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# THE INFLUENCE OF TAX EDUCATION DURING HIGHER EDUCATION ON TAX KNOWLEDGE AND ITS EFFECT ON PERSONAL TAX COMPLIANCE

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## ABSTRACT

**Introduction/Main Objectives:** This study has three objectives. First, to analyze whether tax education during higher education influences individual tax compliance through increased knowledge about taxation. Second, to explore the implementation of tax education in universities. Third, to identify the cooperation between universities and the Directorate General of Taxation in order to improve individuals' tax compliance. The research method used in this study is a mixed-method.

**Background Problems:** In previous studies the educational variables have been measured from the level of the education of the respondents (diploma, undergraduate, and postgraduate), not on the application of courses in tertiary institutions, so that they do not reflect if the respondents received any tax education.

**Research Method:** The approach used in this mixed-method is a convergent parallel one. In a parallel convergent approach, the author collects each item of quantitative and qualitative data simultaneously, and then the data are analyzed.

**Finding/Results:** The results of a survey of 100 students who regularly attend night classes held at the Politeknik Negeri Batam (Polibatam), who have fulfilled the requirements to be taxpayers, indicate that tax education has a significant effect on tax compliance. Then, the indirect effect of tax education through tax knowledge also significantly influences tax compliance. The results of quantitative research are also supported by the results of interviews with two students, two tax lecturers, and one employee of the Directorate General of Taxation.

**Conclusion:** The results of this study are also in line with the social learning theory, where the environment influences cognition and behavior. From the theory, it can be concluded that tax education can increase tax knowledge and influence taxpayers' compliance behavior.

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## INTRODUCTION

Tax is the contribution made by taxpayers to the state, owed by individuals or entities that are coerced by law, with no direct compensation and used for the country's needs for the greatest prosperity of the people (RI Law No. 28 of 2007). According to The International Center for Tax and Development, tax revenues contribute 50% to 80% of state revenues worldwide. In Indonesia, taxes contribute 81.4% of the state's revenue, meaning that tax revenues in Indonesia have reached slightly above the average tax revenues in the world (*State Revenue and Expenditure Budget Information Book*, 2019). This state revenue will be used for public services, boosting the economy, social protection, education, order and security, defense, etc. (*State Budget Information Book*, 2019). Given the important role of taxes, a tax collection system is needed to maximize tax revenues.

The tax collection system that applies in the world (including Indonesia) is divided into three categories: the official assessment system, withholding assessment system, and self-assessment system. Firstly, the self-assessment system is a system that gives taxpayers the freedom to calculate, pay, and report their own tax obligations (Halim, Bawono, and Dara, 2016). Secondly, the official assessment system is a system that authorizes the government (fiscal authorities) to determine the amount of tax owed, for example, the Land and Building Tax, and thirdly the withholding assessment system is a tax system that gives authority to third parties (not tax authorities and also not the taxpayer concerned) to determine the amount of tax owed, for example, as with Income Tax (article 23).

Among the alternatives above, the self-assessment system is the most dominant system, and has been implemented in Indonesia since 1983, with the enactment of Law Number 6 Regarding General Provisions and Tax Procedures, Act Number 7 Concerning Income Taxes, and Law Number 8 of 1983 concerning Value Added Tax of Goods and Services and Sales Tax on Luxury Goods. The implementation of this self-assessment system has had a significant effect on tax revenues in Indonesia. Since the tax reforms in 1983, tax revenues have increased. In 1993, tax revenues reached Rp30,470 billion, then by 2002 they had increased by Rp180,099 billion. It means that there was an increase in tax revenue of 491% during the period from 1993 to 2002 (Setiyaji and Amir, 2005). With the implementation of the self-assessment system, taxpayers are required to fulfill their tax obligations by registering, calculating, paying, and reporting their tax obligations themselves (Supadmi, 2009). Therefore, tax awareness and compliance is the key to success with this system.

Tax compliance is an act that is done consciously, and is based on obedience, desire, and ability in order to comply with the tax laws (Andreoni et al, 1988). Specifically, tax compliance as the full payment of all the taxes owed (Braithwaite, 2009) . Based on this concept, tax non-compliance occurs if there is a difference between the actual amount of tax paid and the amount of tax owed. The indicator used by the government to look at the level of tax compliance in Indonesia is the ratio of the submission of income tax returns. This indicator is also used by PricewaterhouseCoopers in assessing the tax compliance rates of 190 countries in the world (Paying Taxes 2018).

