Exploring the Interaction Effect of Attitudes and Tax Knowledge on Tax Compliance Behaviour among Individual Direct Taxpayers

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DOI: 10.62823/IJARCMSS/8.2(II).7663

ABSTRACT

Tax compliance always be a crucial concern for every country and tax authorities where tax revenue is main essential for government income. The present study tries to explore the interaction effect of attitude and tax knowledge on tax compliance behaviour. Data for the present study collected through survey and analysis done with Structural equation model. The results proved a significant interaction effect of attitude and tax knowledge on tax compliance behaviour. The study offers valuable implications for policy makers, suggesting that improving taxpayer knowledge alongside fostering positive attitudes could enhance overall tax compliance rates.

Keywords: Attitude, Tax Knowledge and Tax Compliance Behaviour.

Introduction

Tax revenue is a main source of income to government and is utilized for providing various necessities and public services. Governments are needed fund for social programs, infrastructure projects, and the delivery of public goods to citizens. It is important to increase tax revenue as it would help to reduce the fiscal deficit (Tan et al., 2021). It is maintained that as long as governments continue to collect taxes, people would inevitably try to conceal their rising incomes from the government's prying eyes searchlight (Williams and Krasniqi, 2017). Tax compliance is a crucial issue for governments around the worldwide phenomena of tax evasion because taxpayers typically view taxes as a burden. Every country undoubtedly deals with tax non-compliance, which has an immediate impact on the government's revenue. In present scenario, this concern is especially acute in developing countries like India and they have a lack of adequate experience in dealing with this problem.

Assfaw and Sebhat (2019) proved that tax compliance is very low in the India because of taxpayers' attitudes and other Multidimensional factors such as the education level of taxpayers, tax knowledge awareness of taxpayers, perceived role of government expenditure, degree of simplicity of the tax system, and rewarding scheme for loyal taxpayers. However, there is negligible study on the determinants of tax compliance among business individual taxpayers in developing countries like in India. The present study looks into how attitude is influenced by their educational attainment, which in turn affects how they comply with tax laws.

Review of Literature

Attitude refers to the judgments made by the person who will do the action about the act of performing the behaviour (Benk et al., 2011). Ajzen's (1991) introduced Theory of Planned Behavior stating that attitude is related to an individual's own subjective beliefs about behaviour. Positive or negative perceptions of an "attitude object," such as a person, an action, or an event, can also be used to describe attitude. Other scholars view attitude as a phenomenon that induces individuals to act in certain ways. In other words, attitude, along with subjective norms and perceived behavioural control, predicts the behavioural intention of individuals, which in turn predicts their behaviours (Ajzen, 1991; Ajzen and

Fishbein, 1980; Chau and Leung, 2009). Taxpayers' attitudes have long received growing attention from scholars because attitudes largely shape the actual behaviour of humans (Agbetunde et al., 2022). Kirchler et al. (2008) proposed that taxpayers who have a favourable attitude towards tax evasion are predicted to be less compliant and taxpayers with an unfavourable attitude are likely to be more compliant, which is consistent with the comments of Ajzen (1991) and Fishbein and Ajzen (1975). In the context of tax compliance, taxpayers' attitudes are established by their belief and experienced regarding the enforcement and application of tax rules (Sekti & Latifah, 2019). Attitudes are typically thought to influence compliance behaviour because they reflect a taxpayer's inclination to react favourably or unfavourably to a specific scenario, (Eagly and Chaiken, 1993; Ajzen, 1993).

Song and Yarbrough (1978) cleared that education level is positively associated to taxpayers' attitude. This result is further supported by other researchers. (McGraw & Scholz, 1988 and Eriksen & Fallan, 1996). Loo, McKerchar & Hansford, 2009 cleared that education level influences individuals' tax knowledge. Subsequently influencing their attitudes towards tax and then affecting their compliance behaviour. Chan, Troutman, and O'Bryan (2000) did a comparative study on tax compliance behaviour between taxpayers in Hong Kong and the United States. Their findings revealed among U.S. respondents, age and education significantly influenced tax compliance behaviour, showed a positive relationship with attitude and moral development. In contrast, for Hong Kong respondents, the study identified a negative relationship between attitude, education, moral development, and tax compliance.

