

Behavioral Intention of Tax Non-Compliance among Sole-Proprietors in Malaysia

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Abstract

The primary objective of this research is to examine whether the tax and account preparer influences the sole-proprietor behavioural tax non-compliance intention. This is done by using the Theory of Reasoned Action Model proposed by Fishbein and Ajzen (1975). Mailing survey questionnaires were mailed to 515 sole-proprietors selected using simple random sampling method from listing of a local Business Information Directory. Only 196 responded i.e. 38 per cent response rate. The results showed that Attitudinal variables (attitude towards future expected tax cost and attitude towards fairness of tax system), Subjective norms variables (unapproved tax preparer and unapproved account preparer) and Demographic variables (Gender and Age) were found to have a positive relationship on the sole-proprietors behavioural tax non-compliance intention. These attitudinal and subjective norms variables were also found to produce higher Correlation Coefficient R value in the belief-importance model when compared to the belief-only model. Thus, the belief-importance model has a higher predictive model for tax non compliance when compared to the belief-only model. On the other hand, the disaggregative model has a higher R² value than the aggregative (summative model). This would, thus, imply that the disaggregative model is a higher predictive model for tax non compliance when compared to the aggregative (summative model). This research had developed a model called "the extension of the Theory of Reasoned Action".

Key words: Tax non-compliance, Behavioural intention, Attitudes, Subjective norms, Sole-proprietors.

1. Introduction

Extensive amount of research by tax academics on tax compliance / non-compliance behaviour were based on economic/non-economic factors. In the process, research on tax compliance / non-compliance behaviour had taken off since early 1960. It is generally accepted that tax non-compliance and tax evasion exists in every country and Malaysia is no exception. Tax non-compliance by individual sole-proprietors is a serious, expensive and pervasive problem and is as old as taxes themselves (Jackson and Jones, 1985; Worsham, 1996; Kasipillai, 1998). The problem of unintentional tax non-compliance becomes even more significant with the implementation of Self-Assessment System (SAS). Review of the tax compliance / non-compliance behaviour had indicates past researchers had studied extensively about various factors influencing the tax non-compliance behaviours of individual sole-proprietors. Though there were extensive studies on these factors, the paper sought to examine whether there are factors that influencing the intention of tax non-compliance among the taxpayers or sole-proprietors that have not been studied.

2. Literature Review

There has been a substantial amount of research undertaken in the area of tax compliance and tax non-compliance in United States of America (USA) and countries outside USA. Tax non-compliance occurs when there is a failure to perform a timely filing or submission by taxpayers of all required tax returns, when not accurately reporting the tax liability in accordance with the tax laws, when there is a non-payment or late payment on the tax due, an understatement of income, and overstatement of expenses (Singh, 2003). The Inland Revenue Services of USA indicated that there are 64 factors that are related with tax non-compliance by taxpayers or companies (Young, 1994).

Factors studied were Income (**Madeo, Schepanski and Uecker, 1987; Harwood, Larkins & Vazques, 1993; Feldman and Slemrod (2005)**), tax rate (**Spicer & Becker, 1980; Milliron & Toy, 1988; Christian & Gupta, 1992 and Joulfianian & Rider, 1998**), tax penalty (**Davis, Hecht & Perkins, 2002**), opportunity (**Collins, Milliron and Toy, 1992**), social responsibility (**Fortin, Lacroix & Villeval, 2007**), ethics (**Bobek & Radkte, 2007; Nienaber, 2010**), enforcement (**Frey & Fled, 2002**), moral reasoning (**Singh, 2003**), tax deduction (**Singh, 2003**) and sanctions (**Tittle, 1977**). Fairness of tax system was also examined by previous researchers in the area of tax non-compliances. For example, the impact of tax complexity on tax compliance has a mixed results because of the interaction of two factors i.e. perception of fairness and opportunity for non-compliance (**Milliron, 1985**). Under conditions of uncertainty, taxpayers are more prone to tax non-compliance (**Beck, Davies & Jung, 1991**). Tax complexity also influences non-compliance by causing misinterpretation of rules, omissions and unintentional errors besides deliberate under-reporting (**Gupta, 2002**).

