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Evidence from Different Forms
of Tax Education**

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**CAN EDUCATION IMPROVE TAX COMPLIANCE?
EVIDENCE FROM DIFFERENT FORMS
OF TAX EDUCATION**

ABSTRACT

We examine whether tax compliance is improved via different forms of tax education. We argue that different types of tax education have respective impacts on tax compliance. To explore this empirical issue, we conduct a survey related to tax compliance among 205 students taking either a general tax course or a technical tax course in Hong Kong. Our findings suggest that sales tax compliance among undergraduate students was significantly improved if they had been exposed to a general tax education, and income and sales tax compliance among postgraduate students were significantly improved if they had taken a technical tax course.

Keywords: tax compliance; individual behavior; education

INTRODUCTION

This paper investigates whether and how tax compliance can be improved, particularly by changing tax education. In recent years, tax authorities and policymakers have shown an increasing concern for the need to improve tax compliance. Failure to comply with tax laws not only reduces the revenue collected by the government, but also creates a threat to the capital market resulting from distorted financial reporting and firm valuation (Schrand and Wong 2003; Phillips et al. 2003; Frank et al. 2009). The current American income tax system is based on citizens' willingness to report their incomes accurately and pay their taxes voluntarily (Kaplan et al. 1997). However, voluntary tax compliance is declining (Bloomquist 2003). Despite this trend, tax authorities cannot aggressively pursue taxpayers for audit owing to a limitation of resources (Sanders et al. 2008).¹ Therefore, improving tax compliance is a top priority for tax authorities as a means to minimize high auditing costs and increase tax revenue. These needs are especially salient given the current state of the world economy (Brondolo 2009; Bloomberg 2011).

Finding ways to improve tax compliance has also drawn significant attention to accounting researchers. Prior literature suggests that tax knowledge can help to improve tax compliance given that the tax compliance depends on an understanding of relevant tax laws. However, findings from previous research are limited and mixed. For example, Collins et al. (1992) find that the respondents' tax knowledge is not significantly correlated with their tax compliance behavior in general. On the contrary, Eriksen and Fallan (1996) find that respondents with greater tax knowledge consider their own tax evasion more seriously, which implies that tax knowledge may help to improve tax compliance.² Kaplan et al. (1997) and

¹ Tax non-compliance may be more severe for the individual income tax. Although tax authorities will find corporate financial statements useful in selecting targets for corporate income tax audits, it may be difficult for regulators to identify individual taxpayers for audit as an individual's financial position or cash flows are not normally required to be submitted to tax authorities. This also creates additional difficulties for tax authorities in assessing the truthfulness of individual income tax submissions.

² Having said that, Eriksen and Fallan (1996) do not investigate tax compliance decisions directly.

Sanders et al. (2008) find that educational communication related to legal sanction awareness can help to improve tax compliance. However, educational communication regarding the fairness of tax laws and the societal costs associated with tax evasion do not significantly improve tax compliance (Kaplan et al. 1997). We believe that these contradictory findings may be explained by an inadequate understanding of tax education and its impacts on changing individual tax compliance behaviors.

In this paper, we examine whether university-offered formal tax courses have significant impacts on students' tax compliance decisions. The reasoning behind this possibility rests on the assumption that a formal tax course provides more comprehensive tax education than the educational communication. Further, we believe that different forms of tax education may influence tax compliance in distinct ways. Therefore, we investigate whether (a) tax compliance can be promoted by taking a technical versus general tax course, and (b) technical tax courses are effective means to improve tax compliance for students in undergraduate versus postgraduate studies.

Given its similarity with the U.S. tax system (particularly with respect to voluntary reporting of income), we examine the issues mentioned above in the context of the Hong Kong tax system. Similar to the U.S., Hong Kong tax authority base on the income reported by the taxpayers to assess their liabilities before conducting any audits. The two tax systems also have similar level of tax evasion (Kim 2008). However, as compared with the U.S. tax system, the Hong Kong tax system is simpler, tax rate is lower (highest individual marginal tax rate is 17%), and it uses territorial source concept instead of worldwide source concept (i.e., only Hong Kong sourced income is taxable). Besides, there is no sales tax imposed in Hong Kong.³ While existing tax compliance research³ is dominated by studies based in the U.S., this paper aims to provide evidence on whether tax education affects tax compliance in a

³ The Hong Kong government proposed sales tax in 2006 that aimed to broaden the tax base and to secure the sustainability of tax revenues. However, the sales tax has not been implemented due to the opposition from the citizens.

simple tax system⁴ (Hong Kong tax system), and demonstrates whether education can be contributory in promoting compliance with emerging tax laws (e.g., sales tax in Hong Kong).

Recently in Hong Kong, an education reform was enacted by the Education Commission to promote students' self-responsibility, tolerance, and moral behavior (HKGEI 2012).⁵ As a result of the education reform, a number of general education courses have been developed to achieve the said objectives. Contrary to the existing introductory tax course that focuses primarily on the technical aspects of taxation (hereafter referred to as a "technical tax course"), the general education course regarding taxation (hereafter referred to as a "general tax course") covers a broader range of topics related to taxation and inspires students to challenge tax values. This change in tax education thus provides us with an excellent setting to identify two different methods of tax education and to examine their respective impacts on taxpayers' compliance decisions. This study exploits this natural setting to investigate the issues discussed above.

We conduct a survey study on 205 students who were enrolled in taxation course between 2008 and 2010.⁶ Each respondent was asked to complete a survey at the commencement of a tax course and was asked to complete the same survey after completion of their respective course. We are particularly interested in analyzing any changes in students' responses to two specific tax compliance scenarios. Our findings show that sales tax compliance among undergraduate students was significantly improved if they had been exposed to a general tax education, and both income tax compliance and sales tax compliance among postgraduate students were significantly improved if they had taken a technical tax

⁴ Although one may suggest that a simple tax system can reduce tax evasion, Forest and Sheffrin (2002) find that simplifying the tax system may not be an effective means for improving tax compliance because taxpayers do not necessarily consider a complex tax system to be unfair.

⁵ All universities in Hong Kong underwent a change of three-year to four-year undergraduate degree programs in 2012. The original three-year undergraduate degree program focuses more on providing students with top-notch education in an academic specialty or profession, whereas the four-year program has more elements on general education, and thus is designed to provide students with the knowledge, skills, attitudes, and values.

⁶ Among these 205 students, 53 of them were undergraduate students taking a general tax course, 69 of them were undergraduate students taking a technical tax course, and 83 students were postgraduate students taking a technical tax course. Please refer to the Research Method section for details.

course. We find no significant association between technical tax education and undergraduate students' tax compliance. Overall, these findings suggest that general tax education is useful for improving tax compliance for undergraduate students, and technical tax education is useful for improving tax compliance for postgraduate students. Therefore, both the contents of a tax course and educational levels of a program are important factors which affect the effectiveness of changing students' tax compliance behavior via education.

