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THE RELATIONSHIP OF TAX LITERACY, TAX KNOWLEDGE, AND TAX SOCIALIZATION IN CULTIVATING TAX AWARENESS AMONG HIGHER EDUCATION STUDENTS IN MALAYSIA

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Abstract:

Maintaining Malaysia's national income and promoting public development depend heavily on tax compliance. Students in higher education are a significant future taxpayer demographic, and their long-term compliance behaviour is critically influenced by their tax awareness. This study determine using survey on how tax awareness among university students is influenced by tax literacy, tax knowledge, and tax socialization. This study incorporates the cognitive, attitudinal, and social aspects of behaviour by drawing on three theories such as Experiential Learning Theory (ELT), the Theory of Planned Behaviour (TPB), and Social Learning Theory (SLT). The findings are anticipated will help educators, curriculum designers and policymaker to create focused interventions to increase voluntary tax compliance at the young ages.

Keywords:

Tax Literacy, Tax Knowledge, Tax Socialization, Tax Awareness, Higher Education Students

Introduction

The main source of funding for national development, as well as basic public services such as social security, infrastructure, health care and education, comes from taxes. According to the Ministry of Finance (2023), tax revenue accounts for approximately 72.8 per cent of the Federal Government's revenue, which shows the continued importance of tax revenue for Malaysia's national finances. This underlines the importance of ensuring the efficient administration of tax and the compliance of taxpayers. In addition, Malaysia has introduced a self-assessment system since 2000, which requires taxpayers to independently determine, report and declare their tax obligations without prior approval from the Malaysian Inland Revenue Board (MICR). This administrative change improves tax literacy and tax knowledge of taxpayers (Hassan, Nawawi, and Puteh Salin, 2017). Therefore, in order to effectively comply with tax legislation, individuals need to have a sufficient understanding of the rules, responsibilities and reporting obligations.

Despite the importance of tax literacy, recent study shows that Malaysian university students still have a low level of knowledge about the tax system. This is aligned with Sanusi, Abdullah, Chin, Rastam and Rozzani (2021) identified significant gaps in students' understanding of tax obligations and taxation objectives. In a similar vein, Ishak, Azemi, Yunus and Talib (2023) found that the low awareness and lack of tax knowledge of potential taxpayers increases the likelihood of inadvertent non-compliance. In addition to increasing the risk of tax evasion and tax return errors, low tax awareness also undermines voluntary tax compliance by promoting negative attitudes towards the tax system. These issues are particularly important as university students will be the future taxpayers of Malaysia and their attitudes, knowledge and actions will determine the long-term tax compliance culture of the country.

In this context, tax awareness development is shaped by three interconnected dimensions such as tax literacy, tax knowledge and tax socialization. Tax literacy includes practical skills such as being able to navigate administrative procedures and to interpret tax information accurately, whereas tax knowledge is the understanding of the legal provisions, including laws, rates, regulations and exemptions. In addition to this, tax socialization involves the internalization of tax-related norms and behavior through interaction within families, peer groups, educational institutions, and the media. Empirical evidence from Amin, Buhari, Yaacob and Rizzoli (2022) and Hamid, Ismail, Yunus, Jali and Rizzoli (2022) shows that these factors have a significant impact on compliance behavior. However, most previous studies have examined these elements separately rather than in an integrated framework, which limits the insight into how literacy, knowledge and socialization collectively shape students' tax awareness. In this circumstance, the rapid expansion of the digital learning environment and the widespread use of e-filing platforms underline the need to rethink tax information in the current technological context.

This study therefore examines the combined effects of tax literacy, tax knowledge and tax socialisation on tax awareness among tertiary students in Malaysia. It also provides a thorough understanding that can guide curricula design, tax education programmes and policy interventions to support future taxpayers who are better informed and compliant. It does so by drawing on a range of theoretical perspectives and verified empirical findings.