**Table 1.** 2013-2017 Annual Income Tax Submission Compliance Ratio

No	Description	Year				
		2013	2014	2015	2016	2017
1	Registered Taxpayers	<b>27,488,318</b>	<b>30,298,738</b>	<b>33,313,655</b>	<b>36,398,089</b>	<b>39,151,603</b>
	a. Corporate	2,276,876	2,463,878	2,674,406	2,912,882	3,110,887
	b. Individual	24,821,429	27,421,041	30,814,682	33,005,315	35,540,985
	c. Government Treasurer	390,013	413,819	454,567	479,892	499,731
2	Registered Taxpayers					
	Mandatory to Submission	17,731,736	18,357,833	18,159,840	20,165,718	16,598,887
3	Realization of Submission	9,967,904	10,854,819	10,975,909	12,256,401	12,057,400
4	Compliance Ratio (3:2)	56.22%	59.13%	60.44%	60.78%	72.64%
5	Tax Revenue (trillion Rp)	921.40	985.13	1060.86	1105.97	1151.03

Source: Directorate General of Taxes Performance Report for 2017

Data show that compliance with submission is directly proportional to the increase in tax revenue in Indonesia. This can be seen from Table 1 which shows the ratio of the submission of Annual Income Tax Returns and tax revenues in Indonesia from 2013 to 2017. Empirically, Krishnamoorthy (2006) made observations in developing countries, such as Malaysia, and found the phenomenon that the decline in state revenues was caused by tax non-compliance. In the 2003 to 2005 period, the total number of taxpayers in Malaysia who did not meet their tax obligations increased from 25,160 people to 239,666 people. As a result, the Government of Malaysia (GoM) lost approximately 307.7 million ringgit in revenue. The issue of tax compliance is not only a concern for the Government of Indonesia (GoI) but also for numerous other countries.

Palil and Mustapha (2011) argue that tax knowledge influences tax compliance. The better the knowledge of taxation, the greater is the level of tax compliance. In a study conducted by Kasipillai, Aripin, and Amran (2003) at one of the universities in Malaysia, it was found that there is a relationship between education and tax compliance. There was an increase in tax compliance among students, especially female students after studying taxation. Therefore, the results of this study suggest that universities

should provide study materials about taxation for all students. Kasipillai, Aripin, and Amran (2003) continued the research conducted by Bahari and Ling (2009) and found that non-accounting students at tertiary institutions in Malaysia were interested in studying taxation. Holmes, Marriot, and Randal (2012) conducted a study of students in New Zealand. Their results showed that tax education taught in tertiary institutions influenced tax compliance. Students with higher levels education will show a high level of tax compliance. Other studies have also shown that knowledge about taxes has a positive effect on tax compliance (Roshidi et al., 2007; Palil and Mustapha, 2011). In connection with the policies issued by the Ministry of Finance and the Ministry of Research, Technology and Higher Education of the Republic of Indonesia, and previous studies, it is necessary to conduct an empirical study to evaluate the implementation of taxation courses at universities in Indonesia.

This research was conducted at one of the vocational state universities in Indonesia, with the following considerations. First, vocational tertiary education became one of the main focuses of the GoI in 2019. In the 2019 State Revenue and Expenditure Budget, vocational tertiary education has a special budget allocation from the education budget (*State Revenue and*

*Expenditure Budget Information Book*, 2019). The policy was made in the context of increasing the qualifications of human resources to deal with the world of work. Second, the chosen vocational tertiary institution is a vocational tertiary institution located in Batam City. Batam was chosen because it is a free trade zone and free port, based on Government Regulation No. 46 of 2007. The activities carried out within the area are activities in the economic sector, such as trade, maritime, industrial, transportation, banking, tourism, and similar sectors. Batam is one of the four free trade zones in Indonesia. Of the four free trade zones in Indonesia, the largest number of industries is in Batam. Within the Batam Free Trade Zone (FTZ), there are 22 industrial estates with 949 foreign companies (Batam Entrepreneurs Agency, 2016). This means that the employment opportunities for students in Batam are very good, due to the number of companies.

The only state polytechnic in the Batam FTZ is Politeknik Negeri Batam (Polibatam). Polibatam is required to produce graduates who are ready to work and are competent in their fields, according to the various companies' needs. In addition, students also need to be equipped with knowledge about taxes so that the income earned while working can be allocated to pay taxes and be reported to the state. Polibatam has implemented taxation courses for students majoring in business management. Furthermore, Polibatam has students who have fulfilled the requirements to be taxpayers, and who are regular night class students. These students are both private and public employees who take classes at Polibatam at night.

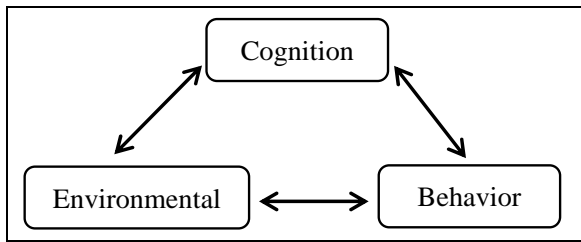
Previous research has examined the effect of education and tax knowledge on personal tax compliance. In previous studies, the educational variables measured the level of education of the respondents (diploma, undergraduate, and postgraduate) not the application of courses in

tertiary institutions, so that they do not reflect that respondents may have received some tax education. In this study, the implementation of the subject is explained as a part of tax education. This research contributes to the measurement of tax education, which has not been done in previous studies. Furthermore, previous studies have not differentiated between tax education and tax knowledge. Some studies use tax education and some other studies use tax knowledge, but both mean the same. In this research, tax education and tax knowledge are distinguished. Then, the research method used in this study is a mixed-method. Mixed methods were rarely used in previous studies. With the mixed method, research results can be explained comprehensively. The results of this study are explained using quantitative methods and corroborated by qualitative methods.