According to Oktaviani et al. (2020), taxpayers who possess knowledge are better equipped to regulate their behaviour and comply with tax regulations. If the taxpayer is not aware with tax rules and processes, they will be unable to correctly resolve their response. Harris (1989) discovered a connection between fairness evaluations and knowledge, which resulted in increased compliance rates. According to Januarti (2020), tax knowledge affects taxpayer compliance, meaning that taxpayers are more aware of tax laws, whether they deal with tariffs or incentives for the company's efficient operation, which makes them more likely to fulfil their responsibilities. We think that tax knowledge will be a crucial factor in determining tax compliance, which is consistent with other findings.

Proposed Model

Research Framework for Exploring interaction effect of attitudes and tax knowledge on tax compliance behaviour among individual taxpayers. The variable for the study along with their source and Proposed Model of the study are presented below:

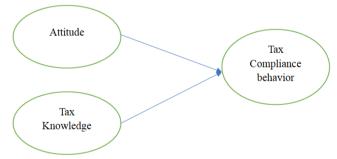


Table 1: Description of the Variables

Constructs	Statements	References
	I think I should honestly declare all my tax	Tang & Chang (2020); Palil (2010)
Attitude	liability	
	I believe that, while filing income tax return,	Tang & Chang (2020); Palil (2010)
	excluding small amount of income is not	
	ethically wrong. –Reverse code	
	I will not evade paying tax even I have a	Tang & Chang (2020); Palil (2010)
	chance too.	
	I do not think evading tax is wrong. –Reverse	Tang & Chang (2020); Palil (2010)
	code	
	I think all the taxpayers should obey and	Tang & Chang (2020); Palil (2010)
	follow all the tax laws.	

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•	Saad (2011); Hagos Gebremichael
applicable to individuals' incomes.	Gebretsadik (2017); Samuel Alemnew
	Belay (2016)
I have knowledge that the income tax system	Saad (2011); Hagos Gebremichael
is a legitimate way for the government to	Gebretsadik (2017); Samuel Alemnew
collect revenue to manage an economy.	Belay (2016)
To my knowledge, it is mandatory to file my	Saad (2011); Hagos Gebremichael
income tax return on or before due date	Gebretsadik (2017); Samuel Alemnew
issued by the tax authority.	Belay (2016)
I am aware that the non-compliance of taxes	Saad (2011); Hagos Gebremichael
is a criminal offence.	Gebretsadik (2017); Samuel Alemnew
	Belay (2016)
As per my information, I can't deduct my	Saad (2011); Hagos Gebremichael
personal expenses in calculating my tax	Gebretsadik (2017); Samuel Alemnew
liability.	Belay (2016)
I clearly knows about the deductions that I	Saad (2011); Hagos Gebremichael
can claim in the computation of my tax	Gebretsadik (2017); Samuel Alemnew
liability.	Belay (2016)
I regularly file my tax return as tax system is	Palil (2010); Shailender Sekhon (2017)
easy and simple to understand.	
I believe that the government spend	Palil (2010); Shailender Sekhon (2017)
reasonable amount of tax revenue on social	
welfare, so I regularly fulfil my tax liability.	
	Palil (2010); Shailender Sekhon (2017)
laws.	
I believe that by paying tax, I can give benefit	Palil (2010); Shailender Sekhon (2017)
to other people especially the poor.	
	is a legitimate way for the government to collect revenue to manage an economy. To my knowledge, it is mandatory to file my income tax return on or before due date issued by the tax authority. I am aware that the non-compliance of taxes is a criminal offence. As per my information, I can't deduct my personal expenses in calculating my tax liability. I clearly knows about the deductions that I can claim in the computation of my tax liability. I regularly file my tax return as tax system is easy and simple to understand. I believe that the government spend reasonable amount of tax revenue on social welfare, so I regularly fulfil my tax liability. I assume that the penalty is lower than my tax liability due to which I don't comply with tax laws. I believe that by paying tax, I can give benefit

