



Tax Awareness Among Students from Higher Learning Institutions in Malaysia: Education Area as A Moderator

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ABSTRACT

This study investigates the higher learning institution students' tax knowledge, tax attitude, tax morale, and the role of tax authorities with the moderation of the education area that influences tax awareness in Malaysia. Data from 224 respondents were collected physically and via online across Malaysia. The Structural Equation Model by using Smart PLS 3.2.4 was used to analyse the data, whereby five hypotheses were tested in the current study. The results showed that tax knowledge, tax attitude, and tax morale significantly influenced tax awareness. The result also indicated that the education area was able to moderate the relationship between the role of tax authorities and tax awareness. The findings of this study contributed to the research on tax area as only a few researches had been conducted on tax awareness, especially in Malaysia. It was suggested to compare the tax awareness amongst different countries as a comparative study to understand what tax authorities of other countries have contributed to their students in the higher learning institutions.

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INTRODUCTION

Tax is an indispensable revenue source to the government of any nation, and Malaysia is not an exception. The Malaysian tax system has undergone several reforms to maintain global competitiveness, as well as to mitigate tax leakages. For instance, the implementation of self-assessment system phase by phase from businesses to individual taxpayers, single-tier dividend policy to substitute dividend imputation policy, adoption of double taxation according to the Organisation for Economic Co-operation and Development (OECD) model, as well as the introduction of the Special Voluntary Disclosure Programme (SVDP). The most prominent strategy amongst these reforms is the SVDP, which was initiated in 2019 by the Inland Revenue Board of Malaysia (IRBM). The SVDP was aimed at reducing tax compliance gap resulting from low awareness and knowledge with regard to the Malaysian tax system amongst taxpayers. This was due to the lack of tax compliance being practiced amongst taxpayers. The IRBM collected RM7 billions of tax under the SVDP by inducing 486,360 taxpayers to reveal unreported income. Taxpayers are encouraged to report previous years undeclared income with a minimum penalty of 10-15% during the SVDP, compared to 30% of penalty if the taxpayers are caught during the tax audit and investigation.

The extent of tax compliance gap in Malaysia is becoming a great concern to the government due to the increase of budgetary requirements that need to be funded with tax revenue. The emergence of shadow economy (including tax evasion) brings about 31.5% of gross domestic product (GDP) in Malaysia for the past 25 years (Din et al., 2019). This finding showed that tax evasion was one of the severe crimes that the government needs to look at in reducing their income losses. An average of 813.8 cases of tax evasion was recorded yearly by the IRBM between 2005 to 2014 with an average value of RM767.9 million (Daud et al., 2018).

Due to the above statistics, early awareness from taxpayers is necessary to reduce aggressive tax planning and tax evasion in future. Tax awareness has always been an interesting area of research years ago. The introduction of the SVDP by the IRBM has since urged taxpayers to declare unreported income voluntarily and subsequently pay their taxes. The SVDP addresses the rise of non-compliance issues amongst Malaysian taxpayers. In this regard, knowing and understanding the nitty-gritty of tax matters is no longer an ignorance amongst taxpayers ever since the government initiated the SVDP. The awareness of income disclosure has behavioural influence on tax compliance (Negara and Purnamasari, 2020; Zanaria and Lestari, 2020). As taxpayers' behaviour become a major concern to several revenue authorities across the globe (including Malaysia), there has been a growing interest to embed tax syllabus into the school curriculum for students to learn about their own countries' tax system (Putro and Tjen, 2020; Kujawski and Szadziwska, 2019; Morgan and Castelyn, 2018). As early informative tax awareness is provided amongst students, positive perception of taxpayers about their national tax system could be possibly enhanced.

Students of higher learning institutions (HLI) are potential taxpayers as they are expected to contribute to the workforce soon after graduation. Since they are highly educated, their knowledge about the tax system should be broader. Considering the importance of taxation to the Malaysian economy, Hastuti (2014) affirmed that tax awareness was indispensable in designing quality tax education and tax knowledge for students of HLI. Tax education amongst HLI students can be better deciphered to improve tax awareness and tax knowledge, whereby such education is not limited to accounting students only. Considering the government's demand for voluntary compliance through the self-assessment system, Zailan and Dahlan (2019) emphasised that HLI had the role of positioning tax education, not only as knowledge transfer but also as motivations and belief system that influenced reasoning, as well as cognitive qualities. Hence, tax awareness education has become a necessary tool for social and economic progress.