## **THEORY AND LITERATURE REVIEW**

### **1. Theory of Social Learning (*Social Learning Theory*)**

The social learning theory is part of the social psychological theory. The theory of social learning (Bandura, 1977) is based on reciprocal determinism (reciprocal determinists/mutually decisive concepts). This theory explains human behavior in the form of continuous reciprocal interactions between cognitive, behavioral, and environmental determinants. The environment is an important factor in shaping behavior because the environment gives direction to individual behavior, by having consequences for every action taken. Cognition is a factor that becomes a reference for individuals in forming behavior; they gain an awareness of the consequences that will occur due to their behavior. Next, individual behavior is the basis of environmental and cognitive direction that can be accepted or not by the environment. The relationship between the three components is illustrated in the Figure 1 below.



Source: Alwisol (2006)

**Figure 1.** Relationship between Environment, Cognition, and Behavior

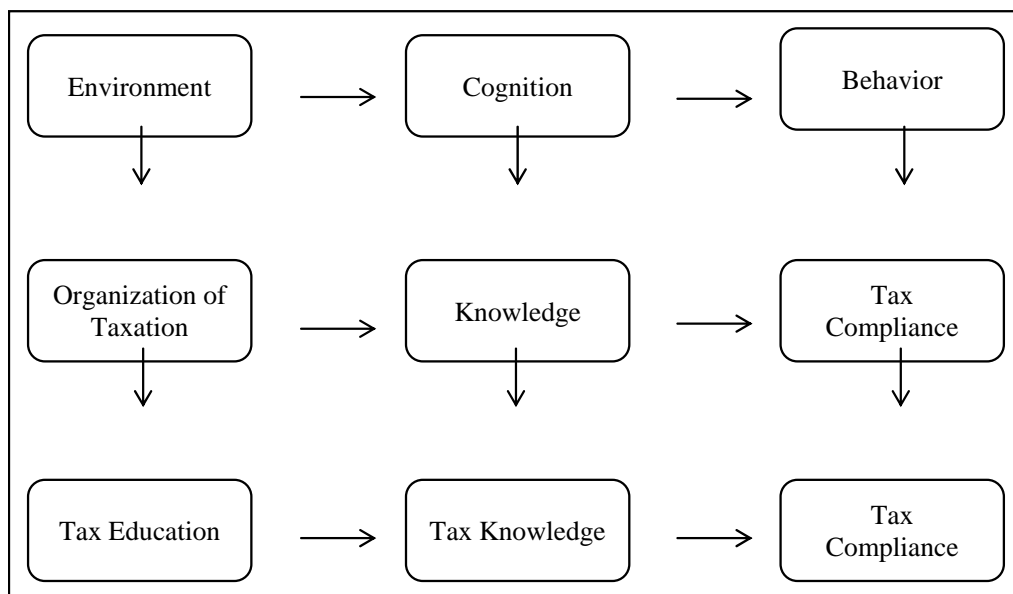
**2. Tax Awareness Inclusion**

Tax awareness inclusion is a policy issued by the Ministry of Finance and the Ministry of Research and Higher Education of the Republic of Indonesia, in order to instill tax awareness in students and educators through providing information about taxation in higher education establishments (*Directorate General of Tax, 2016*). The purpose of this policy is to increase the awareness of taxation through education and improve the quality of teaching taxation matters in the education curriculum. The policy is realized in MoU (memorandum of understanding) No. MOU-4/MK.03/2016 and MoU No. 7/M/NK/2016 on increased co-equal taxation through research, technology, and higher education, then followed up with a

working agreement between the Directorate General of Taxation and the Directorate General of Learning and Student Affairs (KEP-48/PJ/2016 and 001/B1/PKS/2016, *Open Material Tax Awareness for Higher Education, 2016*). Through this cooperation, the Directorate General of Taxation and the Directorate General for Education and Student Affairs agreed to instill an awareness of taxation through increased tax knowledge for educators, insert the inclusion of awareness of tax into the curriculum, method of learning, and specially designed book, as well as research and development (*Open Material Tax Awareness for Higher Education, 2016*).

**3. Framework**

In the context of this research, the environment is realized in the form of taxation courses in tertiary institutions, cognition is realized in the form of knowledge, and behavior is manifested in the form of tax compliance behavior. These three components then become the variables used in this study. The framework of thought is illustrated in the following figure 2.



**Figure 2.** Elements of Variables Based on Theory

#### 4. Research Framework

This research is an empirical study, so theories, hypotheses, and facts are needed (Kinney, 1998 in Hartono, 2013). The hypotheses are used to predict the phenomena that occur in this study. In summary, the research framework is illustrated in the Figure 3 below.