Reducing tax complexity may, thus, lead to an increased perception of fairness on tax system and subsequent reduction of tax non-compliance (**Beck et al., 1991**). **Adam and Sheffrin (2002)** found that tax complexity may not necessarily be considered be unfair and simplifying the system may not effectively deter tax non-compliance. It should also be noted that perception of fairness of tax system generally affects the taxpayers' tax compliance/non-compliance performance. **Spicer and Becker (1980)** found that taxpayers significantly increase their tax non-compliance when they perceive themselves to be victims of tax inequity. Taxpayers' morale increases when tax officials treat them with respect. If tax officials solely rely on deterrence, taxpayers tend to avoid tax (**Frey & Feld, 2002**). Public service announcements are effective in improving taxpayers; perceptions of fairness of tax system (**Roberts, 1994**). Any increases in perception of fairness can lead to an increase improvement in tax compliance (**Forest & Sheffrin, 2002**).

Demographic factors also have an influence of tax non-compliance. For example, according to **Schuetze, 2002** gender is a sociological factor that influences the compliance behaviour of sole-proprietors. **Spicer and Becker (1980)** found that gender appears to have a significant impact on tax non-compliance and noted that male had greater percentage than female in terms of tax non compliances. This was further supported by **Young (1994)** who found that males are less compliance than female. **Mottiakavandar, Haron and Kasipillai (2004)** also found that gender had a significant impact on tax non-compliance. However, **Hasseldine and Hite (2003)** noted there is no significant difference between men and women in tax non-compliance. Age is another sociological factor that influences the compliance behaviour of sole-proprietors. **Clotfelter (1983)** found that there is a close relationship between age and tax compliance/ non-compliance. **Christian and Gupta (1992)** found that older taxpayers are less likely to be at the top of the table brackets, less knowledgeable about tax or may be more conservative and hence less likely to search for additional deductions to lower their taxable income i.e. older people are more tax compliance as compared with younger taxpayer.

Research Gaps

Tax preparers have an important role to play on taxpayers' compliance decision. Prior studies have indicated that the role of tax preparers i.e. CPAs can create an impact on taxpayers' non-compliance decision. Tax preparers play a critical role in how small business owners approach tax planning opportunities (**Plamondon, 1996**). Most of previous studies on tax preparers have centered on approved tax preparers i.e. CPAs rather than unapproved tax preparer. The objective of using approved tax preparer and unapproved tax preparer are the same i.e. assisting and advising the taxpayers to fulfill their tax obligations. The only difference is the level of education, tax knowledge and training. Approved tax preparers are better educated than unapproved tax preparers because of professional certification requirements (**Ayers, Jackson & Hite, 1989**). There is, thus, a tendency that sole proprietors who uses unapproved tax preparers tends to be less tax compliances.

Previous research conducted had also centered on approved account preparer rather than unapproved account preparer. There are several reasons why unapproved account preparer are employed by taxpayers i.e. low fees, ignorant of accounting requirement and limited knowledge in accounting (**Liew, 2004**). Usually these unapproved account preparers are located in small town or districts. These unapproved account preparers need not have to follow the tax regulations and professional ethics set by approved accounting board. There is, thus, a tendency that sole proprietors who uses unapproved account preparers tends to be less tax compliances. **Collin et al, (1992)** recommended unapproved tax preparer i.e. non-CPAs, commercial firms to be studied while **Cuccia (1994)** recommended investigation to be carried out on the impact of unapproved account preparer on their influence on tax non-compliance.