The objective of enhancing tax awareness and compliance education amongst prospective taxpayers, especially HLI students, becomes a point of discussion that has to gain global attention. Research, which was conducted concerning tax awareness amongst HLI students is limited in the Malaysian context. This study fills up the gap in the research relating to tax attitude and awareness of HLI students in Malaysia, with a hope that the outcome of this research will guide policymakers in respect to design the structure of tax education syllabus in Malaysia. Based on literature review, it could be deduced that awareness fosters responsive tax attitude. Therefore, tax education design should be all-inclusive to capture the government's long and short-term tax revenue goals, while targetting the generality of HLI students in Malaysia (Chuah et al., 2020).

This study aims at examining the factors affecting tax awareness amongst HLI students in Malaysia, such as tax knowledge, attitude, tax morale and roles of tax authorities. The education area was used as a moderator

in the study. To the best of the authors' knowledge, there are a few literature, which had used the education area as a moderator in the research, such as Chen et al. (2010), and Rowe et al. (2003). Hence, the current study also examines the role of the IRBM as tax authorities while being moderated by the education area. In previous studies, the role of tax authorities had inconsistent relationship towards tax awareness. In this context, this study stems from the tide of future tax compliance magnitude by examining the influence of tax awareness on the morale of prospective taxpayers, specifically amongst HLI students in Malaysia. Other sections of this study are structured into literature review and hypotheses development (Section 2), research methodology (Section 3), findings and discussions (Section 4), as well as conclusion in Section 5.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Factors influencing tax awareness are more comprehensible after understanding the necessity to pay tax. Tax awareness and compliance behaviour had been variously discussed in the context of individuals, entrepreneurs and corporations (Negara and Purnamasari, 2020; Zanaria and Lestari, 2020; Unianti et al., 2019; Kalgutkar, 2018). However, there are not many research on examining the awareness of students on future possibilities of tax compliance. Tax awareness can be described in terms of consciousness of regulations, rules and procedures in fulfilling tax obligations (Negara and Purnamasari, 2020; Omondi and Theuri, 2019). In view of Zanaria and Lestari (2020), the term tax awareness was used to explain a cognitive process of realising the need to pay tax, obeying tax regulations and subsequently payment of taxes.

Similarly, Ratnawati et al. (2019) described taxpayers' awareness as an attitude involving views, beliefs, reasoning and knowledge, which affected human disposition to behave in conformity with tax provisions. The HLI students should be aware that taxes are the government only steady source of revenue. Taxpayers should be obliged to report their income that is derived from Malaysia in the IRBM's e-filing portal. They would then pay tax punctually under the self-assessment system. This self-awareness and consciousness become a requisite for tax obligation without necessarily questioning the reasons for paying tax (Kalgutkar, 2018).

Some research on self-awareness had generated mixed outcomes, for instance Nugroho et al. (2016) who had detailed that tax awareness was not associated to tax collection. It was found that awareness did not even serve as partial consequence of tax outcome. Other studies displayed causative relationship between tax awareness and obligation to tax payment (Omondi and Theuri, 2019; Wardani and Rumiyyatun, 2017; Chusaeri et al., 2017). Such causal relationship implied that a higher tax awareness resulted in a better tax payment outcome. From the foregoing, Anggia (2019) contended that the basic understanding of taxation was required to be taught to promote tax awareness.

In the Malaysian context, lack of tax awareness has led to unwillingness of tax payment amongst members of the society (Saifi et al., 2015). Empirical finding from Kamarudin and Mustapha (2017) revealed that the level of understanding and awareness amongst Malaysians towards tax was generally low. In addition, Malaysians that were exposed to the technicality of tax displayed some level of uncertainty with regard to the tax system (Harun et al., 2017). Uncertainty of the tax system was reflected in the protest to the Goods and Services Tax (GST) that rocked Kuala Lumpur on 12th April 2016. This protest was a fallout from the implementation of the GST. According to Schwanke (2016), the implementation of the 6% GST was introduced to broaden Malaysia's revenue flow and to reduce fiscal deficit. However, this development raises a lot of concern on the clarity of GST, although the taxpayers were given 18 months to prepare for its implementation (Harun et al., 2017). Rather than preparing taxpayers for positive possibilities, the GST regime led to a more difficult business environment (Ahmad et al., 2019; Anshika and Prashanka, 2019).

Given the importance of tax awareness, identifying factors influencing tax awareness will provide a framework for preparing future taxpayers (HLI) for their civic duties. Savitri (2016) identified tax knowledge, tax morale and attitude as factors influencing awareness.

Tax knowledge and tax awareness

Damajanti and Karim (2017) acknowledged that tax knowledge was the most influential factor in the tax self-assessment system. Therefore, tax knowledge determines the level of acceptance of tax obligations (Sanusi, 2019). Furthermore, Rahayu et al. (2017) claimed that knowledge and understanding of a country's tax functions were mostly appropriate measures of tax awareness. Higher tax knowledge principally leads to positive view of

the tax system (Bidin et al., 2016). The more the tax knowledge is obtained, the better will be the understanding of issues pertinent to tax compliance. It was also noted that with a higher tax knowledge, taxpayers would consider the consequences of tax evasion more seriously. Furthermore, tax knowledge could be enhanced through education and training. Given this review, this study derives at the first hypothesis.