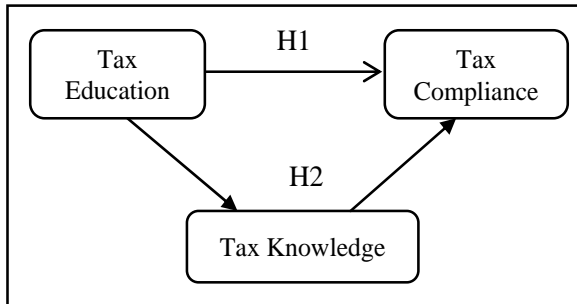


Figure 3. Research Framework

#### 5. Hypotheses Development

##### 5.1. Tax Education and Tax Compliance

According to the social learning theory, education will influence behavior. In line with this theory, Sommerfeld (1966) in Bahari and Ling (2009) argue that taxation must be taught, not just practiced and learned. Therefore, the research by Baryoji (1992) and Ho (1992) suggests including taxation courses in the academic curriculum. Barjoyai (1992) emphasized that all future taxpayers need to have an adequate tax education in schools or colleges, so that they are more tax conscious.

In this case, the Government of Japan (GoJ) has introduced tax education to school students because they are considered to be potential future taxpayers (Sarker, 2003). Empirically, previous studies have found that tax education influences people's attitudes towards taxation and tax compliance behavior. In practice, tax education allows people to understand the taxation system better (Bahari and Ling 2009). Tax education helps a person become better educated so that he/she can understand the tax

laws (Bahari and Ling, 2009). Kasipillai, Aripin, and Amran (2003) found that there is a relationship between education and tax compliance. Based on the above explanation, the first hypothesis proposed in this study is as follows.

H<sub>1</sub>: Tax education has an effect on tax compliance

##### 5.2. Tax Education, Tax Knowledge, and Tax Compliance

According to the social learning theory, human behavior is influenced by the environment and a person's cognitive ability. Based on this theory, cognitive knowledge is obtained from the environment/tax education and its impact on tax behavior/compliance. Barjoyai (1992) argues that tax knowledge is a universal knowledge that is needed by every citizen, as a potential taxpayer one day. Eriksen and Fallan (1996) found that with an adequate understanding of taxation laws, people were more willing to respect the taxation system so that they would be more compliant in paying their taxes. The GoJ uses tax education as one step to improve tax compliance (Bahari and Ling, 2009). The GoJ applies tax education to schools and colleges. Previous research has shown that tax knowledge has a relationship with the ability of taxpayers to understand tax laws and regulations, and the ability to comply with them (Singh 2003). Singh (2003), Eriksen and Fallan (1996), and Harris (1989) prove that an increase in tax knowledge will have an impact on increasing tax compliance. Palil and Mustapha (2011), Palil, Akir, and Ahmad (2013), and Devos (2014) found that tax knowledge has a significant effect on tax compliance. Furthermore, research in Indonesia carried out by Pratama (2018), found that education levels affect people's tax knowledge. Based on the explanation above, the second hypothesis proposed in this study is as follows.

H2: Tax education mediated by tax knowledge influences tax compliance.

**RESEARCH METHOD**

**Research design**

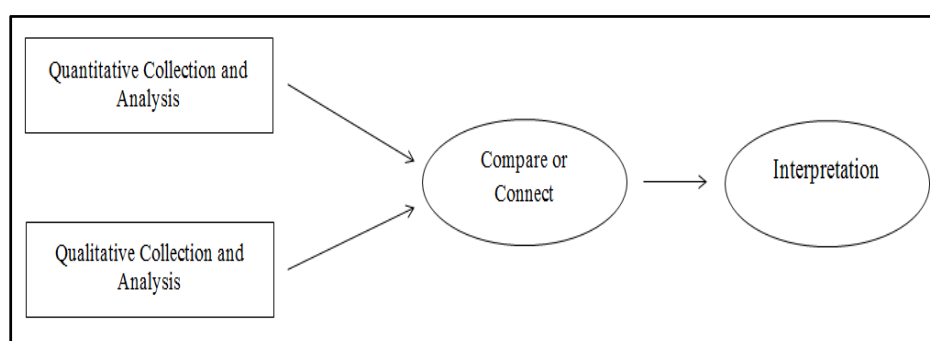
The mixture method is divided into two approaches, namely the convergent and sequential parallel approaches (Cresswell, 2018). The next convergent parallel approach is used in this study. This approach was chosen to discriminate

between quantitative and qualitative findings. In a parallel approach to convergences, quantitative and qualitative data are collected simultaneously, and then the data is analyzed. This approach is illustrated in the Figure 4 below.

**RESULTS AND DISCUSSION**

**1. Overview of Respondents**

Details of the respondents' demographics can be seen in the Table 2 below.



Source: Creswell (2018)

**Figure 4.** Mixed Method of Convergent Parallel Approach

**Table 2.** Respondents' Demographics

No	Characteristic	Information	Number of Respondents	Percentage
1	Gender	Male	13	13%
		Female	87	87%
2	Age	17-25 years	94	94%
		26-30 years	5	5%
		31-45 years	1	1%
3	Study program	D3 Accounting	53	53%
		D4 Business Administration	9	9%
		D4 Managerial Accounting	38	38%
4	Semester	2 (two)	21	21%
		4 (four)	40	40%
		5 (five)	14	14%
		6 (six)	11	11%
		8 (eight)	14	14%
5	Status	Single	96	96%
		Married	4	4%
6	Length of work	<1 year	25	25%
		1-5 years	64	64%
		> 5 years	11	11%

Source: Processed from Primary Data

## 2. Descriptive statistics

This section explains the descriptive statistics. They are presented in Table 3 below.