This study makes several important contributions. We demonstrate that different forms of tax education have various impacts on tax compliance behavior. Extrapolating our results implies that a move toward general tax education at the tertiary level may be effective in changing tax compliance decisions and behaviors of the taxpayers-to-be. Improving taxpayers' tax compliance at an earlier stage should be beneficial for minimizing costs arising from future non-compliance issues (e.g., tax audit costs, or loss of government revenue, etc.). Our paper also demonstrates that students' compliance of an emerging tax law can be improved by an appropriate tax education. We further believe that our findings can help accounting educators to better understand tax education, and can help tax authorities allocate their resources to achieve the best possible outcome in terms of improved compliance with the tax laws. Moreover, findings of this research can help to answer whether a tax course under the general education curriculum is effective in improving students' tax compliance decisions after controlling for their ethical attitudes toward tax compliance. The general tax course responds, at least partly, to the general call for a tax course which focuses less on technical details of compliance of tax laws suggested by Jones and Duncan (1995), Wilkie and Young (1997) and Schadewald (1999).

The remainder of this paper proceeds as follows. The next section discusses the tax education courses available in Hong Kong. The third section formulates our research question. The fourth section discusses the research design, and the fifth section describes the results.

The last section concludes the paper.

TAX EDUCATION COURSES IN HONG KONG

Similar to other countries, the current accounting curricula in Hong Kong require all accounting students to take an introductory technical tax course during their undergraduate study. Most of the introductory tax courses emphasize the technical aspects of taxation, which requires students to understand salient tax principles and compute specific liabilities for different types of tax levied by the government.⁷ Although understanding tax rules and the ways in which they are applied is important for accounting students' future career plans, it is not necessary for non-accounting students to learn the technical details about taxation. That said, tax knowledge is important for non-accounting students because they will be paying taxes and will make various decisions related to tax compliance in the future. Therefore, the development of a general tax course can fulfill some critical needs of the non-accounting students as well.

The general tax course explains taxation issues from the taxpayer's perspective. Specifically, it first introduces transactions that comprise a taxpayer activity and describe the general tax rules for these transactions. Then, the general tax rules are refined and applied to specific scenarios of these transactions. Apart from the discussion of the Hong Kong tax rules, the main features of the general tax course involve examinations of the values of taxation and the rationale for levying different kinds of tax, and discussions about how personal values, cultures, and personal morals affect tax compliance. Upon completion of this course, students are able to (a) describe the main principles and concepts of taxation, as well as the types and influences of taxation on societies; (b) describe the tax system in Hong Kong and explain its unique features; (c) explain the values of taxation and the tax responsibilities of individual

⁷ Due to limit of class hours, although a technical tax course also covers penalties of non-compliance, it does not provide the influence of individual's rationales, values, culture and moral belief on tax compliance.

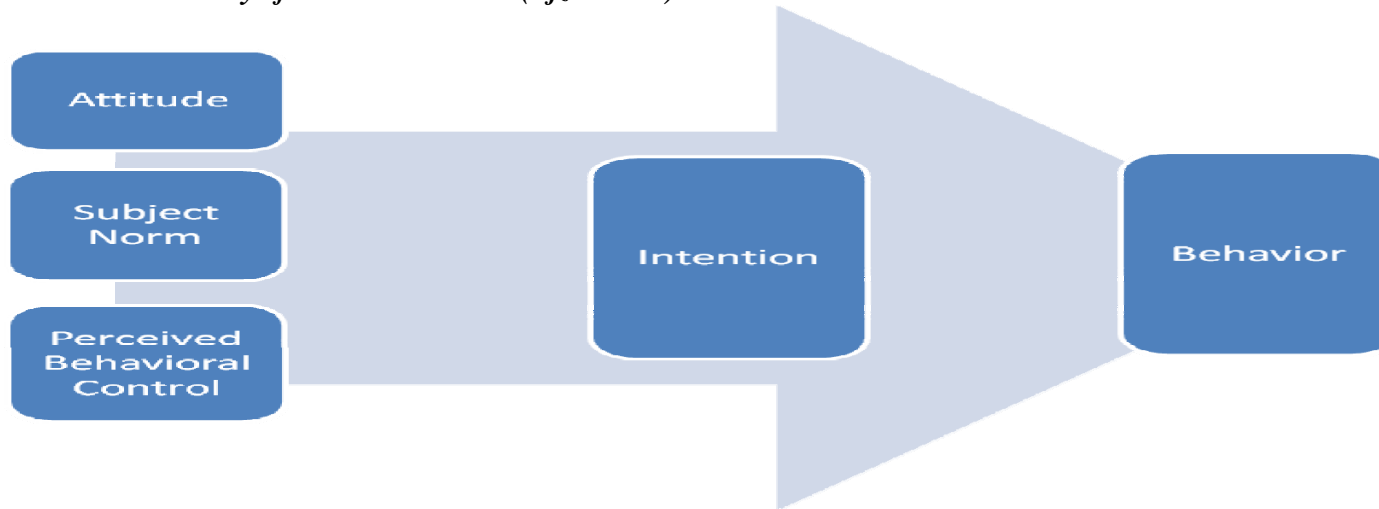
and institutions; (d) describe the principles and purposes of tax planning; (e) explain how to manage tax planning; (f) explain how the attitudes and perceptions of taxpayers affect their tax reporting behavior and how the impacts of cultures, morals and tax systems influence taxpayers' compliance with tax laws; and (g) recognize and analyze taxation issues of current interest in society. In sum, the general tax course has a broader range and teaching approach than the traditional technical tax course, which makes it suitable for all undergraduate students.

RESEARCH QUESTIONS ON TAX COMPLIANCE

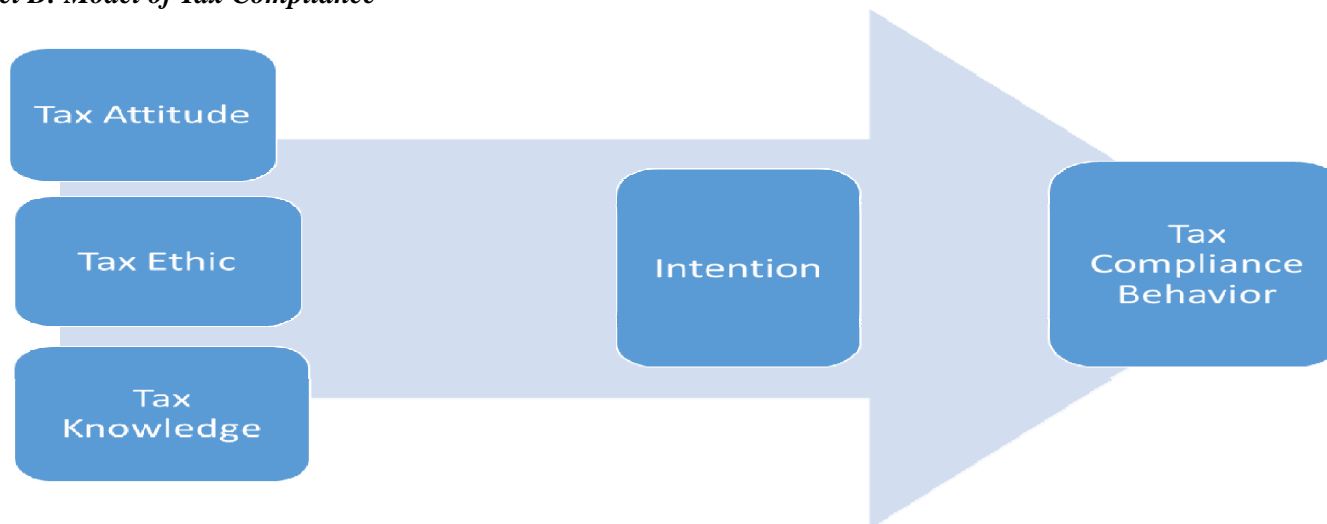
The theory of planned behavior suggests that an individual's behavior is determined by her/his intention; whereas the intention is determined by an individual's (i) attitudes (i.e., belief of the outcomes of a particular behavior), (ii) subject norm (i.e., perception of others opinions of whether he/she should perform a particular behavior), and (iii) perceived behavioral control (i.e., perception of their ability to perform a particular behavior) (Ajzen 1991). Figure 1 Panel A depicts the model. We adopt the theory of planned behavior and argue that an individual's intention to comply with tax regulations is determined by the above three factors modified for an individual's attitudes, norms, and knowledge towards tax compliance. Figure 1 Panel B summarizes the tax compliance behavior. Tax attitude refers to one's belief of the outcomes of tax compliance (Forest and Sheffrin 2002; Kirchler 2007), tax ethics/norm refers to one's perception of others opinions on tax compliance (Henderson and Kaplan 2005; Wenzel 2005), and tax knowledge refers to one's perception of the ability to comply with the tax laws, which includes technical tax knowledge and general tax knowledge about the tax system and tax compliance.