Literature Review

Tax compliance has long been understood as a complex behavioural phenomenon, influenced by cognitive, psychological, social and contextual factors. Recent research has emphasized the significance of tax literacy, tax knowledge, and tax socialization as the fundamental components that influence people's compliance dispositions in this complex environment. These factors are particularly important for young adults in higher education, who represent the next generation of taxpayers and whose initial attitudes and understanding of taxation may affect future compliance behaviour when they enter the labour market. Research has consistently demonstrated that taxpayer behavior is based on a complex interaction of awareness, understanding, and socially acquired norms rather than just legal obligations. In this way, tax knowledge offers the conceptual basis required to comprehend tax laws and practices, tax literacy gives people the practical skills needed to comprehend tax information, and tax socialization shapes attitudes and behaviour through institutional, peer, and family influence. This section synthesizes the main theoretical bases, empirical findings and conceptual frameworks relevant to these constructs, thus providing a comprehensive scientific basis for this study.

A clearer and more organised understanding of how each of the various structures affects tax awareness is crucial to examining the behavioural dynamics that underlie tax compliance. Tax literacy plays a central role among these constructs, as it embodies the practical skills needed to manage tax tasks and to interpret the basic tax information. As students become more aware of their personal financial responsibilities, tax literacy is a key basis for informed choices and responsible tax behaviour. Closely related to this is tax knowledge, which, like tax literacy, is widely recognised as a key determinant of taxpayers' compliance behaviour.

Amin, Buhari, Yaakob, and Iddy (2022) define tax literacy as the capacity to comprehend tax information, perform simple tax computations, interpret fundamental tax concepts, and navigate administrative processes. According to Hamid, Ismail, Yunus, Jali, and Rosly (2022), tax knowledge, on the other hand, is a more conceptual and factual understanding of taxation that includes knowledge of tax laws, filing requirements, tax rates, exemptions, and the structure of penalties. Because people with higher levels of literacy are better able to comprehend and recognize tax rules, empirical studies consistently demonstrate that higher levels of tax literacy lead to more intent to comply and fewer unintentional errors (Sanusi, Abdullah, Chin, Rastam, and Rozzani, 2021).

However, the relationship between knowledge and compliance is not strictly linear. Palil and Mustafa (2011) indicate that increased tax knowledge does not automatically translate into compliant behaviour, as psychosocial factors, such as perceived fairness of the tax system, personal attitudes, and trust in tax authorities, also influence taxpayers' decisions. This suggests that tax literacy and tax knowledge are important foundations as they interact with broader psychological and contextual variables in shaping tax awareness and compliance behaviour.

Kirchler (2007) defines tax socialization as the process whereby people acquire tax-related norms, values and behavioural dispositions from significant social factors such as peers, families, schools and the media. Such socialization is necessary to encourage compliance and to create a sense of taxation as a civic duty. Due to differences in cultural norms, socioeconomic background and exposure to institutional tax messages, the extent and direction of tax socialization vary considerably between demographic groups and multicultural

environment. The rapid growth of digital communications has further changed the tax-socialization environment. Social media, online communities and digital learning platforms are increasingly shaping people's interaction with tax information. Users are exposed to different tax stories in this digital environment; some can encourage compliance, while others can spread misinformation, scepticism or hostility towards tax authorities (OECD, 2022). The validity and reliability of online information therefore play an important role in the development of tax rules and influences tax attitudes.

Technological advances have also introduced new dimensions in tax compliance and tax education. Digital tools such as electronic filing systems, automated tax books and support services powered by artificial intelligence have improved the efficiency, transparency and accessibility of tax procedures (Alm and Torgler, 2011; OECD, 2022). By enabling taxpayers to become familiar with tax procedures in practice, these innovations foster learning by experience, increasing trust and reducing perceived complexity. However, there are still difficulties. Differences in user competencies, unequal access to technological resources and differences in digital literacy, particularly in developing countries, may limit the effectiveness of digital tax systems (Hamid et al.). (c) 2022. Moreover, widespread circulation of false or inaccurate tax information on the internet can undermine trust in the tax administration and encourage negative compliance attitudes. Technological progress therefore creates significant opportunities to raise tax awareness, while at the same time underlining the need to tackle digital inequalities and information integrity.