The anticipated benefits of being tax non-compliant had been researched by **Collins et al. (1992)**. Anticipated benefits revealed that a taxpayer presumes to gain when he/she performs intended tax non-compliance if not audited by tax authorities. On the other hand, if in future, the tax authorities audited the tax payers, whatever additional tax and penalties would be the taxpayer's future expected tax costs. Therefore, if a taxpayer wishes to evade tax, the taxpayers must understand what the future expected tax costs likely to be. With the increase of tax audit by tax authorities, future expected tax costs for tax non-compliant will exist. This is why future expected tax costs needs to be researched upon. **Jackson and Jones (1985)** had indicate that if future expected cost of tax non-compliance is known to taxpayers, then it is a factor that may change taxpayer's non-compliance decision-making.

3. Development of an Extension Model for Theory of Reasoned Action

The basic mathematical equation derived from the model of the Theory of Reasoned Action **Fishbein and Ajzen (1975)** is as follows;

$$BI = \sum_{i=1}^n A_i E_i \text{ (Attitudes)} + \sum_{i=1}^m B_i M_i \text{ (Subjective norms)}$$

Attitudes toward behaviour is influence by a combination of (1) Beliefs **A_i** (a belief that particular behaviour will produce a certain outcome) and (2) Evaluation/Importance of outcome of Beliefs **E_i** (if the outcome seems to benefit the individual (**Fishbein & Ajzen, 1975**)). Subjective norm is a person's perception of what others around them believe that the individual should do (**Miller, 2005**). Subjective norm comprises of (1) normative beliefs **B_i** (an individual's belief that reference group thinks he/she should or should not perform behaviour) and motivation of comply **M_i** (importance of whether or not intention and behaviour will be affected by what other think) (**Lezin, 2007**). It should also be noted that the TRA model did not incorporate any demographic variables although many researchers have mentioned that demographic variables does play an important role in tax non-compliances behaviour (see, for example: **Coltfelter (1983)**; **Collins et al (1992)**; **Torgler (2007)**; **Hasseldine & Hite, (2003)** and **Mottiakavandar et al., (2004)**). Demographic variables such as gender and age has shown to have an impact on behavioral intention (**Tennyson, 1997**). As such, the paper has proposed that the demographic variables be incorporated in the TRA model. **Ajzen (1991)** explained that the Theory of Reasoned Action is open to the inclusion of addition predictor variables

In designing the extension model of the TRA, the research has taken into consideration three independent variables i.e. unapproved tax preparers, unapproved account preparers and future expected tax costs that were not being studied in the area of tax non-compliance. Besides these independent variables, another independent variable (i.e. demographic variables such as gender and age) will also be incorporated into the model. It should be noted that, in any mathematical equation of a linear regression model, and, as such, intercept (**B₀**) and error of prediction (**E**) needs to be included. The proposed mathematical formula for the extension of the TRA model is as follows:

$$Y = B_0 + \sum_{i=1}^n A_i E_i + \sum_{i=1}^m B_i M_i + \sum_{j=1}^p B_j D_j + E$$

where Y = Behavioural Intention (BI)
 B₀ B_j = Unknown Parameters (intercept and slope) to be estimated (the Regression coefficients)
 A_i = the ith belief about the benefit
 E_i = the value of importance of the ith attribute
 n = no. of attribute
 B_i = the ith normative belief
 M_i = motivation to comply with the ith normative belief
 M = no. of normative factors
 D_j = Demographic variables (Gender and Age)
 E = Independent Random Variable (Error Term)
 p = Number of dummy variables

In tax compliance context, demographic variables (gender and age) appear to be a natural choice as an additional predictor that influences behaviour both directly and through behavioural intentions. Previous studies had evidenced that there is a significant effect of gender on tax non-compliance (**Jackson & Milliron, 1986; Young, 1994; Hasseldine & Hite, 2003; Mottiakavandar et al., 2004; Kasipillai & Hijattulah 2006**). Most previous researchers have also found age to have a close relationship with tax compliance or non-compliance (**Spicer & Becker, 1980; Coltfelter, 1983; Christian & Gupta, 1992; Worsham, 1996; Erard & Ho, 1999; Ritsema et al. 2003; Torgler, 2007**).