**Table 3.** Descriptive Statistics

No	Variable	S	Min.	Max.	Mean	Std. Dev.
1	Tax Education	100	1.00	5.00	4.2304	0.71451
2	Tax Knowledge	100	1.00	5.00	3.9297	0.70964
3	Tax Compliance	100	1.00	5.00	4.1171	0.84660

Source: Processed from Primary Data

## 3. Quantitative Research Results

### First Testing

The first test aims to see the effect of tax education on tax compliance.

<i>Model Summary</i>					
<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. An error of the Estimate</i>	
1	0.467 <sup>a</sup>	0.218	0.210	5.438	

<i>Coefficients</i>						
<i>Model</i>		<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>	<i>t</i>	<i>Sig.</i>
		<i>B</i>	<i>Std. Error</i>	<i>Beta</i>		
1	(Constant)	10.976	5.793		1.895	0.061
	Tax Education	0.714	0.137	0.467	5.228	0.000

From the test results in the table above we get the following regression equation.

$$Y = 10.976 + 0.714 X_{\text{Tax Education}} + e$$

### Second Test

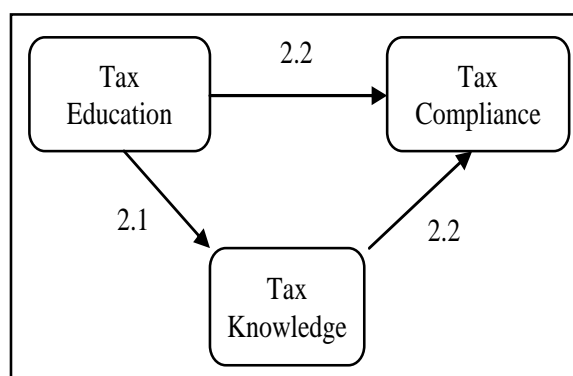
The second test aims to see the effect of mediating tax knowledge on tax education on tax compliance. To achieve these objectives, two tests are conducted. Test 2.1, the effect of tax education on tax knowledge, and test 2.2, the effect of tax education and tax knowledge on tax compliance. After the above tests a path analysis and a Sobel test are carried out. For greater clarity the testing of the two variables is shown in the Figure 5 below.

*Testing 2.1: Tax Education and Tax Knowledge*

#### Determination Coefficient Test

In test 1, the test for the coefficient of determination is performed first. This test aims

to determine the percentage influence tax education has on tax knowledge. The coefficient of determination is indicated by the value of R-squared. The test results can be seen in the Table 4.



**Figure 5.** Testing the Effects of Tax Education and Tax Knowledge Against Tax Compliance



Testing 2.2: Tax Education, Tax Knowledge, and Tax Compliance

Determination Coefficient Test

In test 2, the test for the coefficient of determination is performed first. This test aims to determine the percentage influence tax education and tax knowledge have on tax compliance. The coefficient of determination is indicated by the value of R-squared. The test results can be seen in the Table 5.

From the test results in the table above we get the following regression equation.

$$Y = 4.885 + 0.509 X_{\text{Tax education}} + 0.377 X_{\text{Tax knowledge}} + e$$

**Path Analysis and Sobel Test**

The path analysis and Sobel test are used to see the effect and magnitude of the indirect effect of tax education on tax compliance, through the mediation of tax knowledge. Figure 6 below is an overview of the results of tests 1 and 2. The test results show that tax education can have a direct or indirect effect on tax compliance. The magnitude of the direct effect is 0.509 and the magnitude of the indirect effect is 0.1301 (0.345 x 0.377). The total effect of tax education on tax compliance is 0. 6391 (0.509 + 0.1301).

**Table 4**

<b>Model Summary</b>					
Model	R	R-squared	Adjusted R-squared	Std. error of the estimate	
1	0.433 <sup>a</sup>	0.188	0.179	3.62501	

<b>Coefficients</b>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
		1	(Constant)	28.732		
	Tax Knowledge	0.345	0.072	0.433	4.757	0.000

**Table 5**

<b>Model Summary</b>					
Model	R	R-squared	Adjusted R-squared	Std. error of the estimate	
1	0.544 <sup>a</sup>	0.296	0.282	5.18685	

<b>Coefficients</b>						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
		1	(Constant)	4.885		
	Tax Education	0.509	0.145	0.333	3.522	0.001
	Tax Knowledge	0.377	0.115	0.310	3.278	0.001