H₁ : There is a positive relationship between tax knowledge and tax awareness amongst HLI students in Malaysia.

Tax attitude and tax awareness

Taxpayers' attitude is another factor that is influential on tax awareness. Attitude towards tax awareness is the level of confidence that a taxpayer would display towards tax obligations (Karolina and Noviyari, 2019). According to Soon et al. (2020), attitude referred to an individual's conspicuous thoughts about the outcomes of actions. In the tax system discourse, attitude could be referred to as essential motivation arising from moral consciousness and obligation to pay tax (Taing and Chang, 2020). In a similar view, taxpayer awareness is sometimes influenced by tax attitude, which portrays the desire to act either positively or negatively towards tax obligations (Nurlis and Ariani, 2020; Rahayu et al., 2017). Furthermore, Wijaya (2019) and Devos (2014) found causal relationship between taxpayers' attitude and tax awareness. Likewise, Anto et al. (2020) discovered positive correlation between tax attitude and tax knowledge. Hence, with a good knowledge structure, taxpayers are aware and conscious of the tax policies. Given this review, this study draws the second hypothesis.

H₂ : There is a positive relationship between attitude and tax awareness amongst HLI students in Malaysia.

Tax morale and tax awareness

Tax morale is the perception of taxpayers towards tax obligation (Azmi et al., 2020). Tax morale is also defined as a cognitive-behavioural factor with vital emotional elements that are influenced by education, knowledge and understanding (Obongo, 2020). In addition, tax morale is part of an intrinsic motivation from religious beliefs or moral values in order to pay tax (Luttmer and Singhal, 2014). An improvement of intrinsic motivation is expected to boost the willingness to pay tax. However, tax morale is mostly influenced by external elements surrounding taxpayers. External elements, which could affect tax morale include influence from the government, tax authority and society, as well as an individual's own attitudes shaped by moral and religious belief. Some might suggest that having good governance and the government's fair treatment for the people would promote voluntary compliance amongst the citizens (Kirchgassner, 2010). When income tax was imposed at a higher rate on the poor taxpayers, it was difficult for them to pay the amount charged, thus, they were forced to deviate from their morale and it might cause them to respond immorally towards the implemented tax system. An increasing number of empirical papers tried to measure the essential motivation on tax payments (usually called tax morale) with survey data provided in the market (Halla, 2012). However, insignificant empirical evidence had discovered the impact of tax morale on actual tax compliance, especially for the Malaysian environment. Tax morale amongst the population might increase if their fellow citizens contribute their fair share on tax payment. Torgler and Murphy (2005) described tax motivation as part of moral principles or values held by individuals about paying their taxes. McGee et al. (2012) also argued that tax evasion had been always or almost always acceptable due to the unfair tax system, as viewed by 124 respondents from the College of Business at Hadhramout University, Yemen. This finding was supported by 114 future leaders in Guatemala (McGee and Lingle, 2008). On the other hand, intrinsic motivation, such as tax morale might reduce if taxpayers feel that they are being treated in a negative way and suspected of tax cheating (Lars and Bruno, 2004). The relationship between tax morale and awareness had been established mainly in shaping tax revenue efforts. An increase in awareness surges the perception, as well as tax compliance. A few individual factors were identified that affected tax awareness, which include tax knowledge, personal attitude and tax morale. All these factors were related to the taxpayers and their motivation. From the foregoing, the third hypothesis is tested as follows:

H₃ : There is a positive relationship between tax morale and tax awareness amongst HLI students in Malaysia.

Role of tax authorities in tax awareness

Tax authorities employ a variety of means in enforcing tax compliance. This variety of instruments support tax procedures and ensure tax facilities enhance the tax awareness amongst taxpayers. The instruments identified by Gangl et al. (2020) were tax promotion, knowledge sharing platforms of taxpayers' interpretation of tax regulations, tax audit and fines, tax incentives and tax service support. A previous study showed that enforcement, in terms of audit and fines actions by regulators, would enhance compliance amongst them (Alm and Shimshack, 2014; Braithwaite, 2014). On the other hand, Suak (2019) identified tax authority's supporting services and amnesty policy served as instruments to encourage tax compliances. In an initial phase, tax authorities promoted tax compliance through seminars on tax awareness. This session is very important as preliminary injection for HLI students who will be future taxpayers. By this seminar, students get a chance to see IRBM officers and interact with them directly. The quality of communication is deemed essential to create tax awareness for these young generation. In this context, the IRBM resumes the task of promoting quality information about tax functions and possible contentious challenges resulting from the interaction between tax authority and taxpayers (Conte, 2019). Given this review, this study proposes the fourth hypothesis.