Behavioural intention (Y)

The main area the Theory of Reasoned Action focus on is behavioural intention (Y) as precursor to the actual behaviour. Intentions are assumed to capture the motivational factors that influence a behaviour and to indicate how hard individual are willing to try or how much effort they would exert to perform the behaviour (**Ajzen 1991**). To understand a particular individual taxpayer's behaviour, it is important to identify the determining the variables of a behavioural intention (**Hanno & Violette, 1996**). **Hanno & Violette (1996); Mottiakavandar et al. (2004); Trivedi et al. (2005)** are researchers who have used Behaviourial Intention as their Y Component in the TRA model.

Attitude toward Behaviour.

There are two components that are involved. These are:

- Attitude toward future expected tax costs
- Attitude toward fairness of tax system

Each of these is now discussed.

a) Attitude toward future expected tax costs

This is the total likely costs that a taxpayer needs to be informed before he/she decides to commit intended tax non-compliance. The total costs will be calculated based on the total amount he/she wants to evade. Whatever amounts that a taxpayer does not declare is believe to be his/her future costs if caught by Inland Revenue later. If the expected cost of tax non-compliance is known by taxpayers, this will create a belief that may change taxpayers' non-compliance decision-making (**Jackson & Jones, 1985**).

B)Attitude toward Fairness of Tax System

Roth, Scholz and Whitte (1989) and **Jackson and Milliron (1986)**, in their review of tax compliance research, found that taxpayers' concerns about fairness have links with attitudes and behavioural intentions about tax compliance. **Richardson (2006)** indicates that perceived fairness of tax system is significantly related to tax non-compliance.

Subjective norm (Bi Mi)

Subjective norm (Bi Mi) is an independent variable in this study. **Ajzen (1991)** describes subjective norms (SN) as the influence of third party on others. Subjective norms as a person's beliefs about whether specific individuals or groups approve or disapprove of the individual performing a specific behaviour, and, to what extent the individual is motivated to conform with these other individuals or groups (**Bobek & Hatfield, 2003**). Two key constructs of subjective norm component for this paper as follows:

- Unapproved tax preparer
- Unapproved account preparer

Each of these is now discussed.

a) Unapproved tax preparer

The influence of tax preparers (approved or unapproved) plays an important part in the present tax system of voluntary compliance i.e. Self-assessment system (SAS) (**Klepper, Mazur, & Nagin, 1991**) and has a significant impact on the sole-proprietors compliance behaviour (**Christian & Gupta, 1992**). Unapproved tax preparers can play an important part in influencing the sole-proprietors' intention of tax non-compliance behaviour (**Liew, 2004**). Unapproved tax preparer is included as an independent variable in the proposed model as a element of subjective norms of the Theory of Reasoned Action model.

b) Unapproved account preparer

Unapproved account preparers are book-keepers, accounting technician or accounts clerks and do not register with the Approved Professional Accounting Bodies (**Liew, 2004**). Tax computation that determines the tax liability of the sole-proprietor is based on the financial statement of the company. Majority of sole-proprietors in Malaysia employ non-trained accountants or book-keepers to handle their financial affairs (**Liew, 2004**). The influence of unapproved account preparers included as a element of Subjective norm in the extension mode.

c) Demographic variable (age and gender) (BjDj)

This is also one of the independent variables in the study. Age is an important independent variable of the demographic component in the studies of tax non-compliance. Most studies found age to have a close relationship with tax compliance or non-compliance (**Coltfelder, 1983; Torgler, 2007**). Past studies evidenced that there is a significant effect of gender on tax non-compliance. Most of the studies tested the tax non-compliance of males and females (**Spicer & Becker, 1980; Jackson & Milliron, 1986; Mottiakavandar et al., 2004; Kasipillai & Hijattullah, 2006**).

