Putrajaya, Malaysia: Department of Statistics Malaysia.
- Fajarwati, D. (2023). Determination of tax fairness, tax morale, tax rates, and tax system technology against tax evasion. *Governance: Jurnal Ilmu Pemerintahan*, 11(1), 79–94.

- Fauzi, M. A., Hanafiah, M. H., & Kunjuran, V. (2024). Tourists' intention to visit green hotels: Building on the theory of planned behaviour and the value-belief-norm theory. *Journal of Tourism Futures*, 10(2), 255-276. <https://doi.org/10.1108/JTF-01-2022-0008>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50. <https://doi.org/10.1177/002224378101800104>
- Garg, S., Narwal, K. P., & Kumar, S. (2024). Investigating the compliance behavior of GST taxpayers: An extension to theory of planned behavior. *Journal of Public Affairs*, 24(3), e2936. <https://doi.org/10.1002/pa.2936>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A primer on partial least squares structural equation modeling (PLS-SEM)* (3rd ed.). Los Angeles, CA: SAGE.
- Hamzah, M. I., & Tanwir, N. S. (2021). Do pro-environmental factors lead to purchase intention of hybrid vehicles? The moderating effects of environmental knowledge. *Journal of Cleaner Production*, 279, 123643. <https://doi.org/10.1016/j.jclepro.2020.123643>
- Harinuridin, E., Safitri, K. A., & Kountur, R. (2024). Applying the theory of planned behavior in examining the intention to improve corporate tax compliance through compensation and counterproductive work behavior. *Sage Open*, 14(4), 21582440241305624. <https://doi.org/10.1177/21582440241305624>
- Hayat, N., Salameh, A. A., Mamun, A. A., Helmi Ali, M., & Makhbul, Z. K. M. (2022). Tax compliance behavior among Malaysian taxpayers: A dual-stage PLS-SEM and ANN analysis. *Sage Open*, 12(3), 21582440221127190. <https://doi.org/10.1177/21582440221127190>
- Jassem, S., Al-Rawi, Y. A., & Hussein Ali, A. (2022). Impact of Big Five personality traits on tax non-compliance intentions: Mediation effect of perceived tax-fairness. *Journal of Public Affairs*, 22(S1), e2777. <https://doi.org/10.1002/pa.2777>
- Kettlewell, N., & Zhang, Y. (2024). Financial incentives and private health insurance demand on the extensive and intensive margins. *Journal of Health Economics*, 94, 102863. <https://doi.org/10.1016/j.jhealeco.2024.102863>
- Kirchler, E., Hoelzl, E., & Wahl, I. (2008). Enforced versus voluntary tax compliance: The "slippery slope" framework. *Journal of Economic Psychology*, 29(2), 210-225. <https://doi.org/10.1016/j.joep.2007.05.004>
- Malaysia Sales Tax Act. (2018). *Attorney general's chambers of Malaysia*. Putrajaya, Malaysia: Malaysia Sales Tax Act.
- Masur, P. K., DiFranzo, D., & Bazarova, N. N. (2021). Behavioral contagion on social media: Effects of social norms, design interventions, and critical media literacy on self-disclosure. *PLoS ONE*, 16(7), e0254670. <https://doi.org/10.1371/journal.pone.0254670>
- Ministry of Finance Malaysia. (2025). *Economic outlook 2025*. Putrajaya, Malaysia: Ministry of Finance Malaysia.
- Muniandy, G., Anuar, M. M., Foster, B., Saputra, J., Johansyah, M. D., Khoa, T. T., & Ahmed, Z. U. (2021). Determinants of sustainable waste management behavior of Malaysian academics. *Sustainability*, 13(8), 4424. <https://doi.org/10.3390/su13084424>
- National Audit Department Malaysia. (2023). *Auditor general's report 2023*. Malaysia: National Audit Department Malaysia.