H₄ : There is a positive relationship between the role of tax authorities and tax awareness amongst HLI students in Malaysia.

The moderating role of education area

Given that previous literature had inconsistency result on the role of tax authorities, hence the education area is used as a moderator to test the relationship between the role of tax authorities and tax awareness. There were some studies which had used the education area as a moderator in other research areas, such as Chen et al. (2010) and Rowe et al. (2003). In this study, the education area was analysed as science or non-science disciplines of study. Non-science students, particularly accounting students, know about taxation throughout their diploma and degree studies. Under the common curriculum, students taking the Diploma in Accounting are required to take two taxation subjects (taxation and advanced taxation), whereas students taking the Degree in Accounting are required to take three taxation subjects, which are taxation, advanced taxation and issues in taxation. However, this situation might be different between HLI. In a similar manner, there is seldom any tax knowledge being transferred to science students in comparison to those in the art stream, as they have many other subjects to cope with. They probably heard about taxation from the mass media, such as newspapers and television. Realising this situation, previous authors had used the education area as a moderator to test the relationship between the roles of the tax authorities and tax awareness.

Continuous training and education in HLI, especially through the taxation subjects taken by the students, will implant the curiosity and consciousness of students on tax policies. Mukhlis et al. (2015) advocated that strengthening tax education was highly crucial in shaping tax knowledge and tax compliance. For this reason, tax education should be well structured and taught in HLI to achieve the tax objectives. Tax education structure should reflect and simulate the real working environment to enable the students to learn the needs of acquiring tax knowledge (Putro and Tjen, 2020). At the very least, tax curriculum should include broader scope of self-assessment system and tax filing procedures. This tax education structure should include not only the fundamentals of tax rules, but also hands-on learning procedures. Although tax learning is determined by several internal and external factors, tax learning procedures should be simple and less sophisticated to enhance tax compliance (Alkhatib et al., 2020). Twum et al. (2020) had urged the government to embrace tax education strategies, which involved multiple knowledge initiatives, generally, on the rights and responsibility of taxpayers. Specifically, Shamana and Alito (2020) explained that tax education strategy should include training, counselling and continuous support from the tax authority. Hence, identifying tax education requirements would make it possible to distinguish potential risks that might obstruct the successful educational strategy outcome.

Given the importance of tax knowledge, Bijiga (2020) in their study on 'Perception of Taxpayers towards the Seriousness of Tax Evasion' contended that tax awareness was only useful when there were readily available and accessible information on tax matters. This situation implied that availability and accessibility to tax policy information would enhance HLI students' comprehension of the national tax system, public acceptance of tax policies and confidence to be responsible citizens (Hambali and Kamaludin, 2017). As part of awareness capacity building, tax education and training are equally emphasised (Bijiga, 2020). Another important factor that should be reviewed is the need for the government to use educational facilities in promoting tax awareness

(Anggia, 2019). Ratnawati et al. (2019) admitted that education had an impact on adherence to rules. Students that are going to be future taxpayers will be tax compliant not only because they are informed, but they now have general and technical knowledge of tax processes. Educational facilities have been useful in improving public acceptability of tax policies, as well as increasing awareness (Hambali and Kamaludin, 2017; Hamid, 2016). Muklis et al. (2015) revealed that education had increased tax knowledge, thereby improving their capability to fulfil their tax obligations. Given this situation, Omondi and Theuri (2019) found significant correlation between education and tax awareness. Correlation between education and tax awareness corresponds to higher tax compliance. Muklis et al. (2015) found that education in the field of taxation could increase the knowledge of taxpayers, thereby increasing taxpayers' compliance in carrying out their tax duties. From the foregoing, this study assumes that:

H₅ : Educational area moderates the relationship between the role of tax authorities and tax awareness amongst HLI students in Malaysia.

Figure 1 demonstrates the framework of the current study, which consists of tax awareness as a dependant variable, tax knowledge (Damajanti and Karim, 2017), attitude (Devos, 2014), tax morale (Luttmer and Singhal, 2014) and the role of tax authorities (Braithwaite, 2017), as independent variables and the education area as a moderating variable.