Theoretical Frameworks Related to Tax Awareness

This study uses three underlying theoretical frameworks that are frequently used in behavioural and educational research papers to understand how tax literacy, tax knowledge, and tax socialization contribute to tax awareness. The theories are Social Learning Theory (SLT), Theory of Planned Behavior (TPB), and Experiential Learning Theory (ELT).

Experiential Learning Theory established by Kolb (1984) posits that individuals learn effectively when they engage in experiences, reflect on them, conceptualize, and experiment actively. In taxation, ELT explains how interaction with e-filing platforms, tax calculators, and simulations allows students to strengthen both conceptual understanding and practical skills. Research shows that experiential engagement enhances confidence and reduces anxiety related to tax tasks (Race, 2010).

The second theory is the Ajzen (1991) theory of planned behavior, which provides a behavioral lens through attitudes, subjective standards, and perceived control of behavior. In this context, tax knowledge and literacy reinforce the perception of control, while social influences, including family and peer influence, shape attitudes and standards of tax compliance. Empirical evidence shows that a stronger perceived control of behaviour increases voluntary compliance (Trivedi, Shetty & Mestelman, 2005)

Finally, the social learning theory of Bandura (1977) emphasizes learning through observation and modeling. Taxpayers are influenced by role models, such as peers, parents, or other influences, which shape their compliance behavior. In the digital environment, exposure to positive examples of compliance reinforces self-efficacy and awareness, whereas negative examples can normalise evasion or error (Wood & Bandura, 1989).

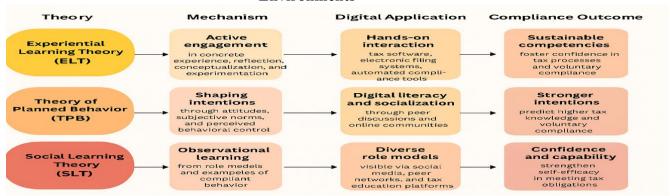
The integration of these three theories provides a comprehensive and coherent framework for understanding tax awareness and compliance. For example, ELT explains how cognitive and experience-based skills are developed through active engagement, reflection and application, which then form the basic competences needed to be able to make informed tax decisions. On this basis, TPB captures how these competences shape taxpayers' attitudes, subjective standards and behavioral intentions, and thus predicts their propensity to fulfil their obligations. To complement these views, SLT highlights the impact of social modeling, observation and reinforcement in shaping and maintaining tax behavior in the social environment.

All the theories show that tax awareness and compliance are not just the result of knowledge, but are also the effect of dynamic interactions between learning, persuasion, and social affiliation. This integrated perspective is particularly important in the current digital tax ecosystems, where individuals, particularly university students and new entrants, learn information from digital interaction, form intentions through digital interaction and are influenced by social norms through the web. The ELT, TPB and SLT combination recognizes that effective compliance is based on active learning, behavioral development and social modelling, which makes them particularly relevant for understanding tax compliance behavior in the rapidly digitizing tax environment.

Table 1: Summary of Theoretical Frameworks and Past Findings

Theory	Key Constructs	Application in Tax	Key Findings from
	v	Studies	Past Studies
Experiential	Experience,	Used in tax	Experiential learning
Learning Theory	reflection,	education and digital	enhances tax literacy
(Kolb, 1984)	experimentation	simulations	and reduces task
			anxiety (Race, 2010)
Theory of Planned	Attitudes, subjective	Predicts compliance	Tax knowledge
Behavior (Ajzen,	norms, perceived	intentions	improves perceived
1991	behavioural control		control; social norms
			strongly influence
			student compliance
			(Trivedi et al., 2005)
Social Learning	Observation,	Explains social	Positive modelling
Theory (Bandura,	modelling,	influences on tax	increases awareness;
1977)	reinforcement	behaviour	negative modelling
			predicts evasion
			tendencies (Wood &
			Bandura, 1989).