- Nekmahmud, M., Naz, F., Ramkissoon, H., & Fekete-Farkas, M. (2022). Transforming consumers' intention to purchase green products: Role of social media. *Technological Forecasting and Social Change*, 185, 122067. <https://doi.org/10.1016/j.techfore.2022.122067>
- Ntiamoah, J. A., Agyenim-Boateng, C., Opoku-Asante, K., Kusi, P. P., & Arhenful, P. (2025). The effects of financial rewards and penalties on tax evasion and whistleblowing intentions in Accra, Ghana. *Public Integrity*, 27(5), 533-562. <https://doi.org/10.1080/10999922.2024.2364383>
- Ogiemwonyi, O., Harun, A., Hossain, M. I., & Karim, A. M. (2023). The influence of green behaviour using theory of planned behaviour approach: Evidence from Malaysia. *Millennial Asia*, 14(4), 582-604. <https://doi.org/10.1177/09763996221080508>
- Organ, P. R., Ruda, A., Slemrod, J., & Turk, A. (2022). Incentive effects of the IRS' passport certification and revocation process. *Journal of Public Economics*, 208, 104625. <https://doi.org/10.1016/j.jpubeco.2022.104625>
- Owusu, G. M. Y., Bekoe, R. A., & Mintah, R. (2023). Predictors of tax compliance intentions among self-employed individuals: The role of trust, perceived tax complexity and antecedent-based intervention strategies. *Small Enterprise Research*, 30(1), 49-70. <https://doi.org/10.1080/13215906.2021.1989622>
- Palil, M. R. (2010). Tax knowledge and tax compliance determinants in self assessment system in Malaysia. Doctoral dissertation, University of Birmingham.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Puklavec, Ž., Kogler, C., Stavrova, O., & Zeelenberg, M. (2026). Unobscuring the concept of tax morale: A systematic review of the literature. *Journal of Business Ethics*, 207(3), 583-595. <https://doi.org/10.1007/s10551-025-06218-z>
- RMCD. (2023). *RMCD annual report 2023*. Putrajaya, Malaysia: RMCD.
- RMCD. (2024). *RMCD annual report 2024*. Putrajaya, Malaysia: RMCD.
- Robertson, C. E., del Rosario, K. S., & Van Bavel, J. J. (2024). Inside the funhouse mirror factory: How social media distorts perceptions of norms. *Current Opinion in Psychology*, 60, 101918. <https://doi.org/10.1016/j.copsyc.2024.101918>
- Sapawi, S., Ahmad, A., Valeri, M., & Azman, N. (2024). Change in sustainable waste management behaviour in oil palm community: Application of the theory of planned behaviour. *Sustainability*, 16(2), 919. <https://doi.org/10.3390/su16020919>
- Saptono, P. B., Hodžić, S., Khozen, I., Mahmud, G., Pratiwi, I., Purwanto, D., . . . Khodijah, S. (2023). Quality of e-tax system and tax compliance intention: The mediating role of user satisfaction. *Informatics*, 10(1), 22. <https://doi.org/10.3390/informatics10010022>
- Ting, L. S., Zailani, S., Sidek, N. Z. M., & Shaharudin, M. R. (2024). Motivators and barriers of circular economy business model adoption and its impact on sustainable production in Malaysia. *Environment, Development and Sustainability*, 26(7), 17551-17578. <https://doi.org/10.1007/s10668-023-03350-6>

- Torgler, B. (2007). *Tax compliance and tax morale: A theoretical and empirical analysis*. Cheltenham, UK: Edward Elgar Publishing.
- Wong, G.-Z., Wong, K.-H., Lau, T.-C., Lee, J.-H., & Kok, Y.-H. (2024). Study of intention to use renewable energy technology in Malaysia using TAM and TPB. *Renewable Energy*, 221, 119787. <https://doi.org/10.1016/j.renene.2023.119787>
- Yee, C. H., Al-Mulali, U., & Ling, G. M. (2022). Intention towards renewable energy investments in Malaysia: Extending theory of planned behaviour. *Environmental Science and Pollution Research*, 29(1), 1021-1036. <https://doi.org/10.1007/s11356-021-15737-x>
- Yeow, P. H. P., & Loo, W. H. (2022). Antecedents of green computer purchase behavior among Malaysian consumers from the perspective of rational choice and moral norm factors. *Sustainable Production and Consumption*, 32, 550-561. <https://doi.org/10.1016/j.spc.2022.05.015>
- Yusoff, Y. H., Isahak, M. S., Hashim, M. R., Khan, N. I., & Zuberi, I. (2022). The influence of perception and tax knowledge on non-compliance in indirect tax among public university students in Selangor and Klang Valley. *Environment-Behaviour Proceedings Journal*, 7(21), 145-150.