Objectives

- To examine the effect of attitude on tax compliance behaviour of individual direct taxpayers.
- To study the effect of tax knowledge on tax compliance behaviour of individual direct taxpayers.
- To determine the Interaction effect of attitude and tax knowledge on tax compliance behaviour.

Hypothesis Formulation

The following hypothesis were formulated to achieve the objectives of the present study.

- **H**₁ Attitude has a significant positive influence on tax compliance behaviour.
- **H**₂ Tax knowledge has a significant positive influence on tax compliance behaviour
- **H**₃ There exists significant interaction effect of attitude and tax knowledge on tax compliance behaviour.

Research Methodology

Research Design

The present research paper used quantitative research method and descriptive research survey to find out the moderating effect of education in relation between attitude and tax compliance behaviour.

Population

Population for the present study was individuals' taxpayers who have filed either ITR 3 or ITR 4 SUGAM. Therefore, as per official records of Income tax department, total 6.77 crore ITRs filed till 31st July, 2023 for AY 2023-2024, total number of individuals i.e., 2.564 crore (75.40 lakhs filled ITR 3 and 1.81 crore filed ITR 4 SUGAM) represent population for the present research work.

Questionnaire

The present research paper used a self-administered questionnaire to collect data in order to evaluate the link between attitude and tax compliance behaviour with the moderating effect of education. Data is collected through a survey approach on individual taxpayers having business from the north

Indian region. The data was collected from October 2024 to January 2025. Questionnaire consisted of statements that measuring attitude, education and tax compliance behaviour. For the study, 5-point Likert scale was used for questionnaire survey and allowed for negative, positive, and neutral responses.

Sample Size

For achieving the objectives of the research, the primary data have been collected from the 500 individual direct taxpayers having business income in India. Taro Yamane formula has been applied for determination of sample size for the present study.

Sampling

In present study, Convenience sampling was used over other sample techniques for this study as it is the most effective and rapid method of gathering data (Sekaran & Bougie, 2016). The non-probability sampling, convenience sampling strategy, which is found to be appropriate for this study and particularly when the population is very vast (Etikan, Musa, & Alkassim, 2016).

Data Analysis

Descriptive Analysis

Primary data was collected from 500 individual taxpayers having business in India. Out of the 500 respondents, 385 were found to be male, whereas the remaining 115 were found to be female. Most of the respondents, that is, 17.8% of the total respondents, were found to be in the age group of 18-40. Further 57.6% of the taxpayers were found to in age group of 40-50, and 24.6% of the respondents were found to 50 years or older. The majority of the taxpayers (above 60%) were either graduate, postgraduates or any other qualifications. 77.6% of them were found in the range of income above 5 lakhs under the category of annual income. The essential data highlighting the demographic information of the respondents are displayed in Table 2.

Variables	Level	Frequency	Percentage	
Age	18-40	89	17.8	
	40-50	288	57.6	
	50 and above	123	24.6	
Gender	Male	385	77.0	
	Female	115	23.0	
Education	Matric	26	5.2	
	10+2	142	28.4	
	Graduation	208	41.6	
	Post Graduation	94	18.8	
	Others	30	6	
Type of Business	Trading	180	36.0	
	Service	141	28.2	
	Manufacturing	179	35.8	
Income Level	2.5 to 5.0 Lakhs	112	22.4	
	5 to 7.5 Lakhs	101	20.2	
	7.5 to 10 Lakhs	74	14.8	
	10 to 12.5 lakhs	68	13.6	
	12.5 to 15 Lakhs	50	10	
	Above 15 Lakhs	95	19	

Table 2: Demographic Profile of Respondents

Reliability, Validity and Measurement of Variables

Reliability

The reliability of the questionnaire was tested by using Cronbach's alpha coefficient. The study found that Cronbach's alpha of 0.920 for attitude measured with 5 items, 0.897 for tax compliance behaviour measured with 4 items and 0.925 for tax knowledge measured with 6 items. All values were greater than 0.700, all three constructs were found to be reliable.