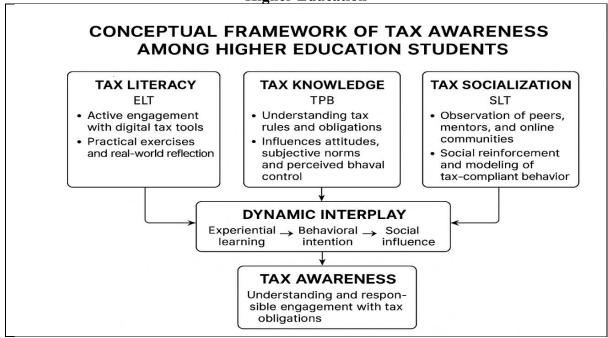
Table 2: Integrated Theoretical Framework for Tax Compliance in Digital Environments



Based on theories of experiential learning, anticipatory behaviour and social learning, Tables 1 and 2 show how tax literacy, tax knowledge and tax socialisation interact to develop tax awareness among students in higher education. Active participation is considered to be the result of tax literacy, where students acquire skills through practical exercises, interaction with digital tax tools and reflection on tax issues in their daily lives. Cognitive and practical skills necessary to understand tax concepts and procedures are developed through this practice. Tax knowledge influences compliance intentions, as digital literacy and peer review standards shape students' attitudes, perceptions of control and willingness to learn about tax obligations.

Tax socialization strengthens these processes by emphasizing the importance of social reinforcement, modelling and observation in developing tax-related attitudes and behavior. Students internalize behavior that promotes responsible financial attitude by absorbing norms and strategies from peers, mentors, and online communities. Consequently, the proposed framework captures the dynamic interaction between learning through experience, belief formation and social impact through the integration of ELT, TBT and SLT. This comprehensive perspective provides a sound basis for understanding the emergence and growth of tax awareness in the digitalized learning environment and provides valuable input for designing interventions to increase student tax literacy, awareness and social participation..

Table 3: From Learning to Awareness: A Tri-Theoretical Model of Tax Behaviour in Higher Education



Based on theories, the framework from learning to awareness as Table 3 describes how tax literacy, tax knowledge and tax socialisation interact to shape the tax consciousness among higher education students. In this framework, tax literacy is seen as the result of active learning, where students develop their skills through using digital tax tools, engaging in exercises and reflecting on the actual tax scenario. By developing both cognitive and applied skills, these learning processes help students to understand the fundamentals of taxation and the responsibilities that go with it. The intention to comply is then influenced by tax knowledge, with attitudes, perceived behavioural control and normative pressures acting as intermediaries between knowledge and compliance behaviour. By highlighting the importance of social reinforcement, modeling, and observation in influencing students' attitudes and behaviours regarding taxes, tax socialization enhances these processes even more. Students internalize tax compliance norms and strategies through their interactions with peers, mentors, and online communities. A thorough understanding of the development of tax awareness in an increasingly digitalized learning environment is provided by the integration of ELT, TPB, and SLT, which captures the dynamic interaction between learning through experience, behavioural intentions, and social impact. This integrated approach offers a theoretical foundation for creating interventions that improve students' tax literacy, increase their social participation in tax-related activities, and expand their tax knowledge.