Figure 1 Model of Tax Compliance Behavior

Panel A: The Theory of Planned Behavior (Ajzen 1991)



Panel B: Model of Tax Compliance



This paper investigates how tax education affects an individual's tax knowledge that in turn changes her/his tax compliance behavior. Previous research on tax compliance generally finds that education levels are positively associated with tax compliance. For example, Mathieu et al. (2010) and Muehlbacher et al. (2011) find that voluntary tax compliance is positively associated with education. These two studies use taxpayers' overall education level to measure the influence of education on tax compliance. However, proper tax compliance may require specific tax knowledge that an overall education level cannot provide. For example, income tax compliance may depend on a comprehensive understanding of relevant tax laws and the taxability of different types of income. Therefore, a more direct measure of tax knowledge is necessary for investigating the impact of tax education on tax compliance decisions.

However, prior evidence on the association between tax knowledge and tax compliance decisions are limited and inconclusive (Collins et al. 1992; Eriksen and Fallan 1996). Previous studies that investigate the effect of educational communications on tax compliance also produce mixed results. For example, Kaplan et al. (1997) find that communication related to fairness of tax laws and the social costs associated with tax evasions does not improve tax compliance; whereas the communication related to legal sanctions improve tax compliance of taxpayers with low moral reasoning. A more recent study by Sanders et al. (2008) reveals that increasing sanction awareness through mail-based education could help to improve tax compliance.

We argue that different forms of tax education may have varying impacts on taxpayers' compliance decisions. The current education reform in Hong Kong enables us to investigate whether the traditional technical tax course or the general tax course helps to improve the tax compliance behaviors of undergraduate students. Specifically, we aim to examine whether a general (or technical) tax course in the undergraduate program increases students' perceptions

of tax responsibilities and thus reduce tax evasion. Besides, tax education includes not only the dissemination of technical tax knowledge, but also the communication of the motivation, skills and confidence (self-efficacy) necessary to comply with the tax laws. We believe that a same tax courses can have different impact on undergraduate versus postgraduate students' tax compliance behavior because educational level affects their learning process (Bayard et al. 1995; Linder et al. 1996; Smith et al. 2010). For example, a tax course can simultaneously increase the tax knowledge and self-efficacy of postgraduate students who have tax filing experience, while, in contrast, the course may not have the same impact on undergraduate students. Consequently, the postgraduate students are more likely to believe that they can report their income correctly after taking the tax course than are those undergraduate students which have limited practical experience. Given the same tax course, students with different educational levels could have different responses to their tax compliance decision. Thus, it should be interesting to investigate whether the relation between a technical tax course and tax compliance is different for undergraduate students relative to postgraduate students. In summary, we propose the following research questions:

RQ1: Does general tax education have a significant influence on undergraduate students' tax compliance decisions and whether its influence is significant different from technical tax education?

RQ2: Does technical tax education have a significant influence on undergraduate (postgraduate) students' tax compliance decisions?

RESEARCH METHOD

We conduct a survey to test our research questions. In total, 205 students from a University in Hong Kong who were enrolled in taxation courses between 2008 and 2010 were asked to complete a questionnaire at the beginning of a taxation course and were subsequently

asked to fill in the same questionnaire after completing the course. Of these 205 students, 53 were taking a general tax education course at the undergraduate level, 69 were taking a technical tax course at the undergraduate level, and 83 were taking a technical tax course at the postgraduate level (having the same syllabus and level of difficulty as the undergraduate-level course). All three courses were taught by the same professor. All the undergraduate students are year 2 or year 3 full-time students who are studying for their first degree. For those who were taking a general tax course, 53% are accounting students and 35% are business (non-accounting) students; whereas for those who were taking a technical tax course, 66% are accounting students and 23% are business (non-accounting) students. All postgraduate students have obtained a non-accounting degree and are studying the part-time postgraduate diploma of accountancy.

The questionnaire is comprised of three sections. The first section contains two hypothetical tax compliance scenarios: Scenario I relates to income tax, and Scenario II relates to sales tax. In Scenario I, respondents were asked whether they would report an income of HK\$50,000 that was earned by developing computer programs for their friends. In Scenario II, respondents were asked whether they would pay sales tax when they purchased textbooks if they could evade the tax by not requesting for a receipt for their purchases.

The second section of the questionnaire contains five statements about the Hong Kong tax system: (a) the tax system is simple (TQ1), (b) the tax system is fair (TQ2), (c) the tax rate of Hong Kong is low (TQ3), (d) the risk of being caught by tax authorities for tax evasion is high (TQ4), and (e) the penalty for tax evasion is high (TQ5). Respondents were requested to provide an evaluation on how much they agree with these five statements.

The third section of the questionnaire contains 16 statements about ethical attitudes on tax compliance. Respondents were requested to express the extent to which they agree that it is ethically acceptable to evade tax if (a) the tax rate is high/low (EQ1/EQ9), (b) the tax

system is complex/simple (EQ2/EQ10), (c) the tax system is unfair/fair (EQ3/EQ11), (d) the risk of being caught is low/high (EQ4/EQ12), (e) the penalty of tax evasion is low/high (EQ5/EQ13), (f) everyone/no one does it (EQ6/EQ14), (g) a large portion of the money collected is spent on projects that do not benefit/do benefit me (EQ7/EQ15), and (h) a large portion of the money collected is spent on projects that I disagree/agree with (EQ8/EQ16). We use a 7-point scale (strongly agree [1]–strongly disagree [7]) to evaluate items in the second (i.e., TQ1–TQ5) and third sections (i.e., EQ1–EQ16). Table 1 summarizes the details of the questionnaire and the variable definitions.