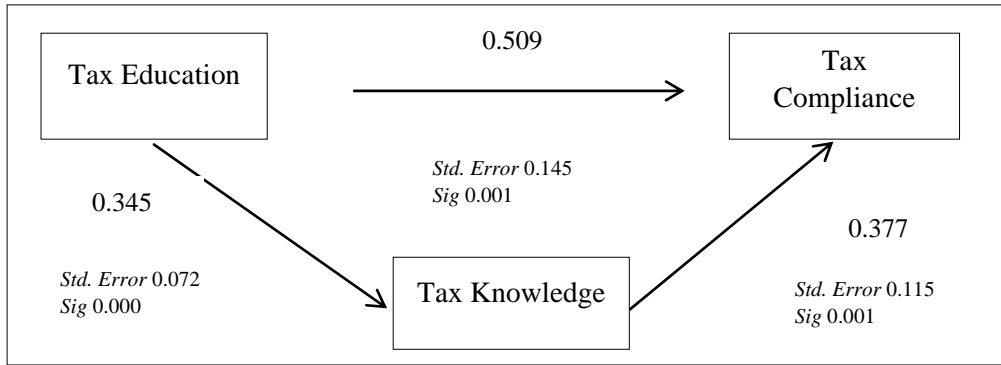


Figure 6. Path Analysis

In addition to the above analysis, the Sobel test is employed to detect whether there is any mediation by tax knowledge. It is said that mediation will occur if the p-value is below 0.05. The test results can be seen in the Figure 7 below.

Figure 7 shows that the p-value is 0.000, which is below 0.05. That means tax knowledge mediates tax education’s effect on tax compliance.

**Hypotheses Testing and Discussion**

This test is intended to answer the first research question. Two hypotheses have been proposed by this study. The first hypothesis (H1) states tax education affects tax compliance. The second hypothesis (H2) states tax education influences tax compliance. The first hypothesis refers to the first est and the second hypothesis

refers to the second test. The discussion of the two hypotheses is below.

**a. Tax Education and Tax Compliance**

Based on the test results from the first test, the significance value for tax education is 0.000. This value is below 0.05, so H1 can be accepted. Tax education does affect tax compliance. The implementation of tax education at Polibatam will affect the compliance behavior of students who meet the requirements for taxpayers.

Referring to the theory of social learning, which says that the environment can influence one's behavior, if this is related to the results of this study, it can be concluded that the results are supported by the social learning theory. In this study, the environment is shown by the implementation of tax education at Polibatam and the behavior is shown by tax compliance behavior.

Input:		Test statistic:	Std. Error:	p-value:
a	28.732	Sobel test: 23.62766959	3.47541918	0
b	2.858	Aroian test: 23.62583134	3.47568959	0
s <sub>a</sub>	0.377	Goodman test: 23.62950827	3.47514874	0
s <sub>b</sub>	0.115	Reset all	Calculate	

Source: Preacher and Leonardelli, 2010-2020 (quantpsy.org/sobel)

Figure 7. Sobel Test

The results empirically also support previous research that found the influence of tax education on tax compliance. Tax education can affect the attitudes and mindsets of individuals toward tax compliance. Taxpayers who have received some tax education will tend to obey the tax rules (Kasipillai, et al, 2003). Tax education makes a person a better educated individual, so that he/she can understand the tax laws and obey them (Bahari and Ling, 2009). Future taxpayers need to receive an adequate tax education in schools or colleges, so that they are more tax conscious (Barjoyai, 1992).

### **b. Tax Education, Tax Knowledge and Tax Compliance**

Based on the test results from the second test, the significance value for tax education is 0.001 and for tax knowledge it is also 0.001. The significance value of the two variables is below 0.05. Based on the results of these tests, the path analysis test and the Sobel test, it can be concluded that tax education has a significant and positive effect on tax compliance through tax knowledge, so H2 is accepted.

Referring to the theory of social learning, the environment can influence one's behavior through cognitive enhancement. When this is related to the results of this study, it can be concluded that the results are supported by the social learning theory. The environment can improve people's cognitive ability and thus shape their behavior. In this study the environment is shown by organizing for taxation matters to be taught at Polibatam, cognition is shown by tax knowledge and behavior is shown by people's compliance behavior. In this research, tax education can increase tax knowledge, and this affects tax compliance. This supports the research conducted by Pratama (2018), who found tax education affects tax knowledge. Furthermore, taxpayers who have received some

tax education and thus increased their tax knowledge, will comply with the tax rules.

The results of this study also support the findings of previous studies. Eriksen and Fallan (1996) found that with a reasonable understanding of taxation laws, people were more willing to respect the taxation system and be more willing to pay their taxes. Previous studies have shown that tax knowledge has a relationship with the ability of taxpayers to understand tax laws and regulations, and the ability to comply with them (Singh, 2003). Singh (2003), Eriksen and Fallan (1996) Harris (1989) prove that increasing people's knowledge about taxes has an impact on increasing their tax compliance.

### **Qualitative Research Results**

Qualitative research was carried out through interviews; which were conducted at Politeknik Negeri Batam (Polibatam) and the Regional Office of the Riau Islands Directorate General of Taxation (DGT) at different times. The interviews were conducted during 10 working days, starting from May 14, 2019, to May 27, 2019. The following describes the analysis of the results of the interviews with five respondents.

#### **a. Nature of Tax Courses**

The system of courses applied at the Politeknik Negeri Batam's Business Management Department is a package system. Students must take all the courses offered by the department, including the one on taxes. Thus the study of taxation at Polibatam is mandatory. Then to support the statement above, the writer checked the lecture schedule. Based on this check, information was obtained about the schedule of students taking the taxation course. For accounting study programs, core courses are obtained in semester 1, for managerial accounting courses, in semester 2, and business administration study programs, in semester 4.