Research Methodology

Research Design and Approach

This study adopts a quantitative, cross-sectional survey design to explore the relationship between tax literacy, tax knowledge, tax socialisation and tax awareness among tertiary students in Malaysia. The design is consistent with the objectives of the study, as it allows for systematic measurement of theoretical constructs and statistical testing of hypotheses derived from an integrated framework that draws on experimental learning theory, developmental

theory and social learning theory (Creswell & Creswell, 2023). The cross-sectional approach makes it easier to collect data efficiently at one time point and to compare across groups of students and academic disciplines. This methodological choice supports the objective of assessing how multiple predictors interact to influence tax awareness and provides an up-to-date summary of the behavioural patterns which can inform curricula and educational policy (Bryman, 2016). The quantitative design provides a solid basis for measuring complex psychological and learning constructs and supports conclusions that can be generalised to the wider Malaysian tertiary student population.

Sample Design and Participants

The study uses a structured survey methodology to collect 300 students from accounting and non-accountancy programmes at Malaysian universities. The sample size is determined by prior power analysis to ensure that the magnitude of the intermediate effect (0.80) is sufficiently statistically controlled by multiple regression analysis (f2 = 0.15) according to standards set out in the KOHEN 1988 and FAB 2009 studies. This calculation also takes into account possible non-response, thus preserving the reliability of the database. The sample size selected ensures sufficient statistical power not only to test the main effects, but also to perform subgroup comparisons between accounting and non-accounting students, thereby increasing the robustness and universality of the results.

The inclusion of accounting and non-accounting students reflects a deliberate selection strategy aimed at producing meaningful comparative results. This approach allows a study to assess whether a disciplinary background moderates the relationship between tax literacy, tax knowledge, tax socialization and tax awareness. Accountants are expected to have more formal exposure to taxation through specialized training, while non-accountants represent a larger group of future taxpayers who typically acquire tax-related knowledge through mainstream and non-formal educational channels (Palil and Mustafa, 2011). Including both groups strengthens the study's ability to distinguish between general effects on tax awareness and those specific to a particular discipline and thus provides a more nuanced understanding of how tax competences evolve in different educational settings.

The study uses a stratified random sample approach to ensure representative coverage of the key dimensions of the Malaysian HEIs. The stratification was based on academic programme (accounting versus non-accounting), year of study (1st to 4th year of study), type of institution (public versus private) and geographical location. These variables have been selected in order to increase external validity and to control for possible confounders related to the educational context (Fowler, 2014). By systematically including these categories, the sampling design ensures that the findings can be generalized to a broader population of Malaysian tertiary students, while maintaining sufficient statistical power to detect meaningful relationships between study variables.

Instrumentation and Construct Measurement

The research instrument includes a structured questionnaire specifically designed to capture the four central concepts of the study: tax literacy, tax knowledge, tax socialization and tax awareness. Each structure shall be measured using validated scales, adapted from established research in the field of tax compliance and training. Particular attention is paid to ensuring the validity of constructions, and the questionnaire includes psychometric items that have consistently been shown to be reliable and valid in a variety of cultural contexts (Develis, 2016;

Nunnally & Bernstein, 1994). This methodological choice strengthens the credibility of the findings by ensuring that the measures accurately reflect the theoretical dimension of the investigations.

The measurement of tax literacy includes validated scales assessing practical tax competences, including the ability of individuals to correctly interpret tax information, to make basic tax calculations, to understand tax forms and procedures and to effectively manage tax-related administrative procedures. The tax literacy construct focuses on applied skills and functional competences rather than on purely theoretical knowledge, reflecting the emphasis of Kolb (1984) on practice and practical application. The items assess the ability to complete tax-related tasks, understanding of tax terminology and the ability to apply tax concepts to real-life scenarios relevant to young adults entering the labour market. Tax knowledge assessment employs established measures focusing on factual understanding of tax laws, regulations, filing requirements, deadline structures, and penalty frameworks specific to the Malaysian tax system. The knowledge construct encompasses both general tax principles and Malaysia-specific tax regulations, including understanding of the self-assessment system, tax rates, allowable deductions, and taxpayer rights and obligations (Saad, 2014). Items test comprehension of tax concepts through multiple-choice and true/false formats that have demonstrated validity in previous Malaysian tax research.