4. Hypotheses

There are seven hypotheses. Each of these hypotheses are highlighted below.

Hypotheses 1 is the empirical test on the attitude component of the extension model of The Theory of Reasoned Action. These hypotheses [Ho = Null Hypotheses. Ha = (Alternative Hypotheses)] are:

Ho1A/Ha1A: "Subject's attitude is (negatively)/positively correlated with their behavioural intentions."

Ho1B/Ha1B: "Relationship between attitude and behavioural intention is (stronger)/weaker when importance component is not included in attitude."

Ho1C/Ha1C: "The disaggregative attitude model yields (weaker)/stronger relationship between attitude and behavioural intention than the aggregative model."

Hypotheses 2 is the empirical test on the attitude and subjective norm component of the extension model of The Theory of Reasoned Action. These hypotheses are:

Ho2A/Ha2A "When both normative belief and attitude are considered, subject's behavioural intention shows (weaker)/stronger relationship with the former than the latter"

Ho2B/Ha2B "When importance component is not included in the extended behavioural Intention model, relationship between behavioural intention and both attitude and normative belief is (stronger)/weaker."

Ho2C/Ha2C "The disaggregative version of the extended behavioural intention model yields (weaker)/stronger results than the aggregative model"

Hypotheses 3 is the empirical test on the attitude component (future expected tax costs) of the extension model of The Theory of Reasoned Action. These hypotheses are:

Ho3A/Ha3A "Sole-proprietor's attitude toward future expected tax cost is (negatively)/stronger correlated with their behavioural tax non-compliance intentions."

Ho3B/Ha3B "Relationship between attitude toward future expected tax costs and sole-proprietors' behavioural tax non-compliance intentions is (stronger)/weaker when importance is not included in attitude"

Ho3C/Ha3C "The disaggregative attitude model yields a (weaker)/stronger relationship between attitude toward future expected tax costs and the sole-proprietors' behavioural tax non-compliance intention than the aggregate attitude model".

Hypotheses 4 is the empirical test on the attitude component (fairness of tax system) of the extension model of The Theory of Reasoned Action. These hypotheses are:

Ho4A/Ha4A “Sole-proprietor’s attitude toward fairness of tax system is (negatively)/stronger correlated with their behavioural tax non-compliance intentions”.

Ho4B/Ha4B “Relationship between attitude toward fairness of tax system and sole-proprietors’ behavioural tax non-compliance intentions is (stronger)/weaker when importance is not included in attitude”

Ho4C/Ha4C “The disaggregative attitude model yields a (weaker)/stronger relationship between attitude toward fairness of tax system and the sole-proprietors’ behavioural tax non-compliance intention than the aggregate attitude model”.

Hypotheses 5 is the empirical test on the subjective norm component (unapproved tax preparer) of the extension model of The Theory of Reasoned Action. These hypotheses are:

Ho5A/Ha5A “Unapproved tax preparer is (negatively)/stronger correlated with the sole-proprietors’ behavioural tax non-compliance intentions

Ho5B/Ha5B “Relationship between unapproved tax preparer and sole-proprietors’ behavioural tax non-compliance intentions is (stronger)/weaker when importance is not included in subjective norms”

Ho5C/Ha5C “The disaggregative subjective norm model yields a (weaker)/stronger relationship between unapproved tax preparer and sole-proprietors’ behavioural tax non-compliance intention than aggregative subjective norm model.”

Hypotheses 6 is the empirical test on the subjective norm component (unapproved account preparer) of the extension model of The Theory of Reasoned Action. These hypotheses are:

Ho6A/Ha6A “Unapproved account preparer is (negatively)/stronger correlated with the sole-proprietors’ behavioural tax non-compliance intentions”.

Ho6B/Ha6B “Relationship between unapproved account preparer and sole-proprietors’ behavioural tax non-compliance intentions is (stronger)/weaker when importance is not included in subjective norms ”

Ho6C/Ha6C “The disaggregative subjective norm model yields a (weaker)/stronger relationship between unqualified accountant and sole-proprietors’ behavioural tax non-compliance intention than the aggregative subjective norm model.”