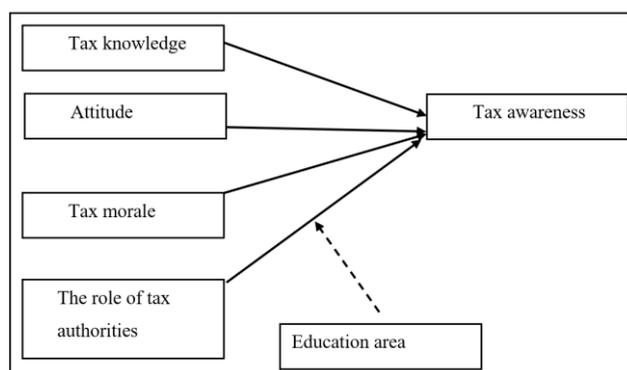


Figure 1 Research framework of tax awareness

RESEARCH METHOD

The research used a quantitative approach, where students' tax awareness was treated as a variable that could be measured in the questionnaire. This study employed cross-sectional quantitative survey method. A sample of 224 undergraduate (96.55%) and eight postgraduate (3.45%) students from various fields of study were selected from the public and private HLI in Malaysia. There were more than 700,000 HLI students in Malaysia in 2019 (Hirschmann, 2020). Therefore, a total of 384 is required to be sampled as respondents to the current study (Krejcie and Morgan, 1970). Meanwhile, a minimum sample of 117 is required for a medium effect size of 0.15 (Green, 1991). Purposive sampling technique was used, whereby respondents received an online survey administered via the university's lecturers and also through physical survey. With regard to ethical consideration, the students' consent to participate in this study was sought before they answer the questionnaires. Participation was strictly voluntary and anonymous.

The questionnaire consisted of five sections, which aimed at studying the understanding of taxation amongst HLI students in Malaysia. It consisted of tax awareness items, tax knowledge (Mohamad, 2013), personal attitude (Mohamad, 2013), the role of tax authorities and tax morale (Alm and Torgler, 2006). There were five basic demographic questions (i.e., age, gender, ethnicity, the field of study and level of education), and 32 items in five dimensions. The five dimensions, along with the respective number of items in the questionnaires were as follows: tax awareness (five items), tax knowledge (eight items), personal attitude (six items), roles of tax authorities (seven items), and tax morale (six items). Amongst the items asked in the survey questionnaire include the student's knowledge on the tax return to be submitted to the IRBM, type of taxes in Malaysia, their responsibility as a taxpayer in the future, tax avoidance and tax evasion and the purpose of tax

collection. A seven-point Likert-type scale ranging from strongly disagree (1) to strongly agree (7) was provided as response options for all the items. Only one response was allowed per item.

Before the actual data collection, a small-scale pilot test was conducted with 30 students in a public HLI in Penang, Malaysia, to ensure the suitability of wordings, formatting, and layout. These 30 students were excluded from the main study. After the pilot study, the actual survey questionnaires were distributed to the students in a few HLI in the central and northern regions of Malaysia. The SPSS software was used to determine the validity and reliability of the instrument. Smart PLS 3.2.4 had been used to test the relationship between variables in the actual research. It started with the measurement of the analysis followed by the structural analysis.

FINDINGS AND DISCUSSION

Demographic Profiles of Respondents

The overall number of acceptable completed questionnaires was 232 from the HLI students in Malaysia. The questionnaire required the respondents to provide their background information, such as gender, age, ethnicity and current education level. Table 1 provides a summary of the demographic of the respondents.

Table 1 Demographic of the respondents ($n=232$)

Demographics	Descriptions	Frequency	Percentage (%)
Gender	Male	49	21.1
	Female	183	78.9
Age	15-19	12	5.2
	20-24	208	89.7
	25-29	1	0.4
	30-34	6	2.6
	Others	5	2.1
Ethnicity	Malay	199	85.8
	Chinese	18	7.8
	Indian	6	2.6
	Others	9	3.8
Current education level	Certificate	3	1.3
	Diploma	11	4.7
	Degree	210	90.5
	Master	6	2.6
	PhD	2	0.9
Education area	Science	92	40
	Non-science	140	60
Total		232	100

Convergent validity

The convergent validity is an extent whereby numerous measuring tools are used to measure similar concept that might be incongruent. Several indicators were used to determine the convergent validity, which comprised indicators such as composite reliability (CR) and average variance extracted (AVE) (Hair et al., 2010).

Table 2 refers to the composite reliability values, which indicated the extent to which construct indicators would estimate latent construct, which exceeds a recommended value of 0.7 (Hair et al, 2019). The total number of variances in the indicators provided by the latent construct was portrayed by the extracted average variance, which surpassed the desired value of 0.5 (Hair et al., 2010). The results for convergent validity are shown in Table 2.