Tax socialization measurement utilizes scales examining exposure to tax-related information, attitudes, and behavioral models through various social agents including family members, peer groups, educational institutions, and media channels. The socialization construct captures both traditional face-to-face socialization processes and contemporary digital socialization through online platforms and social media (Torgler, 2007). Items assess frequency and quality of tax-related discussions with significant others, exposure to tax compliance role models, and influence of social norms regarding tax behavior.

Tax awareness assessment employs comprehensive measures capturing overall understanding of tax obligations, awareness of taxpayer rights and responsibilities, and recognition of the broader civic and social role of taxation in Malaysian society. The awareness construct integrates cognitive, affective, and behavioral dimensions, reflecting the multifaceted nature of tax awareness as both knowledge and attitude (Eriksen & Fallan, 1996). Items assess understanding of tax system purposes, awareness of compliance requirements, and recognition of taxation's role in funding public services and national development.

Each construct is operationalized using multiple-item scales with seven-point Likert response formats (1 = strongly disagree to 7 = strongly agree), allowing for precise quantification of individual differences and sufficient variance for statistical analysis. The questionnaire incorporates reverse-coded items and attention check questions to minimize response bias and ensure data quality (Podsakoff et al., 2003). Pilot testing with a small sample of Malaysian students will be conducted to ensure item clarity, cultural appropriateness, and preliminary reliability evidence before full data collection.

Data Collection Procedures

Data collection will be conducted through both online and paper-based survey administration to maximize response rates and accommodate different institutional preferences and technological capabilities. Online survey distribution through institutional email systems and

learning management platforms provides efficient access to large student populations while maintaining anonymity and reducing data entry errors (Dillman et al., 2014). Paper-based administration in classroom settings serves as a complementary approach for institutions with limited digital infrastructure or student populations with varying technological access.

The data collection protocol includes multiple contact attempts following established survey research best practices, including initial invitation, reminder emails, and final contact to maximize response rates while maintaining ethical standards (Groves et al., 2009). Survey administration will be coordinated with institutional representatives to ensure appropriate timing that avoids examination periods and major academic deadlines that might affect response quality or rates.

Ethical considerations include obtaining institutional review board approval, ensuring voluntary participation with clear informed consent procedures, maintaining participant anonymity and confidentiality, and providing participants with study contact information for questions or concerns. Data security protocols will protect participant information throughout collection, analysis, and storage phases.

Analytical Strategy and Statistical Methods

Data analysis will be performed using multiple regression analysis as the primary statistical technique for determining the strength and the relevance of the relationship between the predictor variables (tax literacy, tax awareness, tax socialisation) and the control variable (tax awareness). Multiple regression is particularly suitable for this study as it allows for the simultaneous examination of multiple predictors and their interaction, and provides clear evidence of the unique contribution of each theoretical factor to the variation in tax awareness (Hair et al., 2019; Tabachnick and Fidell, 2019).

The analytical strategy shall start with a comprehensive ex-ante analysis to assess the quality of the data, distributional properties and statistical assumptions necessary for the multiple regression analysis. Descriptive statistics will characterize the demographics of the sample and the distribution of variables, while correlation analysis will explore the bivariate relationships between all study constructs. Missing data samples will be assessed and, where appropriate, addressed by appropriate imputation techniques, in line with current best practice in the treatment of incomplete survey data (Little & Rubin, 2019).

The main analysis will test an integrated theoretical model that predicts tax awareness from three predictor variables by means of simultaneous multiple regression. Standardized regression coefficients (β), significance tests, confidence ranges and measure of magnitude of effect (R^2 , corrected R^2 , f^2) will be provided in the analysis to assess both the statistical and the practical significance of the relationships. The model's fit will be assessed by examining residual values, significant observations, and presumptive diagnostic criteria including normality, homoscedasticity, and multilinearity.