Hypothesis H7 tests the relationship between demographic factors (Gender and Age) and behavioural intention of tax non-compliance among the sole-proprietors.

Ho7A/Ha7A “There is (no)/a relationship between Gender and sole-proprietors’ behavioural tax non-compliance intention.”

Ho7B/Ha7B “There is (no)/a relationship between Age and sole-proprietors’ behavioural tax non-compliance intention.”

5. Methodology

a. Population, Sampling Frame, Data Collection Method and Sample Size

The population of the study comprises sole-proprietors in a particular district (Batu Pahat, Johor) in Malaysia. The Batu Pahat District Business Information Guide 2002 was used as the sampling frame. Sole-proprietors were identified using the simple random sampling method. Mail questionnaire was used in the survey. Out of the 515 questionnaires that were sent out, only 196 responded and were used in the analysis (38% response rate).

b. Questionnaire Design and Testing

The questionnaire has six sections. Section A contains questions pertaining to demographic details. Section B to C contains questions pertaining to the perception on attitudes toward two independent variables whilst Section D and E contain questions pertaining to the perception on the impact of third party influence. Section F asked about issues pertaining to the intention of tax non-compliance.

A 7-point semantic scale was used for Section B to F. A total of 20 individuals (at 20 different times) were used for pre testing.

c. Reliability and Validity

Cronbach's alpha is used to test for reliability. The acceptable reliability using Cronbach's Alpha is 0.7. The questionnaires were tested with experts in order to ensure there is content validity.

6. Data Analysis and Results

a. Profiles of the Respondents

Table 1 shows the summary of the demographic data collected from the sole-proprietors.

Table 1: Results of Demographic factors (n = 196)

Variables	Characteristics	Nos. of Response	Percent %	Population comparison %
Gender	Male	190	98	N/A
	Female	6	2	
Age	20-29+ years old	4	2	N/A
	30-39+ years old	29	14	
	40-49+ years old	96	49	
	50-59+ years old	61	31	
	60 years old and above	6	3	
Race	Malay	6	3	N/A
	Chinese	187	95	
	Indian	3	2	
Who prepare your tax return	Myself	4	2	N/A
	Management Service	188	96	
	Approved tax preparer	4	2	
Who prepare your company account	Myself	4	2	N/A
	Management Service	188	96	
	Approved account preparer	4	2	
Type of Business	Trading	124	63	62
	Manufacturing	45	23	18
	Construction	4	2	5
	Services	11	6	9
	Agriculture	6	3	3
	Others	6	3	3

No attempts were made to compare the sample with the population based on variables like Gender, Age, Race, who prepare the sole proprietors' tax and as to who prepared the sole proprietors' company accounts category. This is because there is no data available for the population base. However, the only comparison could be made between the respondents in the survey with the population base (i.e. the Batu Pahat Business Directory 2002) on the Type of Business. The results of the comparison showed that the percentage of each business category were quite close i.e. trading with 63% for respondents compared to 62% for the population, manufacturing with 23% for respondents compared to 18% for the population, construction with 2% for respondents compared to 5% for the population Services with 6% compared to 9% for the population, Agriculture with 3% compared to 3% for the population and lastly others with 3% for respondents compared with 3% for the population. There is, thus, no significant difference between the sample in the survey and the population base.

b. Result and findings of Hypotheses

The following were the results and findings of each hypothesis:

Note : (B) – Belief, (I) – Importance, (Disagg) – Disaggregative, (Aggreg) - Aggregative

Hypothesis 1

Hypothesis H1A

- R 0.770*

Hypothesis H1B

- R 0.770* (B and I) > 0.741* (B only)

Hypothesis H1C

- R²0.606* (Disagg) > 0.593* (Aggreg)

* p < 0.05

Comments: The findings supported three alternative hypotheses Ha1A, Ha1B and Ha1C and concluded that (1) Attitudes has a positive influence on behavioural intentions, (2) belief only attitude model has less than influence on behavioural intention and (3) disaggregative attitude model has high coefficient of determination value than aggregative attitude model on behavioural intention.