### **b. The Purpose of Tax Subjects**

Polibatam is one of the tertiary institutions which prepare graduates for what they will experience at work. After taking the tax course, students are expected to be able to manage their taxes, both personal and corporate. In addition to industry's needs, the courses are also to educate the public in general and students in particular, so that people are aware of their tax obligations. Existing tax objectives for higher education are in line with the DGT's objectives. The first objective is to foster an active role by the community to contribute to the tax revenues in Indonesia. The second goal is to introduce taxes to the public.

### **c. Compilation of Tax Curriculum**

The preparation of the tax curriculum at Polibatam is based on industry's needs. Before compiling the curriculum, Polibatam conducted a survey related to industry's needs for graduates from Polibatam's Business Management Department, including their expected competency in matters of taxation. The survey results were then used as a basis for developing the curriculum. Guidelines for the preparation of the curriculum (using guidelines from the Indonesian National Qualification Framework from the Ministry of Research, Technology and Higher Education), are found in the National Standards of the Directorate of Higher Education, regulated by the Minister of Education and Culture's Regulation No. 49 of 2014. The curriculum is prepared or evaluated during one study program cycle plus one year. So the D4 program is carried out once every five years, and D3 every four years.

### **d. Cooperation between Polibatam and DGT**

The Directorate General of Taxation supports universities that have tax education courses. At present, in the Riau Islands, which come under the Regional Office of the Riau Islands DGT, which separated from the Riau Regional Office

at the end of 2018, two universities are in collaboration with the DGT: they are Politeknik Negeri Batam and Batam International University. Polibatam has been working together with the Riau Islands' DGT since 2014. This is the first time the two entities have worked together. This cooperation was marked by the opening of the Polibatam Tax Center. At that time the Riau Islands Regional Tax Office was still joined with the Riau Regional Tax Office. But now the Tax Center is not running optimally. For example, there are no plans or targets for the year and activities only occur at certain times, such as the filing of Annual Tax Returns or seminars.

### **e. Competence of the Tax Courses' Teachers**

The tax course instructors at Polibatam are lecturers who are graduates of the accounting master's study programs. Of the lecturers who came from the accounting master's program, there were only two lecturers who specialized in taxation matters; there were also two lecturers who had participated in tax certifications. So, at this time the taxation courses' teaching is still dominated by lecturers who are not tax specialists or certified tax consultants. Although they may not be tax specialists, the lecturers who graduated from the accounting master's program have at least studied some aspects of taxation while at college. In addition to lecturers from the internal campus, Polibatam also brings tax lecturers from outside the campus, namely practitioners who work as tax consultants and DGT employees.

### **f. Teaching Methods for Tax Subjects and Facilities**

The method of delivering courses on taxation is divided into two, namely theory and practice. The delivery of theory is also divided into two, namely presentations by lecturers and presentations by students. Presentations and assignments

are by individuals and groups. Students are also required to offer their opinions, so there is a two-way communication between the lecturer and students, because usually at the beginning of the lecture the instructor gives several questions to the students regarding the material to be taught. There are not only theoretical classes, but students also use computer laboratories to operate applications electronically. Teaching methods and materials can be seen in the lecture contract that must be submitted by the lecturer at the beginning of each class.

#### **g. Evaluation of Taxation Courses**

There are several ways used by teachers to evaluate students who have followed the course of tax, among others, by giving assignments, and exams in the form of quizzes, exams Middle Semester and Final Exam Semester. The form of the questions given during the exam is in the form of theory, calculations, and cases. From the tug as and the test is obtained to the value transcript.

Students who have been interviewed by researchers are satisfied with the results of the assessment provided by the instructor. Students feel the value given by the instructor is in accordance with their abilities. Students also have input for tax courses for the future, among others, first, forming a community of students who are interested in taxes for regular night classes, so that there is a place to share knowledge about tax. Second, for practical courses conducted in the laboratory, students should be given an overview of the material that has been (refreshed) before being given the task to work on practical subjects in the laboratory. Based on the results of the interview also, students said that tax subjects were important to teach, because they were very useful in everyday life, especially when working. Then the most important thing is that people are aware of the tax.

#### **h. Students' Tax Knowledge**

Based on the results of interviews with the tax lecturers, the students' tax knowledge can be seen two ways: verbally and in writing. Orally, the lecturer asks questions directly to students at the beginning of the class. From these questions, lecturers can assess the extent of the students' knowledge regarding taxes. Then at the end of the lecture, the lecturer again asks the students questions. From the answers to these questions, the lecturer can assess whether the students have learnt anything, or not. The second way is to give assignments and tests. From the results of these assignments and examinations, the lecturers can also assess the students' knowledge. Furthermore, it can also be seen how students respond to the tax knowledge they have gained.