Next analysis will use hierarchical multiple regression to explore the incremental contribution of each theoretical construct to determine which factors provide unique explanatory power over others. Interaction conditions can be tested to investigate the possible synergistic effects of tax literacy, knowledge and socialization on the prediction of levels of awareness.

While, a subgroup analysis will compare accounting and non-accounting students using a moderated regression analysis to determine whether the disciplinary history affects the relationship between predictor variables and tax awareness. This analysis will provide evidence of whether the theoretical model works in a similar way in different educational settings or requires adjustment for different student groups.

Other statistical methods include exploratory factor analysis to verify the dimensional structure of measured constructs and mediation analysis if theoretical reasoning and initial findings indicate that some variables function indirectly through others. Instead of depending only on significance testing, all analyses will be carried out using modern statistical software (SPSS, R), paying proper attention to statistical assumptions, effect sizes, and confidence intervals (American Psychological Association, 2020).

Methodological Rigor and Limitations

By offering empirical support for the combined effects of tax literacy, knowledge, and socialization on tax awareness in the Malaysian higher education context, this methodological approach directly fills the identified research gap. The design provides a more thorough understanding of how various theoretical constructs jointly influence the development of tax awareness, going beyond earlier research that looked at these factors separately (Mohdali and Pope, 2014).

The strengths of the study are a theoretically grounded approach, validated measurement tools, an adequate sample size and sampling strategy, and sophisticated analytical methods that can reveal complex relationships. A comparative design involving accounting and non-accounting learners increases generalizability and provides insight into learning factors that influence the development of tax awareness.

The cross-sectional design, which restricts causal inference, possible common method bias from self-report measures, and limitations on generalizability to the Malaysian higher education context are among the acknowledged limitations. To improve understanding of the development of tax awareness among young adults getting ready to enter the workforce, future research may benefit from longitudinal designs, mixed-method approaches incorporating qualitative data, and replication across various cultural and educational systems.

Conclusion

Using the Theory of Planned Behaviour, the Theory of Experiential Learning and the Theory of Social Learning to create an integrated framework emphasising the interaction of cognitive, experiential and social factors in shaping tax understanding in a digitalised environment, the study examined the impact of tax literacy, tax knowledge and social learning on the tax awareness of Malaysian tertiary students. The study demonstrated the interactive role of these constructs using validated measurement tools and found that socialisation processes have a significant impact on tax awareness, and tax literacy and knowledge further improve the understanding of tax obligations by students. Despite the contributions, limitations such as the cross-sectional design, reliance on self-reported measures, the focus on Malaysian university students and differences in digital literacy highlight areas for further research and recommend caution in extrapolating results. The findings have theoretical and practical implications, highlighting the usefulness of combining ELT, TBT and SLT to predict tax behaviour and the importance of increasing the level of digital tax education by adding structured tax modules

and interactive exercises such as mock e-filing and simulation to increase student engagement and preparedness. Future studies could use cross-cultural comparisons, longitudinal and blended methodologies, analyse the impact of digital behaviour, social media, artificial intelligence and gamified learning tools, and assess intervention strategies to increase the real tax awareness and compliance of young adults.