Table 2 Reliability test of variables

Variable	No of Item	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Attitude	6	0.924	0.94	0.724
Education area	1	1	1	1
Role of Tax Authorities	7	0.93	0.943	0.702
Tax Awareness	5	0.809	0.869	0.574
Tax Knowledge	8	0.893	0.913	0.567
Tax Morale	6	0.932	0.946	0.747

Discriminant Validity

Discriminant validity indicates how far the measures fail to portray other variables, which is shown by low correlations between the extent of interest and the measures of different constructs (Cheung and Lee, 2010). By contrasting squared correlations between constructs and variance for a particular construct, it becomes possible to determine discriminant validity (Fornell and Larcker, 1981). This study assessed discriminant validity through heterotrait-monotrait ratio (HTMT). While, discriminant validity had a problem when the HTMT value was greater than the value of 0.90 (Gold et al, 2001), all values in Table 3 showed to be lower than the recommended value of 0.90. This indicated that discriminant validity had been established. Overall, the measurement model had indicated the presence of adequate convergent and discriminant validity.

Table 3 Discriminant validity based on heterotrait-monotrait ratio (HTMT) criterion

	1	2	3	4	5
Attitude					
Education b/ground	0.034				
Role of Tax Authorities	0.359	0.082			
Tax Awareness	0.814	0.181	0.474		
Tax Knowledge	0.541	0.232	0.742	0.694	
Tax Morale	0.809	0.086	0.389	0.81	0.501

Data analysis

The data for this study was analysed by using the partial least squares (PLS) method. The PLS is the preferred method due to its ability to manage both reflective and formative factors (Chin, 1998; Ooi et al., 2013) and it emphasises on minimal restrictions on the distributional characteristics and sample size (Chin, 2000). The data analysis process for the current study adopted the Smart PLS Version 3.2.4 and two-step analysis approach. The significant levels of loadings, weights and path coefficients were resolved by applying the bootstrapping method (Ooi et al., 2013). Figure 2 demonstrates the measurement model for this study, which will be further discussed in the next section.

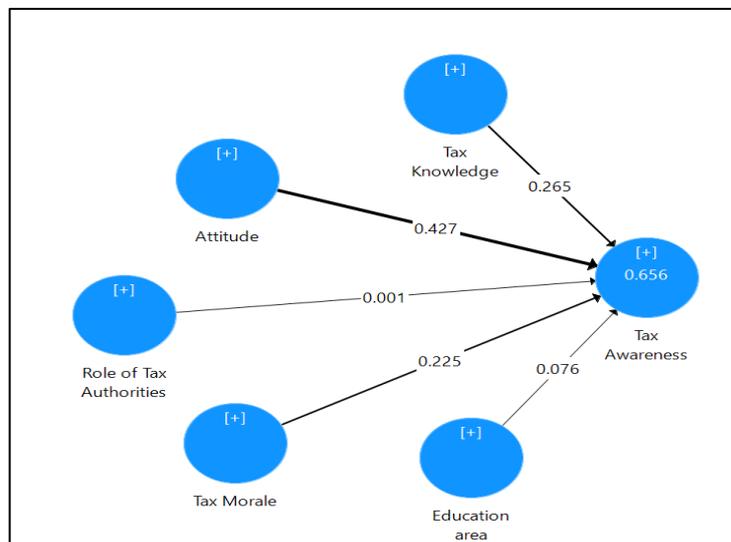


Figure 2 Measurement model

Structural Model and Hypothesis Testing

The structural model indicated causal relationships amongst the constructs in the model (Sang et al., 2010). It started with assessing the variance inflation factor (VIF), *R*-squared, *F* square, *Q* square and path coefficients (Hair et al., 2014). The collinearity issue should be addressed during initial stages of the structural model. This was evaluated by examining the VIF value. The model requires the VIF value to be less than 5 to ensure that no multicollinearity occurred before hypotheses testing. Table 4 shows no potential of multicollinearity in the model, as the VIF value is less than 5, i.e., attitude (3.579), education area (1.071), role of tax authority (1.918), tax knowledge (2.366) and tax morale (3.415). Thereafter, the analysis will look into the effect size by using the *F* square.

The effect size of the predictor was evaluated by using the Cohen's f^2 , which measured the relative impact of an independent variable on dependent variable. The effect size of the predictor from Table 4 construct indicated that the f^2 value of 0.148 for personal attitude was of a medium effect size (Cohen,1992). F^2 for the education area, tax knowledge and tax morale were of a small effect size (0.016, 0.086 and 0.043, respectively). Meanwhile, the role of tax authorities had no effect size at all as the f^2 value was 0.00.

Table 4 Determination of co-efficient (R^2), effect size (f^2) and predictive relevance (Q^2)

Item	Path Coefficient	VIF	F Square	R square	Q square
Attitude	0.427	3.579	0.148		
Education area	0.076	1.071	0.016		
Role of Tax Authorities	0.001	1.918	0		
Tax Awareness				0.656	0.343
Tax Knowledge	0.265	2.366	0.086		
Tax Morale	0.225	3.415	0.043		

In order to acquire t-values, a bootstrapping procedure with 500 resamples was performed. Thus, the measurement model in Figure 2 shows that an R-squared value of 65.5%, as well as p-values of the relationships amongst the constructs. Table 5 and 6 indicate the results from the tested hypotheses.