Table 1 Details of the questionnaire

	Question/Statement	Scale
Section 1	Tax compliance decisions	
COMPLIANCE_1	<p><u>Hypothetical case 1 (Scenario I):</u> Assume that you have a full-time job in a trading company. You also work as a freelancer to help your friend in developing some computer programs and earn HK\$50,000 (US\$6,300 equivalent) in a year. You know that your friend did not report your details to the tax authority. Will you report the \$50,000 income to the tax authority?</p>	= 1 if will report the income; 0 otherwise
COMPLIANCE_2	<p><u>Hypothetical case 2 (Scenario II):</u> Assume that a 5% sales tax (GST) is applicable in Hong Kong. When you were buying some textbooks, costing HK\$1,000 (US\$130 equivalent), from a bookshop in Hong Kong, the shopkeeper told you that if you request for a receipt for your purchase, you are needed to pay the sales tax of 5% (i.e., the total cost would be HK\$1,050). However, if you do not request for a receipt, the sales tax would not be charged. What decision would you make?</p> <p>Will you request a receipt?</p>	=1 if will pay the sales tax; 0 otherwise

Table 1 (cont.) Details of the questionnaire

Section 2		
	Perception of tax system	
TQ1	The Hong Kong tax system is simple.	Point 1 to 7; 1= strongly agree, 2= agree, 3= fairly agree, 4= neutral, 5= fairly disagree, 6= disagree, and 7= strongly disagree
TQ2	The Hong Kong tax system is fair.	
TQ3	The tax rate of Hong Kong is low.	
TQ4	The risk of being caught by the Hong Kong tax authority for tax evasion is high.	
TQ5	Penalty for tax evasion is high in Hong Kong.	
Section 3		
	Ethical attitude on tax compliance	
EQ1	It is ethically acceptable to evade tax if the tax rate is high.	Point 1 to 7; 1= strongly agree, 2= agree, 3= fairly agree, 4= neutral, 5= fairly disagree, 6= disagree, and 7= strongly disagree
EQ2	It is ethically acceptable to evade tax if the tax system is complex.	
EQ3	It is ethically acceptable to evade tax if the tax system is unfair.	
EQ4	It is ethically acceptable to evade tax if the risk of being caught is low.	
EQ5	It is ethically acceptable to evade tax if the penalty for tax evasion is low.	
EQ6	It is ethically acceptable to evade tax if everyone does it.	
EQ7	It is ethically acceptable to evade tax if a large portion of the money collected is spent on projects that do not benefit me.	
EQ8	It is ethically acceptable to evade tax if a large portion of the money collected is spent on projects that I disagree with.	
EQ9	It is ethically acceptable to evade tax if the tax rate is low.	
EQ10	It is ethically acceptable to evade tax if the tax system is simple.	
EQ11	It is ethically acceptable to evade tax if the tax system is fair.	
EQ12	It is ethically acceptable to evade tax if the risk of being caught is high.	
EQ13	It is ethically acceptable to evade tax if the penalty of tax evasion is high.	
EQ14	It is ethically acceptable to evade tax if no one does it.	
EQ15	It is ethically acceptable to evade tax if a large portion of the money collected is spent on projects that benefit me.	
EQ16	It is ethically acceptable to evade tax if a large portion of the money collected is spent on projects that I agree with.	

To answer our research questions, we first compare the respondents' tax compliance decisions and ethical assessments toward tax compliance before and after taking the taxation

course via univariate tests. Then, we pool the responses in the pre- and post-education period for each of the taxation courses and perform the following logistic regressions:

$$\begin{aligned} \text{COMPLIANCE_1} = & \alpha_0 + \alpha_1 \text{EDUCATION} + \alpha_2 \text{TAX_SYSTEM} + \alpha_3 \text{TAX_EVASION} \\ & + \alpha_4 \text{ETHIC_1} + \alpha_5 \text{ETHIC_2} + \alpha_6 \text{FEMALE} + \alpha_7 \text{AGE} + \varepsilon \end{aligned} \quad \text{----- (1)}$$

$$\begin{aligned} \text{COMPLIANCE_2} = & \alpha_0 + \alpha_1 \text{EDUCATION} + \alpha_2 \text{TAX_SYSTEM} + \alpha_3 \text{TAX_EVASION} \\ & + \alpha_4 \text{ETHIC_1} + \alpha_5 \text{ETHIC_2} + \alpha_6 \text{FEMALE} + \alpha_7 \text{AGE} + \varepsilon \end{aligned} \quad \text{----- (2)}$$

COMPLIANCE_1 is equal to 1 if the respondent chose to report the income in Scenario I, and 0 otherwise. COMPLIANCE_2 is equal to 1 if the respondent chose to pay sales tax in Scenario II, and 0 otherwise. Our main variable of interest, EDUCATION, is an indicator variable that is equal to 1 if the respondent has completed the tax course, and 0 otherwise. To control for the potential influence of the students' perceptions about the Hong Kong tax system and tax evasion on their tax compliance, TAX_SYSTEM and TAX_EVASION are added as control variables. TAX_SYSTEM represents students' perceptions about the characteristics of the tax system, which is the mean value of TQ1-TQ3.⁸ TAX_EVASION represents students' perceptions about consequences of tax evasion, which is the mean value of TQ4 and TQ5. Kaplan et al. (1997) suggest that the mixed results of studies related to tax education and compliance are caused by respondents' ethical standards. Therefore, to determine the impacts caused by different types of tax education on tax compliance without interference from a confounding variable, we control for the respondents' ethical attitudes towards tax compliance in the regressions. Therefore, we include ETHIC_1, which is the mean value of EQ1-EQ8, and ETHIC_2, which is the mean value of EQ9-EQ16, as the control variables.

In line with our main argument, we expect to obtain a significant coefficient on EDUCATION if tax education (i.e., general tax course or technical tax course) has a

⁸ Details for the grouping of variables would be discussed later under the Factor Analysis Section.

significant impact on changing a taxpayer's tax compliance decision. Stated differently, if tax education increases tax compliance, we expect α_1 to be positive and significant in Model (1) and (2). However, if ethical attitudes affect tax compliance rather than tax education; we expect α_4 or α_5 (instead of α_1) to be significant in Model (1) and (2). We also include FEMALE and AGE as additional control variables. FEMALE is a dummy variable that is equal to 1 if the respondent is female, and 0 if male. AGE is equal to 1 if the respondent is aged 20 or below, 2 if the respondent is aged 21 to 30, 3 if the respondent is aged 31 to 40, 4 if the respondent is aged 41 to 50, and 5 if the respondent is aged above 50. To control for the effects of the working experience on tax compliance, we add an additional control variable, EXPERIENCE, in the regressions for the group of postgraduate students. EXPERIENCE equals to 1 if the respondents have working experience relates to auditing, accounting or taxation.