Hypothesis 2

- Hypothesis H2A - $R^2 0.654^* (SN) > 0.647^* (ATT)$
 Hypothesis H2B - $R^2 0.605^* (B \text{ and } I) > 0.587^* (B \text{ only})$
 Hypothesis H2C - $R^2 0.626^* (Disagg) > 0.605^* (Aggreg)$
 * $p < 0.05$

Comments: The findings supported three alternative hypotheses Ha2A, Ha2B and Ha2C and concluded that (1) subjective norms model has a positive influence on behavioural intention, (2) belief only attitudes/subjective norms model has less influence on behavioural intention than belief-importance attitudes/subjective norms model and (3) disaggregative attitudes/subjective norms model has high R²value than aggregative attitude/subjective norms model on behavioural intention.

Hypothesis 3

- Hypothesis H3A - $R 0.767^*$
 Hypothesis H3B - $R 0.767^* (B \text{ and } I) > 0.728^* (B \text{ only})$
 Hypothesis H3C - $R^2 0.588^* (Disagg) > 0.557^* (Aggreg)$
 * $p < 0.05$

Comments: The findings supported three alternative hypotheses Ha3A, Ha3B and Ha3C and concluded that (1) attitudes towards future expected tax costs model has a positive influence on behavioural intention, (2) belief-only attitude towards future expected tax costs has less influence on behavioural intention than belief-importance attitudes towards future expected tax costs model and (3) disaggregative attitudes towards future expected tax costs model has a high R²value than aggregative attitudes towards future expected tax costs model on behavioural intention.

Hypothesis 4

- Hypothesis H4A - $R 0.761^*$
 Hypothesis H4B - $R 0.761^* (B \text{ and } I) > 0.722^* (B \text{ only})$
 Hypothesis H4C - $R^2 0.580^* (Disagg) > 0.554^* (Aggreg)$
 * $p < 0.05$

Comments: The findings supported three alternative hypotheses Ha4A, Ha4B and Ha4C and concluded that attitudes towards fairness of tax system model has a positive influence on behavioural intention, (2) belief-only attitudes towards fairness of tax system model has less influence on behavioral intention than belief-importance attitudes towards fairness of tax system model and (3) disaggregative attitudes towards fairness of tax system model has a R²high value than aggregative attitudes toward fairness of tax system model on behavioural intention.

Hypothesis 5

- Hypothesis H5A - $R 0.784^*$
 Hypothesis H5B - $R 0.784^* (B \text{ and } I) > 0.777^* (B \text{ only})$
 Hypothesis H5C - $R^2 0.628^* (Disagg) > 0.606^* (Aggreg)$
 * $p < 0.05$

Comments: The findings supported three alternative hypotheses Ha5A, Ha5B and Ha5C and concluded that unapproved tax preparer has a positive influence on behavioural intention, (2) belief-only unapproved tax preparer model has less influence on behavioral intention than belief-importance unapproved tax preparer model and (3) disaggregative unapproved tax preparer model has a R²high value than aggregative unapproved tax preparer model on behavioural intention.

Hypothesis 6

- Hypothesis H6A - $R 0.815^*$
 Hypothesis H6B - $R 0.815^* (B \text{ and } I) > 0.804^* (B \text{ only})$
 Hypothesis H6C - $R^2 0.665^* (Disagg) > 0.644^* (Aggreg)$
 * $p < 0.05$

Comments: The findings supported three alternative hypotheses Ha6A, Ha6B and Ha6C and concluded that unapproved account preparer model has a positive influence on behavioural intention, (2) belief-only unapproved account preparer model has less influence on behavioral intention than belief-importance unapproved account preparer model and (3) disaggregative unapproved account preparer model has a R²high value than aggregative unapproved account preparer model on behavioural intention.