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References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- Alm, J., & Torgler, B. (2011). Do ethics matter? Tax compliance and morality. *Journal of Business Ethics*, 101(4), 635–651.
- American Psychological Association. (2020). Publication manual of the American Psychological Association (7th ed.). APA.
- Amin, M., Buhari, M., Yaacob, N., & Rizzoli, A. (2022). [Study on tax literacy]. [Journal details unavailable in the document].
- Bandura, A. (1977). Social learning theory. Prentice Hall.
- Bryman, A. (2016). Social research methods (5th ed.). Oxford University Press.
- Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Lawrence Erlbaum.
- Creswell, J. W., & Creswell, J. D. (2023). Research design: Qualitative, quantitative, and mixed methods approaches. Sage.
- DeVellis, R. F. (2016). Scale development: Theory and applications (4th ed.). Sage.
- Dillman, D. A., Smyth, J. D., & Christian, L. (2014). *Internet, phone, mail, and mixed-mode surveys: The tailored design method* (4th ed.). Wiley.
- Eriksen, K., & Fallan, L. (1996). Tax knowledge and attitudes towards taxation: A report on a quasi-experiment. *Journal of Economic Psychology*, 17(3), 387–402.
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41(4), 1149–1160. https://doi.org/10.3758/BRM.41.4.1149.
- Fowler, F. J. (2014). Survey research methods (5th ed.). Sage.
- Groves, R. M., Fowler, F. J., Couper, M., Lepkowski, J., Singer, E., & Tourangeau, R. (2009). *Survey methodology* (2nd ed.). Wiley.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage.
- Ahmad, N. H., & Ismail, S. (2022). Taxpayer perceptions of tax awareness, tax education, and tax complexity among small and medium enterprises in Malaysia: A quadrant analysis approach. *Universal Journal of Accounting and Finance*, 10(1), 231–242. https://doi.org/10.13189/ujaf.2022.100124
- Hassan, N. S. A., Nawawi, A., & Puteh Salin, A. S. A. (2017). Determinants of tax compliance in self-assessment system. *International Journal of Economics and Financial Issues*, 7(2), 279–284.
- Ishak, S. N., Azemi, A., Mohamad Yunus, M. H. S., & Abdul Talib, N. (2023). The impact of tax awareness and tax knowledge on tax non-compliance from the perspective of

- potential taxpayers. Advanced International Journal of Business Entrepreneurship and SMEs, 5(18), 11–21. https://doi.org/10.35631/AIJBES.518002
- Kirchler, E. (2007). The economic psychology of tax behaviour. Cambridge University Press.
- Kolb, D. A. (1984). Experiential learning: Experience as the source of learning and development. Prentice Hall.
- Little, R. J. A., & Rubin, D. B. (2019). *Statistical analysis with missing data* (3rd ed.). Wiley. Ministry of Finance Malaysia. (2023). *Economic report 2023/2024*. Ministry of Finance.
- Mohdali, R., & Pope, J. (2014). The influence of religiosity on taxpayers' compliance attitudes. *Journal of Accounting and Taxation*, 6(1), 48–55.
- Nunnally, J. C., & Bernstein, I. H. (1994). Psychometric theory (3rd ed.). McGraw-Hill.
- OECD. (2022). Tax administration 2022: Comparative information on OECD and other advanced and emerging economies. OECD Publishing.
- Palil, M. R., & Mustafa, H. M. (2011). Factors affecting tax compliance behaviour in self-assessment system. *African Journal of Business Management*, 5(33), 12864–12872.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review. *Journal of Applied Psychology*, 88(5), 879–903.
- Race, P. (2010). Making learning happen: A guide for post-compulsory education. Sage.
- Saad, N. (2014). Tax knowledge, tax complexity and tax compliance: Taxpayers' view. *Procedia Social and Behavioral Sciences*, 109, 1069–1075.
- Sanusi, S., Nik Abdullah, N. H., Lim, T. C., Rastam, F., & Rozzani, N. (2021). Tax awareness among students from higher learning institutions in Malaysia: Education area as a moderator. *International Journal of Economics and Management, 15*(1), 89–102.
- Tabachnick, B. G., & Fidell, L. S. (2019). Using multivariate statistics (7th ed.). Pearson.
- Torgler, B. (2007). Tax compliance and value norms: A cross-country analysis. Edward Elgar.
- Trivedi, V. U., Shehata, M., & Mestelman, S. (2005). Attitudes, incentives, and tax compliance. *Canadian Tax Journal*, 53(1), 29–61.
- Wood, R., & Bandura, A. (1989). Social cognitive theory of organizational management. *Academy of Management Review, 14*(3), 361–384.