RESULTS AND DISCUSSION

Descriptive Statistics

Table 2 reports the tax compliance level, perception of tax system, ethical attitude toward tax compliance, gender proportion, and age distribution of the sample respondents at the time before (Panel A) and after (Panel B) they took the tax courses. Few responses were excluded because of incomplete data for analyses.⁹ Column A (Column B) reports the responses of the undergraduate students taking the general (technical) tax education course while Column C reports the responses of the postgraduate students taking the technical tax education course. As shown in Panel A (i.e., before undertaking a tax education course), the mean compliance rate for income reporting scenario (COMPLIANCE_1) is 41.5% for the undergraduate students taking the general tax course, 45.6% for the undergraduate students taking the

⁹ At the time before respondents took the tax courses, one respondent taking the undergraduate technical tax course and two respondents taking the postgraduate technical tax course were excluded. At the time after respondents took the tax courses, one respondent taking the undergraduate general tax course was excluded.

technical tax course, and 38.8% for the postgraduate students taking the technical tax course. The mean compliance rate for sales tax (COMPLIANCE_2) is 22.6% for the undergraduate students taking the general tax course, 23.5% for the undergraduate students taking the technical tax course, and 21.3% for the postgraduate students taking the technical tax course.

Overall, we find no significant differences in the tax compliance behaviors of these three groups of students before taking the tax education courses. With respect to their ethical attitudes toward tax compliance, some of the postgraduate students' ethical scores are significantly lower than the undergraduate students' scores (Column C vs. Column B). The gender distribution is not significantly different between the three groups, but the postgraduate students taking the technical tax course are significantly older than the undergraduate students. For the postgraduate students, 53 percent of them have working experience relates to auditing, accounting or taxation; whereas the undergraduate students do not have any relevant working experience.

Table 2 Summary statistics
Panel A: Before taking the tax course

Variable	Column A		Column B			Column C		
	General tax course (undergraduate) (n=53)		Technical tax course (undergraduate) (n=68)			Technical tax course (postgraduate) (n=80)		
	Mean	Std. D	Mean	Std. D	A vs. B (t-stat.)	Mean	Std. D	B vs. C (t-stat.)
Tax compliance decisions								
COMPLIANCE_1	0.415	0.497	0.456	0.502	-0.445	0.388	0.490	0.837
COMPLIANCE_2	0.226	0.423	0.235	0.427	-0.114	0.213	0.412	0.330
Perception about tax system								
TQ1	2.453	.911	2.529	1.152	-0.397	2.650	1.202	-0.620
TQ2	3.585	1.117	2.882	1.228	3.247 ***	3.375	1.306	-2.350 **
TQ3	2.472	.992	2.456	1.085	0.083	2.663	1.179	-1.102
TQ4	3.642	1.210	3.794	1.166	-0.702	3.713	0.944	0.470
TQ5	3.396	1.149	3.691	.851	-1.622	3.600	0.989	0.596
Ethical attitude toward tax compliance								
EQ1	4.755	1.329	4.882	1.388	-0.511	4.300	1.578	2.363**
EQ2	4.943	1.216	5.338	1.154	-1.824 *	4.650	1.351	3.300***
EQ3	4.075	1.479	4.029	1.555	0.165	4.125	1.618	-0.365
EQ4	4.811	1.520	4.926	1.568	-0.406	4.563	1.525	1.429
EQ5	4.887	1.476	5.132	1.315	-0.966	4.488	1.475	2.785***
EQ6	4.679	1.661	4.456	1.652	0.736	4.250	1.650	0.756
EQ7	4.660	1.255	4.765	1.426	-0.421	4.400	1.279	1.640
EQ8	4.943	1.167	4.941	1.220	0.010	4.225	1.467	3.195***
EQ9	5.415	1.027	5.338	1.323	0.349	4.888	1.302	2.083**
EQ10	5.415	1.064	5.338	1.378	0.355	4.738	1.430	2.590**
EQ11	5.528	1.137	5.500	1.440	0.117	5.038	1.409	1.970*
EQ12	5.566	1.010	5.676	1.085	-0.572	4.850	1.284	4.187***
EQ13	5.604	.862	5.647	1.062	-0.241	4.863	1.319	3.938***
EQ14	5.491	1.265	5.632	1.233	-0.621	4.875	1.325	3.577***
EQ15	5.585	1.064	5.338	1.356	1.088	4.938	1.363	1.787*
EQ16	5.415	1.167	5.294	1.372	0.513	4.863	1.366	1.917*
Cronbach's alpha	0.928		0.923			0.942		
Demographic characteristics								
FEMALE	0.660	0.478	0.618	0.490	0.481	0.538	0.502	0.979
AGE - 20 or below	22.6%		19.1%			0.0%		
- 21 to 30	77.4%		80.9%			63.8%		
- 31 to 40	0.0%		0.0%			28.8%		
- 41 to 50	0.0%		0.0%			7.5%		
- above 50	0.0%		0.0%		0.226	0.0%		41.450***
EXPERIENCE						53.0%	0.503	

***, **, and * indicate significance at the 1 percent, 5 percent, and 10 percent levels respectively (two-tailed).

FEMALE = 1 if the respondent is female; 0 if the respondent is male.

AGE = age of the respondent.

EXPERIENCE = 1 if the respondent has working experience relates to auditing, accounting or taxation; 0 otherwise.

All other variables are defined in Table 1.

Table 2 (cont.) Summary statistics
Panel B: After taking the tax course

Variable	Column A		Column B			Column C			
	General tax course (undergraduate) (n=52)		Technical tax course (undergraduate) (n=69)		A vs. B (t-stat.)	Technical tax course (postgraduate) (n=83)		B vs. C (t-stat.)	
	Mean	Std. D	Mean	Std. D		Mean	Std. D		
Tax compliance decisions									
COMPLIANCE_1	0.442	0.502	0.551	0.501	-1.178	0.554	0.500	-0.043	
COMPLIANCE_2	0.481	0.423	0.232	0.427	2.941 ***	0.373	0.487	-1.890*	
Perception about tax system									
TQ1	2.250	0.968	2.725	1.259	-2.261 ***	2.301	1.112	2.201**	
TQ2	2.904	0.913	2.928	1.075	-0.128	2.831	1.135	0.533	
TQ3	2.346	1.251	2.565	1.022	-1.060	2.241	0.932	2.045**	
TQ4	3.654	0.968	3.449	1.145	1.039	3.482	1.097	-0.179	
TQ5	3.577	1.126	3.348	1.082	1.133	3.277	1.281	0.363	
Ethical attitude toward tax compliance									
EQ1	4.673	1.593	4.870	1.494	-0.696	4.735	1.490	0.554	
EQ2	4.577	1.433	5.188	1.102	-2.655 ***	4.855	1.474	1.550	
EQ3	3.558	1.526	4.319	1.558	-2.684 ***	4.313	1.538	0.022	
EQ4	4.673	1.665	4.870	1.464	-0.689	4.867	1.446	0.009	
EQ5	4.827	1.556	5.014	1.409	-0.693	4.904	1.543	0.459	
EQ6	4.500	1.578	4.551	1.614	-0.173	4.446	1.610	0.400	
EQ7	4.519	1.350	4.928	1.192	-1.761 *	4.687	1.405	1.126	
EQ8	4.500	1.515	4.884	1.278	-1.511	4.602	1.439	1.263	
EQ9	5.096	1.209	5.551	1.022	-2.238 **	5.434	1.202	0.639	
EQ10	5.115	1.182	5.493	1.009	-1.891 *	5.398	1.249	0.510	
EQ11	5.308	1.351	5.667	1.010	-1.673 *	5.470	1.193	1.085	
EQ12	5.558	1.037	5.377	1.214	0.863	5.349	1.311	0.133	
EQ13	5.423	1.091	5.435	1.022	-0.061	5.373	1.276	0.322	
EQ14	5.615	1.013	5.478	1.093	0.705	5.241	1.503	1.093	
EQ15	5.346	1.170	5.333	0.965	0.066	5.108	1.423	1.116	
EQ16	5.404	1.089	5.377	0.972	0.144	5.000	1.431	1.859*	
Cronbach's alpha	0.942		0.949			0.953			
Demographic characteristics									
FEMALE	0.653	0.480	0.620	0.488	0.344	0.518	0.503	1.553	
AGE - 20 or below	13.5%		18.8%			0.0%			
- 21 to 30	86.5%		81.2%			61.4%			
- 31 to 40	0.0%		0.0%			31.3%			
- 41 to 50	0.0%		0.0%			7.2%			
- above 50	0.0%		0.0%		0.622	0.0%		34.145***	
EXPERIENCE						54.0%	0.501		