Table 3: Reliability Analysis

Name of Constructs	No. of statements	Cronbach Alpha		
Attitude	5	0.920		
Tax Knowledge	6	0.925		
Tax Compliance Behaviour	4	0.897		

Validity

The validity of the instrument was ascertained using content validity and construct validity tests. For content validity, semi-structured interviews were conducted with 10 persons including 4 tax experts and 6 taxpayers having business income. Modifications were made in survey instruments as per the experts' opinions. The construct validity of the measurement scale assessing taxpayer tax behaviour is examined using the CFA approach. For construct validity, Exploratory factor analysis was employed. After confirming the presence of reliability and validity, the statistical fitness of the measurement model is assessed. The CFI and RMSEA indices are also strongly recommended because they are not affected by sample size (Hair et al., 2010) The results of the model fit indices were as follows: CFI = 0.978, TLI = 0.923 and RMSEA = 0.048

Table 4: Regression Weights

Path			Standardised path coefficients	Estimate	S.E.	C.R.	P value
TAK_1	<		0.857	1.000			
TAK_2	<		0.847	0.994	0.041	24.327	***
TAK_3	<	Tax	0.786	0.937	0.044	21.501	***
TAK_4	<	knowledge	0.772	0.877	0.042	20.892	***
TAK_5	<		0.787	0.834	0.039	21.531	***
TAK_6	<		0.877	0.968	0.037	25.855	***
ATT_1	<		0.739	1.000			
ATT_2	<		0.769	1.106	0.064	17.403	***
ATT_3	<	Attitude	0.926	1.334	0.063	21.236	***
ATT_4	<		0.864	1.216	0.062	19.763	***
ATT_5	<		0.869	1.266	0.064	19.904	***
CBEH_1	<	_	0.972	1.000			
CBEH_2	<	Tax	0.773	0.867	0.036	24.176	***
CBEH_3	<	Compliance Behaviour	0.837	0.801	0.028	28.766	***
CBEH 4	<	Bonaviour	0.751	0.764	0.033	22.880	***

Table 5: Convergent and Discriminate Validity

	CR	AVE	MSV	ASV
Tax Knowledge	0.926	0.676	0.370	0.115
Attitude	0.920	0.699	0.147	0.053
Tax_Compliance_Behaviour	0.903	0.702	0.341	0.088

Table 6: Model Fit Indices of Measurement Model

Fit indices	CMIN/DF	GFI	AGFI	CFI	TLI	NFI	RMSEA
Estimated Value	1.72	0.978	.0.902	0.978	0.923	0.947	0.048
Required Value	< 3	> 0.9	> 0.8	> 0.9	> 0.9	> 0.9	< 0.08

Findings of Study

The analysis examines the influence of attitude, tax knowledge, and the interaction of attitude and tax knowledge (denoted as ATT_TAK) on tax compliance behaviour. The findings reveal distinct patterns in how these variables impact compliance. Objective wise findings are as follow:

Objective

- To examine the effect of attitude on tax compliance behaviour of individual direct taxpayers.
- H₁ Attitude has a significant positive influence on tax compliance behaviour.