#### **i. Taught Tax Material**

Every student who takes a tax course must be given material related to the rules in the General Provisions and Tax Procedures. The material taught to the students can also be seen in the lecture contracts. The material covers the basic understanding of taxation, regional taxes and levies, land and building taxes, and others. Furthermore, according to the DGT's employees, the community, which in this case is the students, needs to know the role of taxes for the state, for development, and for the community itself. The most important point about the material presented to the students is that it can increase their personal tax awareness.

#### **j. Student Tax Compliance**

Ensuring that the students who have received tax courses are compliant with tax rules is indeed rather difficult for the lecturers. These activities can only be carried out by the DGT, by checking in the system whether the taxpayer ID has already reported or not. Each year the DGT publishes the number of taxpayers who have met the requirements for tax reports, and the number

of taxpayers who have reported their taxes, and all a lecturer can do is ask the students directly whether they are compliant with the tax rules or not. The weakness of the questioning process is that the lecturer cannot ascertain whether the students answer honestly or not.

## CONCLUSIONS

Based on the quantitative and qualitative data analysis, the research results can be concluded as follows.

1. The results of a survey of 100 regular students of night classes at Polibatam, who have met the requirements for taxpayers, showed that tax education had a significant effect on tax compliance. Then, the indirect effect of tax education through tax knowledge also significantly influences tax compliance. Based on these results, the first hypothesis is proven and the first research goal is reached.

The quantitative research results are also supported by qualitative research results with interviews with two students, two lecturers teaching tax courses, and one employee of the Directorate General of Taxation. In the interviews, the students revealed that their tax compliance increased after taking a tax course. In the beginning, students did not understand what their obligations were as taxpayers, but after learning about taxation the students came to understand. The same thing was conveyed by the lecturers who had asked the students in class. The results of this study are also in line with the social learning theory, which states that the environment influences cognition and behavior. From this theory, it can be concluded that tax education can increase tax knowledge and influence the tax compliance behavior of a taxpayer.

2. Based on the results of the qualitative research's interviews with five respondents regarding the implementation of tax education at Polibatam, which is the second objec-

tive of this study, it can be concluded that the implementation of tax education in tertiary institutions is still optional. There is no pressure from the Ministry of Research and Technology and Higher Education (Kemendikdik) to require tax subjects in all tertiary institutions in Indonesia. The Ministry of Technology Research and Higher Education and the Ministry of Finance have planned to incorporate courses on taxation into the general compulsory subjects.

3. Polibatam is one of the universities that hold tax education courses. The implementation of tax education at Polibatam is based on the needs of industries, which are that college graduates know about taxes. In addition, it is also intended to provide a description of the taxation system to students in order for them to comply with the tax regulations. Tax education is taught in theory and practice, students are taught about taxation rules and the use of their applications. Based on the results of quantitative and qualitative research, the implementation of tax education at Polibatam is able to increase the tax knowledge and tax compliance of its students.
4. Based on the results of the qualitative research interviews with five respondents regarding cooperation between universities and the Directorate General of Taxation, which is the third objective of this study, it can be concluded that the collaboration between the DGT, in particular, the Riau Islands DGT Regional Office and Polibatam has been going on since 2014. The cooperation aims to increase the public's tax awareness, especially for the academics at Polibatam. Increasing tax compliance is one of the programs of the Directorate General of Taxation. One way to increase tax compliance is to coordinate with colleges. Coordination between the local university and the Directorate General of Taxation

began intensively when the Regional Office of the Directorate General of Taxation moved to Batam, which was previously still joined to the Regional Office of Riau, located in Pekanbaru. This year the Riau Islands DGT also plans to collaborate with several campuses in the Riau Islands.

## **SUGGESTION**

Based on the results of the discussion and the limitations in this study, the following suggestions can be offered.

### **1. For Higher Education**

Tax courses can be introduced for students outside the business management departments, such as electrical, mechanical and informatics majors. Most of the non-business students are also students who have worked and have met the requirements for taxpayers. Then there is the need for additional teaching resources for the tax courses, so that new innovations in learning methods or research in the field of taxation can emerge. Furthermore, universities need to appoint a person who can manage and be in charge of their respective tax centers, so that they can be maximally utilized by academicians and the public, and can coordinate regularly with the Directorate General of Taxation. Finally, the two entities can create a joint program for the public's education.

### **2. For the Directorate General of Taxation**

The Directorate General of Taxation, through the regional offices of the DGT, can arrange future plans and target programs with the universities in their areas, such as the socialization of rules, tax classes for non-business students, public lectures and research so that the programs that are carried out are pre-planned activities, and not just incidental activities. Then, it is necessary to hold regular meetings between the DGTs' regional offices and the local universities to

monitor the programs that will and have been implemented.

### **3. For Further Researchers**

Tax awareness's inclusion is a government program to introduce taxation to all the students in Indonesia, so that researchers can then choose other universities as their research objects. Then they can add respondents who come from departments other than business/management/economics. In addition, the research method used in this study is a survey and case study, researchers can use other methods such as experimentation and phenomenology; with the experimental method, researchers can use respondents who are not taxpayers by providing a treatment in advance and with phenomenology a researcher can explore in detail the experience of a taxpayer in fulfilling his/her tax obligations.

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