***, **, and * indicate significance at the 1 percent, 5 percent, and 10 percent levels respectively (two-tailed).

FEMALE = 1 if the respondent is female; 0 if the respondent is male.

AGE = age of the respondent.

EXPERIENCE = 1 if the respondent has working experience relates to auditing, accounting or taxation; 0 otherwise.

All other variables are defined in Table 1.

After taking their respective tax education courses, Panel B demonstrates a mean compliance rate for income reporting scenario (COMPLIANCE_1) of 44.2% for the undergraduate students taking the general tax course, 55.1% for the undergraduate students taking the technical tax course, and 55.4% for the postgraduate students taking the technical tax course. The mean compliance level for sales tax (COMPLIANCE_2) is 48.1% for the undergraduate students taking the general tax course, 23.2% for the undergraduate students taking the technical tax course, and 37.3% for the postgraduate students taking the technical tax course. As shown in Panel B, we find no significant differences for income tax compliance behavior (i.e., COMPLIANCE_1) between these three groups of students. However, sales tax compliance (i.e., COMPLIANCE_2) is significantly higher for the undergraduate students who took the general tax course (Column A) and for the postgraduate students who took the technical tax course (Column C), relative to the undergraduate students who took the technical tax course (Column B).

Factor Analysis

Table 3 reports the factor analysis results on respondents' perceptions about the Hong Kong tax system (Panel A) and their ethical attitudes toward tax compliance (Panel B). We use the Principal Component Analysis method to extract factors.¹⁰ From the results, we can re-classify the 5 measures on respondents' perceptions about the Hong Kong tax system into two new factor categories, namely (i) characteristic of tax system (TAX_SYSTEM, which is the mean value of TQ1-TQ3) and (ii) consequence of tax evasion (TAX_EVASION, which is the mean value of TQ4 and TQ5). Similarly, the 16 measures on ethical attitudes toward tax compliance can be reclassified as two tax ethics factors if (i) there is an excuse for tax evasion (ETHIC_1, which is the mean value of EQ1-EQ8) and (ii) there is no good excuse for tax

¹⁰ We use 0.5 as the significant loading on a particular variable. The number of factor retained is based on the general rule that eigenvalue is equal to or larger than one. We also apply Varimax for factor rotation.

evasion (ETHIC_2, which is the mean value of EQ9-EQ16).

Table 3 Factor analysis on respondents' perceptions about the Hong Kong tax system and their ethical attitudes

Panel A: Perception about tax system

	Factors	
	1	2
TQ1	0.79	
TQ2	0.74	
TQ3	0.75	
TQ4		0.85
TQ5		0.86
% of variance explained	36.11	28.40

Panel B: Ethical attitudes toward tax compliance

	Factors	
	1	2
EQ1		0.70
EQ2		0.74
EQ3		0.79
EQ4		0.73
EQ5		0.76
EQ6		0.75
EQ7		0.73
EQ8		0.74
EQ9	0.77	
EQ10	0.83	
EQ11	0.83	
EQ12	0.81	
EQ13	0.87	
EQ14	0.76	
EQ15	0.80	
EQ16	0.81	
% of variance explained	55.35	11.16

All variables are defined in Table 1.

Univariate Tests

Table 4 shows the univariate test results for respondents' (a) tax compliance decisions, (b) perceptions about the Hong Kong tax system, and (c) ethical attitudes toward tax compliance before and after taking their respective tax courses. As shown in Panel A, the undergraduate students' compliance level for sales tax (COMPLIANCE_2) increases significantly ($p < 0.01$) after taking the general tax course. We also find that more respondents agree that the Hong Kong tax system is good (i.e., simple, fair and have a low tax rate) (TAX_SYSTEM; $p < 0.05$)

after taking the course. As Wartick (1994) suggests, providing affected taxpayers with the legislative reasoning for a tax law change mitigates their perception that the tax law change is unfair. Because the general tax course would include the reasoning for different types of taxation, more students in that course would think that the tax system is fair after taking the course. However, we find no significant difference in the students' ethical attitudes before and after taking the general tax course.

Table 4 Univariate test for tax compliance decisions, perceptions about tax system, and ethical attitudes

Panel A: For respondents taking a general tax course (undergraduate; n = 105)

	Before the course (n=53)	After the course (n=52)	t-statistic	Significance
	Mean	Mean		
Tax compliance decisions				
COMPLIANCE_1	0.415	0.442	0.279	0.781
COMPLIANCE_2	0.226	0.481	2.803	0.006 ***
Perceptions about tax system				
TAX_SYSTEM	2.837	2.500	-2.068	0.041 **
TAX_EVASION	3.519	3.616	0.515	0.607
Ethical attitudes toward tax compliance				
ETHIC_1	4.719	4.478	-1.044	0.299
ETHIC_2	5.502	5.358	-0.807	0.422

Panel B: For respondents taking a technical tax course (undergraduate; n = 137)

	Before the course (n=68)	After the course (n=69)	t-statistic	Significance
	Mean	Mean		
Tax compliance decisions				
COMPLIANCE_1	0.456	0.551	1.107	0.270
COMPLIANCE_2	0.235	0.232	-0.047	0.963
Perceptions about tax system				
TAX_SYSTEM	2.622	2.739	0.806	0.422
TAX_EVASION	3.742	3.399	-2.294	0.023 **
Ethical attitudes toward tax compliance				
ETHIC_1	4.809	4.828	0.104	0.918
ETHIC_2	5.471	5.464	-0.041	0.968

Table 4 (cont.) Univariate test for tax compliance decisions, perceptions about tax system, and ethical attitudes**Panel C: For respondents taking a technical tax course (postgraduate; n = 163)**

	Before the course (n=80)	After the course (n=83)	t-statistic	Significance
Tax compliance decisions				
COMPLIANCE_1	0.388	0.554	2.148	0.033 **
COMPLIANCE_2	0.213	0.373	2.276	0.024 **
Perceptions about tax system				
TAX_SYSTEM	2.895	2.458	-3.271	0.001 ***
TAX_EVASION	3.656	3.380	-1.845	0.067 *
Ethical attitudes toward tax compliance				
ETHIC_1	4.375	4.676	1.616	0.108
ETHIC_2	4.881	5.297	2.272	0.024 **

***, **, and * indicate significance at the 1 percent, 5 percent, and 10 percent levels respectively (two-tailed).

COMPLIANCE_1 = 1 if the respondent choose to report the income in income tax scenario; 0 otherwise.