Table 7: Structural Parameter Estimates

			Estimate	S.E.	C.R.	Р	Label
Compliance	<	Attitude	036	.047	755	.450	
Compliance	<	Knowledge	.177	.045	3.935	***	
Compliance	<	ATT_TAK	.055	.009	6.073	***	

Interpretation: The above table 7 interpreted that attitude alone does not have a statistically significant impact on tax compliance behaviour as estimate of -0.036, a standard error (S.E.) of 0.047, a critical ratio (C.R.) of -0.755, and a p-value of 0.450. This p-value (greater than 0.05) suggests that attitude, when considered independently, is not a strong predictor of individual taxpayers.

Objective

- To study the effect of tax knowledge on tax compliance behaviour of individual direct taxpayers.
- H₂: Tax knowledge has a significant positive influence on tax compliance behaviour

Interpretation: In contrast, table 7 indicates that tax knowledge has significantly positive impact on tax compliance behaviour. The path estimate is 0.177 with a standard error of 0.045, and a critical ratio of 3.935. The associated p-value is denoted by '***', indicating a high level of statistical significance (p < 0.001). This suggests that individuals with higher knowledge about tax policies and procedures are more likely to comply with tax regulations.

Objective

- To determine the Interaction effect of attitude and tax knowledge on tax compliance behaviour.
- H₃: There exists significant interaction effect of attitude and tax knowledge on tax compliance behaviour.

Interpretation: Most notably, the interaction between attitude and tax knowledge (ATT_TAK) also shows a significant and positive effect on tax compliance behaviour. With an estimate of 0.055, a standard error of 0.009, and a critical ratio of 6.073, the p-value is again denoted by '***', confirming strong statistical significance. This result indicates that attitude alone may not directly influence on tax compliance, it moderates the relationship between knowledge and behaviour. In other words, individuals with a favourable attitude towards taxes are more likely to translate their knowledge into compliant behaviour, indicating that attitude enhances the effectiveness of tax knowledge.

In summary, the findings suggest that tax knowledge is a critical driver of compliance, and its effect is further strengthened when individuals hold a positive attitude toward taxation. This implies that both educational efforts and attitude-building initiatives are essential for improving tax compliance.

Conclusion, Implications, Limitations and Future Research Directions Conclusion

The present study examined the interaction effect of attitude and tax knowledge on tax compliance behaviour. This result indicates that attitude alone may not directly influence on tax compliance, it moderates the relationship between knowledge and behaviour. In summary, the findings suggest that tax knowledge is a critical driver of compliance, and its effect is further strengthened when individuals hold a positive attitude toward tax regulations. This implies that both educational efforts and attitude-building initiatives are essential for improving tax compliance.

Implications

Theoretical Implications

For academics, the results from the models support that taxpayers' attitudes and tax knowledge have significant effects on the tax compliance behaviour of Individuals. The findings suggest that taxpaying attitudes with the moderating influence of the tax knowledge dimension had a more significant contribution to the changes in tax compliance behaviour. This indicates that the tax authorities need to focus on boost the tax knowledge to enhance the tax compliance in India

Practical Implications

Policymakers and tax authorities need to see taxpayers' attitudes as a crucial factor while formulating and implementing tax policies. Tax authorities and government agencies should collaborate with tax education groups to boost taxpaying attitudes and tax compliance in the developing countries. In particular, tax authorities should countries efforts on tax enlightenment, education and campaigns using religious leaders as tax ambassadors, promoters and campaigners in Nigeria.

I imitations

- This study was conducted with a small sample size of 500 taxpayers.
- This study considered only individual taxpayers having business which is just one part of taxpayers defined under Income Tax Act, 1961.
- Taxpayers were found to be reluctant to contribute their opinions, leisure time and unwilling to share their incomes and tax information.

Scope for Future Direction

Can help the authorities to better understand the taxpayer compliance behaviour. This study considered only business individual taxpayers which is just one part among various taxpayers defined under Income Tax Act, 1961. Tax compliance behaviour of all taxpayers also effects the government tax income. So, future researchers can consider the other categories of persons for examine the tax compliance behaviour. Variables that have mediating effects could also be added on the conceptual framework of this study by future researchers.

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