Hypothesis 7

Hypothesis H7A and H7B – p-value of 0.048 (gender) and 0.047 (Age)

Comments: The findings supported Hypothesis Ha7A and Ha7B concluded that Gender and Age has positive influence on behavioral intention.

c. Result and findings of Regression Analysis

The results of the multiple regression analysis are as follows:

Table 2: Multiple Regression Analysis (Likelihood Scale and Importance Scale): Entry of All Independent Variables – Dependent Variable (Behavioural Tax Non-compliance Intention); Independent Variables (Extracted Factors and Demographic Variables)

	Likelihood Scale	Importance Scale
Multiple R	0.787	0.805
R ²	0.620	0.647
Adjusted R ²	0.612	0.640
Standard Error	0.841	0.858
F value	77.842	87.666
Significance F	0.000	0.000
Df (Regression)	4	4
Df (Residuals)	191	191
Mean Square (Regression)	61.824	64.576
Cronbach's Alpha	0.863	0.875

Likelihood Scale

The R² of the extension model is 0.620 reflect a good prediction of Behavioural sole-proprietors tax non-compliance intention.. The result of R² associated with equation is 0.620 which implies that the three explanatory variables explain 62.0% of the variation in tax non-compliance intention. R² provide information pertaining to goodness to fit (**Rubin fled, n.d.**).

The regression equation for the Likelihood Model is:

$$\text{Behavioural Tax Noncompliance Intention (Y)} = 1.673 + 0.344 (\text{ATT}) + 0.894 (\text{SNorm}) + 0.258 (\text{Age}) + 0.737 (\text{Gender})$$

Subjective Norm variable had the highest coefficient (i.e. “Std B” value of 0.894) followed by Gender variable coefficient of 0.737, Attitude coefficient of 0.344 and Age coefficient of 0.258 in the regression equation.

For reliability, Cronbach's Alpha was 0.863 above the acceptable range of 0.70.

Importance Scale

R² is seen to be 0.647 which thus indicate that 64.7 per cent of total variation of the dependent variable is explained by the independent variables. In this case, the R² of the extension model is 0.647 reflect a good prediction of Behavioural sole-proprietors tax non-compliance intention. The result of R² associated with equation is 0.647 which implies that the three explanatory variables explain 64.7% of the variation in tax non-compliance intention. R² provide information pertaining to goodness to fit (**Rubin fled, n.d.**).

The regression equation for the Importance Model is:

$$\text{Behavioural Tax Noncompliance Intention (Y)} = 1.814 + 0.270 (\text{ATT}) + 0.927 (\text{SNorm}) + 0.246 (\text{Age}) + 0.713 (\text{Gender})$$

Subjective Norm variable had the highest coefficient (i.e. “Std B” value of 0.927) followed by Gender variable coefficient of 0.713 Attitude coefficient of 0.270 and Age coefficient of 0.246 in the regression equation.

For reliability, Cronbach's Alpha 0.875 above the acceptable range of 0.70

7. Discussion and Conclusion

The major finding in this research is that there is a positive behavioural intention of tax non-compliance by sole-proprietors in Malaysia. The results of the study had shown that the attitude (future expected tax costs and fairness of tax system), subjective norm (unapproved tax preparer and unapproved account preparer) and demographic variables (age and gender) components had a positive influence on sole-proprietors behavioural tax-non-compliance intention. The results also showed that the seven hypotheses were supported by the alternative hypothesis. Results from the multiple linear regression analyses showed that all the predictive variables i.e. attitudinal variables, subjective norm variables and demographic variables (Age and Gender) variable in the model were significant. An extension to TRA model to include other predictive variables such as client characteristics seems to be fruitful for tax research. This offers a good explanation of tax compliance behaviour.

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