Table 5 Structural model and hypothesis testing

H	Variable	Beta Coefficient	Standard Error	t Values	p Values	Decision
H1	Tax Knowledge -> Tax Awareness	0.265	0.067	3.962	0.000	Supported
H2	Attitude -> Tax Awareness	0.076	0.045	1.693	0.046	Supported
H3	Tax Morale -> Tax Awareness	0.225	0.114	1.985	0.024	Supported
H4	Role of Tax Authorities -> Tax Awareness	0.001	0.056	0.023	0.491	Not supported

Table 5 presents the results of the structural model from the PLS output, which comprise the path coefficients, t-values, p-values and standard error. As a result, tax knowledge ($b = 0.265$, $p < 0.05$), attitude ($b = 0.076$, $p < 0.05$), and tax morale ($b = 0.225$, $p < 0.05$) were found to be positively related to tax awareness and managed to explain 65.5% of the variances. These results supported H1, H2 and H3 of the current study. In addition, the study also discovered that the role of tax authorities had no significant effect on tax awareness ($b = 0.001$, $p > 0.05$). Hence, the result did not support H4, which had emphasised on the relationship between the role of tax authorities and tax awareness.

These results were consistent with previous findings, such as Rahayu et al. (2017) for tax knowledge, Devos (2014) for attitude and Obongo (2020) for tax morale. All the previous studies had a positive relationship with tax awareness. These internal factors, which come from the individual themselves will help to understand the tax system better in the future. However, the role of tax authorities result, as an external factor, indicated that the IRBM and other regulators did not play the main role in improving tax awareness amongst the HLI students. The IRBM might have focus on the current individual taxpayers, corporate taxpayers and the public because they are the existing taxpayers who contributed to the government's collection. Furthermore, by comparing to other countries, such as Australia, the Australian Taxation Office (ATO) has school education programmes with a vision that every child will understand and value tax by the time they leave school for a career.

Moderation effect of the education area

The moderation effect of the education area (science and non-science student's category) on the structural model is shown in Table 6, and this was confirmed by having a test on the moderator's graph in Figure 2. The findings indicated that when the moderator of the education area was introduced in the model, the R-squared increased marginally from 65.5% to 66.2%. It implied a better fit for the model. The beta value also changed for each variable in Table 5, because the bootstrapping run with a moderator, as shown in Table 6.

Table 6 Bootstrapping on the moderation effect

H	Variable	Beta-Co	Standard Error	t Values	p Values	Decision
	Attitude -> Tax Awareness	0.426	0.103	4.149	0.000	
	Tax morale -> Tax Awareness	0.408	0.180	2.265	0.012	
H5	Education*Tax Authorities -> Tax Awareness	-0.138	0.069	2.006	0.023	Supported
	Role of Tax Authorities -> Tax Awareness	0.105	0.083	1.270	0.102	
	Tax Knowledge -> Tax Awareness	0.258	0.068	3.817	0.000	
	Tax Morale -> Tax Awareness	0.233	0.111	2.096	0.018	

By plotting beta for the role of tax authorities ($\beta = 0.105$), education ($\beta = 0.408$) and the interaction effect ($\beta = -0.138$), and intercepted at 3, the regression lines showed an interaction. These two lines, which represented both the education area of 'science' (coded as 1) and 'non-science' (coded as 2), were non-parallel and merely intercepted each other. This condition proved the existence of the interaction effect of educational area on the relationship between the role of tax authorities and tax awareness, hence supporting hypothesis 5. The result implied that students who had science education and in a high role of tax authorities marked more heightened tax awareness compared to a low role of tax authorities. In contrast, students who had non-science education and in a high role of tax authorities marked a lower tax awareness compared to those in a low role of tax authorities. Hence, the difference in the education between science and non-science provided a profound interaction effect between the role of tax authorities and tax awareness, suggesting that the education area is capable in strengthening or weakening the relationship between the role of tax authorities and tax awareness. Figure 3 shows the detail of the moderating graph.