COMPLIANCE_2 = 1 if the respondent choose to report the income in sales tax scenario; 0 otherwise.

TAX_SYSTEM = mean of TQ1-TQ3 (defined in Table 1).

TAX_EVASION = mean of TQ4-TQ5 (defined in Table 1).

ETHIC_1 = mean of EQ1-EQ8 (defined in Table 1).

ETHIC_2 = mean of EQ9-EQ18 (defined in Table 1).

Panel B shows that the technical tax course has no significant influence on undergraduate students' tax compliance decisions or ethical attitudes, but more respondents think that the consequences for tax evasion is high (TAX_EVASION; $p < 0.05$) after taking the tax course. For the postgraduate students in the technical tax education course, Panel C reports significant differences with respect to their tax compliance decisions (COMPLIANCE_1 and COMPLIANCE_2), perceptions about the Hong Kong tax system (TAX_SYSTEM), perceptions about consequences of tax evasion (TAX_EVASION), and their ethical attitudes toward tax compliance (ETHIC_2). Specifically, it demonstrates that the tax compliance levels of postgraduate students increase significantly regardless of income tax compliance (COMPLIANCE_1) or sales tax compliance (COMPLIANCE_2) ($p < 0.05$ for both cases). Overall, the univariate test results reveal that the contents of a tax course and educational levels of a program influence taxpayers' tax compliance behaviors in distinct ways.

Regression Results

Table 5 reports the logistic regression results for Model (1) and Model (2). Panel A shows the regression results for the undergraduate students taking the general tax course. These results show that there is no significant association between COMPLIANCE_1 (i.e., tax compliance of income tax) and EDUCATION regardless of whether respondents' perceptions about tax system and their ethical attitudes are controlled for. In contrast, we find that EDUCATION is significantly and positively associated with COMPLIANCE_2 (i.e., tax compliance of sales tax). This significant association holds regardless of whether perceptions about the tax system and ethical attitudes are controlled for. For the undergraduate students who were taking the technical tax course (Panel B), we find no significant relation between EDUCATION and either type of tax compliance decision (i.e., COMPLIANCE_1 or COMPLIANCE_2). In addition, we find that the coefficient on COMPLIANCE_2 for students taking the general tax course (i.e., Panel A) is significant larger than the coefficient on COMPLIANCE_2 for students taking the technical tax course (i.e., Panel B; $p < 0.05$). However, there is no significant difference between coefficients on COMPLIANCE_1 for students taking the general tax course versus students taking the technical tax course. Overall, the findings suggest that the undergraduate students' tax compliance decisions were not affected by taking the technical tax course. Instead, general tax education plays a more significant role in affecting their tax compliance decisions, particularly with respect to sales tax compliance.

Table 5 Regression results on the impact of tax education and ethical attitudes toward tax compliance
Panel A: For respondents taking a general tax course (undergraduate; n = 105)

$$\text{COMPLIANCE}_1 = \alpha_0 + \alpha_1 \text{EDUCATION} + \alpha_2 \text{TAX_SYSTEM} + \alpha_3 \text{TAX_EVASION} + \alpha_4 \text{ETHIC}_1 + \alpha_5 \text{ETHIC}_2 + \alpha_6 \text{FEMALE} + \alpha_7 \text{AGE} + \varepsilon$$

Ind. Variable		Coeff.	Wald	Coeff.	Wald	Coeff.	Wald
Intercept		0.293	0.088	1.325	0.811	1.410	0.494
EDUCATION	+	0.166	0.171	0.100	0.059	0.101	0.059
TAX_SYSTEM	-			-0.230	0.838	-0.259	0.994
TAX_EVASION	-			-0.092	0.188	-0.073	0.113
ETHIC_1	+					0.099	0.203
ETHIC_2	+					-0.095	0.118
FEMALE	?	0.443	1.081	0.443	1.075	0.431	0.958
AGE	?	-0.527	1.040	-0.562	1.164	-0.567	1.187
Nagelkerke R square		0.027		0.040		0.043	

$$\text{COMPLIANCE}_2 = \alpha_0 + \alpha_1 \text{EDUCATION} + \alpha_2 \text{TAX_SYSTEM} + \alpha_3 \text{TAX_EVASION} + \alpha_4 \text{ETHIC}_1 + \alpha_5 \text{ETHIC}_2 + \alpha_6 \text{FEMALE} + \alpha_7 \text{AGE} + \varepsilon$$

Indep. Variable		Coeff.	Wald	Coeff.	Wald	Coeff.	Wald
Intercept		-0.551	0.277	0.540	0.093	-3.040	1.265
EDUCATION	+	1.250	7.883 ***	1.783	11.209 ***	2.041	12.316 ***
TAX_SYSTEM	-			0.652	4.071 **	0.653	3.227 **
TAX_EVASION	-			-0.865	9.792 ***	-0.751	7.013 ***
ETHIC_1	+					0.615	4.010 **
ETHIC_2	+					0.097	0.073
FEMALE	?	0.586	1.569	0.699	1.850	0.394	0.525
AGE	?	-0.622	1.261	-0.722	1.373	-0.805	1.589
Nagelkerke R square		0.129		0.309		0.384	

Panel B: For respondents taking a technical tax course (undergraduate; n = 137)

$$\text{COMPLIANCE}_1 = \alpha_0 + \alpha_1 \text{EDUCATION} + \alpha_2 \text{TAX_SYSTEM} + \alpha_3 \text{TAX_EVASION} + \alpha_4 \text{ETHIC}_1 + \alpha_5 \text{ETHIC}_2 + \alpha_6 \text{FEMALE} + \alpha_7 \text{AGE} + \varepsilon$$

Indep. Variable		Coeff.	Wald	Coeff.	Wald	Coeff.	Wald
Intercept		0.426	0.255	1.661	1.760	1.129	0.357
EDUCATION	+	0.383	1.237	0.292	0.678	0.288	0.646
TAX_SYSTEM	-			-0.042	0.038	-0.028	0.015
TAX_EVASION	-			-0.300	2.088	-0.294	1.978
ETHIC_1	+					0.320	2.230
ETHIC_2	+					-0.191	0.627
FEMALE	?	0.186	0.270	0.209	0.334	0.165	0.203
AGE	?	-0.398	0.795	-0.409	0.811	-0.406	0.764
Nagelkerke R square		0.021		0.044		0.065	

$$\text{COMPLIANCE}_2 = \alpha_0 + \alpha_1 \text{EDUCATION} + \alpha_2 \text{TAX_SYSTEM} + \alpha_3 \text{TAX_EVASION} + \alpha_4 \text{ETHIC}_1 + \alpha_5 \text{ETHIC}_2 + \alpha_6 \text{FEMALE} + \alpha_7 \text{AGE} + \varepsilon$$