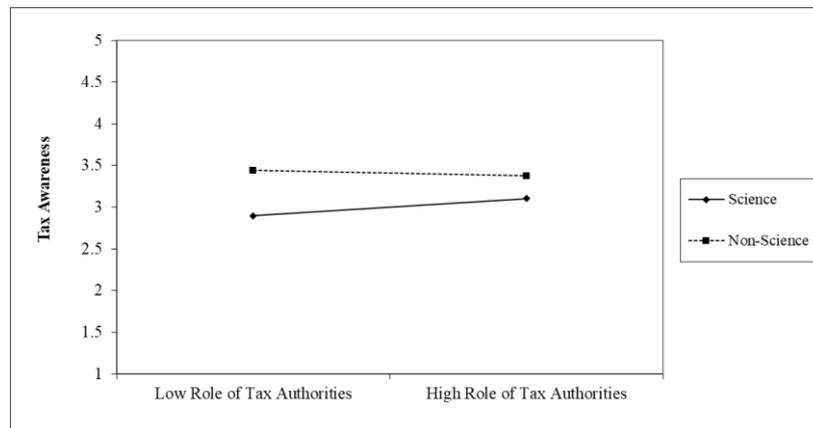


Figure 3 Test into moderator's graph

CONCLUSION AND RECOMMENDATION

This paper examines the effect of tax knowledge, tax morale, attitude and the role of tax authorities on tax awareness amongst HLI students in Malaysia. Therefore, the current study investigated factors that contributed to tax awareness amongst various HLI students in Malaysia, as many young Malaysians overlooked on taxpayers' responsibilities. By using the Smart PLS version 3.2.4, significant positive relationships between tax knowledge, tax morale and attitude towards tax awareness were discovered. However, no relationship was found between the role of tax authorities and tax awareness. This relationship was only discovered with the introduction of the education area as a moderator between both variables. These results were consistent with previous studies by Bornman and Ramutumbu (2019) and Inasius (2019).

This study has notable education, social and tax regulation implications. From an educational perspective, the result from the current study expands the understanding of tax awareness in HLI, as awareness from a young age is very important before these students become taxpayers in the future. It also contributed to the taxation study as not many articles discuss on tax awareness, especially in Malaysia. From a social point of view, tax collection could be increased if taxpayers understand that the importance of tax collection is for the sake of society. Any loss of the government's tax revenues harms the society since it deprives the states of the resources needed to fund public necessities, citizen welfare and social cohesion. Findings from the current study could also be useful for tax regulators to actively promote tax awareness amongst students. It had been noted that there was no significant relationship between tax authorities and tax awareness amongst the students, which might be due to fewer activities, promotion and education given by the tax regulators to the public, especially students. The empirical indication of this result is hoped to alert the IRBM to take pre-emptive action to improve it in order to impart tax knowledge to the HLI students as they will become taxpayers very soon.

Nonetheless, this study has a few limitations. Amongst the limitation is that the research provided only a snapshot view of the phenomena, whereby all data were collected at the same time in a short period of months. It is suggested that the limitations of the current study bring opportunities for future research. The first

suggestion is that the same research with the same settings as the present study could be conducted in the future. A future study on the comparison of the level of tax awareness amongst HLI students in Malaysia is suggested with the mean to see whether there is a difference after a few years. These are mostly with the young digital media's generation compared to the previous generation. It is also suggested comparing the tax awareness from other countries as a comparative study in the future.

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APPENDIX

Survey Questionnaire's Items.

Tax awareness

- Tax awareness should start from the young age.
- I need to pay tax when my income reaches the threshold amount.
- I am aware that tax avoider may get a penalty in the future.
- I am aware that there are two types of taxes: direct tax and indirect tax.
- I am aware that the tax collection will be used for the social economic development in the country.

Tax knowledge

- I know that the IRBM is the agency that handles direct tax in Malaysia.
- I know that the Royal Malaysia Customs Department is the agency that handles indirect tax in Malaysia.
- I know how to calculate personal income tax from my future income.
- I know that we need to submit tax file every year.
- I know that there are several types of tax relief provided to reduce the burden on taxpayers.
- I know that schedular tax deduction provided for a monthly tax deduction.
- I know that education, insurance/takaful payment will reduce the tax amount.
- I know that buying books can reduce the tax amount payable to the government.

Personal attitude

- I will report my income tax as it is.
- I will not manipulate any figure of my income for tax declaration.
- I will pay my income tax before the due date.
- I will pay the actual outstanding tax amount, if any.
- I will keep all my records of tax submission properly.
- I will comply with all applicable laws and regulations in the Malaysian Acts.

Role of tax authorities

- The IRBM had provided information with regard to taxation to the public.
- The IRBM had aggressively conduct programmes for students to understand further about taxation in Malaysia.
- The IRBM is fair and equal in their actions.
- The IRBM had initiated awareness programmes for students to take responsibility as a taxpayer.
- I can view the information about responsibility as taxpayers from the mass media.
- I can approach tax officers easily if I have any queries related to taxation.
- I have high confidence in the IRBM in managing tax collection in the country.

Tax morale

- I believe that paying tax is the right thing to do as a good citizen.
- I believe that as a citizen, we need to follow all rules and regulations related to tax.
- I will voluntarily comply with the tax law.
- I will not cheat on tax, even though I have a chance to do it.
- Tax avoidance is unethical for everyone.
- Tax evasion is unethical for everyone.