Indep. Variable		Coeff.	Wald	Coeff.	Wald	Coeff.	Wald
Intercept		0.283	0.099	1.297	0.787	3.321	2.053
EDUCATION	+	-0.017	0.002	0.200	0.212	0.204	0.214
TAX_SYSTEM	-			-0.729	5.853 ***	-0.894	7.126 ***
TAX_EVASION	-			0.321	1.507	0.345	1.643
ETHIC_1	+					0.284	1.184
ETHIC_2	+					-0.511	2.896 **
FEMALE	?	-0.593	2.050	-0.626	2.168	-0.636	2.160
AGE	?	-0.628	1.704	-0.842	2.797	-0.995	3.569
Nagelkerke R square		0.045		0.121		0.151	

Table 5 (cont.) Regression results on the impact of tax education and ethical attitudes toward tax compliance

Panel C: For respondents taking a technical tax course (postgraduate; n = 163)

COMPLIANCE_1 = $\alpha_0 + \alpha_1$ EDUCATION + α_2 TAX_SYSTEM + α_3 TAX_EVASION + α_4 ETHIC_1 + α_5 ETHIC_2 + α_6 FEMALE + α_7 AGE + α_8 EXPERIENCE + ε							
Indep. Variable		Coeff.	Wald	Coeff.	Wald	Coeff.	Wald
Intercept		-0.84	1.381	-0.454	0.168	-1.053	0.615
EDUCATION	+	0.672	4.441 **	0.636	3.693 **	0.577	2.918 **
TAX_SYSTEM	-			-0.046	0.059	-0.062	0.103
TAX_EVASION	-			-0.063	0.134	-0.079	0.210
ETHIC_1	+					0.288	2.283
ETHIC_2	+					-0.073	0.146
FEMALE	?	-0.04	0.016	-0.030	0.009	-0.196	0.327
AGE	?	0.148	0.336	0.134	0.269	0.083	0.100
EXPERIENCE	?	0.081	0.064	0.085	0.068	0.098	0.084
Nagelkerke R square		0.040		0.042		0.066	

COMPLIANCE_2 = $\alpha_0 + \alpha_1$ EDUCATION + α_2 TAX_SYSTEM + α_3 TAX_EVASION + α_4 ETHIC_1 + α_5 ETHIC_2 + α_6 FEMALE + α_7 AGE + α_8 EXPERIENCE + ε							
Indep. Variable		Coeff.	Wald	Coeff.	Wald	Coeff.	Wald
Intercept		-0.919	1.338	-2.913	5.046	-2.241	2.089
EDUCATION	+	0.790	4.895 **	1.083	7.723 ***	1.115	7.804 ***
TAX_SYSTEM	-			0.501	5.372 **	0.457	4.359 **
TAX_EVASION	-			0.129	0.456	0.125	0.422
ETHIC_1	+					0.419	2.912 **
ETHIC_2	+					-0.433	3.281 **
FEMALE	?	-0.328	0.849	-0.403	1.223	-0.560	2.120
AGE	?	-0.163	0.323	-0.149	0.260	-0.203	0.458
EXPERIENCE	?	0.322	0.817	0.361	0.977	0.230	0.369
Nagelkerke R square		0.059		0.110		0.142	

*** and ** indicate significance at the 1 percent and 5 percent levels, respectively. Significances are based on a one- (two-) tailed test when the coefficient sign is (not) predicted.

- COMPLIANCE_1 = 1 if the respondent choose to report the income in income tax scenario; 0 otherwise.
 COMPLIANCE_2 = 1 if the respondent choose to report the income in sales tax scenario; 0 otherwise.
 EDUCATION = 1 if the respondent has completed the tax course; 0 otherwise.
 TAX_SYSTEM = mean of TQ1 -TQ3 (defined in Table 1).
 TAX_EVASION = mean of TQ4-TQ5 (defined in Table 1).
 ETHIC_1 = mean of EQ1-EQ8 (defined in Table 1).
 ETHIC_2 = mean of EQ9-EQ18 (defined in Table 1).
 FEMALE = 1 if the respondent is female; 0 if the respondent is male.
 AGE = 1 if the respondent is aged 20 or below; 2 if the respondent is aged 21 to 30; 3 if the respondent is aged 31 to 40; 4 if the respondent is aged 41 to 50; 5 if the respondent is aged above 50.
 EXPERIENCE = 1 if the respondent has working experience relates to auditing, accounting or taxation; 0 otherwise.

Panel C reports the regression results for the postgraduate students. As reported, EDUCATION is positively associated with COMPLIANCE_1 and COMPLIANCE_2

regardless of the inclusion of students' perceptions about tax system or ethical attitudes as control variables. These findings imply that postgraduate students who have taken the technical tax course significantly improve their income tax compliance (COMPLIANCE_1) and sales tax compliance (COMPLIANCE_2).

In sum, our results demonstrate that different forms of tax education may improve tax compliance in different ways. In particular, general tax education courses are effective in improving sales tax compliance decisions for undergraduate students and technical tax education courses are effective in improving (both income and sales) tax compliance decisions among postgraduate students. Since some undergraduate students have taken a taxation course before taking the general or technical tax course (i.e., 13% and 15% respectively)¹¹, as a sensitivity test, we excluded these students from our sample and rerun the regressions. Results of this sensitivity test are qualitatively similar to the original results reported above. We find consistent results that general tax education helps to improve sales tax compliance of the undergraduate students.

CONCLUSION

This study investigates how different types of tax education affect the tax compliance decisions of students. Our survey results show that undergraduate students' sales tax compliance can be significantly improved by taking a general tax course, but there is no evidence that technical tax courses have a significant impact on undergraduate students' tax compliance decisions. For postgraduate students, we find that technical tax courses can help to significantly improve tax compliance for both the income and sales taxes. These findings hold after controlling for the students' perceptions about the tax system, their ethical attitudes, gender, and age.

¹¹ Some undergraduate students may have taken a general (technical) tax course before taking a technical (general) tax course. For the postgraduate students, none of them have taken a tax course before taking the technical tax course.

This paper makes several important contributions. First, the findings reported here enrich our understanding of how tax compliance decisions are affected by general and technical tax courses, which are useful for the policymakers and educators who seek to reform the education system. Our findings suggest that a move toward general tax education can improve the tax compliance of undergraduate students and that a technical tax course can generally improve postgraduate students' tax compliance. Broadening general tax education components of undergraduate courses seems to be an effective means for promoting moral behavior. However, because this study uses a scenario based on existing laws in Hong Kong (income tax) and a scenario based on proposed laws (sales tax), this limit the validity of comparisons across these two types of evasion. Having said that, this setting can help to demonstrate that education can be effective in promoting compliance with emerging tax laws. General tax courses are likely to improve tax compliance and this finding should be of interests to the Hong Kong government when they would like to introduce sales tax in the future. This study also contributes to the tax compliance literature by providing a systematic analysis of whether and how different types of tax education can help to improve tax compliance after controlling for respondents' ethical attitudes. The conclusions from our study will assist tax authorities in their on-going work to improve tax compliance. Future research can feature a more in-depth analysis of the relation between contents of tax courses and tax compliance.

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