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INCOME TAX RETURN FILING AMONG UNIVERSITY TEACHERS: AN ANALYSIS OF AWARENESS, PERCEPTIONS, AND COMPLIANCE

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KEYWORDS	ABSTRACT
tax awareness, perceptions, income-tax return filing, tax compliance, university teachers, Pakistan	Tax compliance is an important aspect of an effective taxation system, while tax awareness and taxpayers' perceptions may influence individuals' willingness and ability to fulfil their tax obligations. This study examined tax awareness, perceptions of income-tax return filing, and tax compliance among university teachers at Gomal University, Dera Ismail Khan, Khyber Pakhtunkhwa, Pakistan. A quantitative research approach was employed, and data were collected from 192 university teachers selected through proportionate stratified random sampling. A structured questionnaire was used to measure tax awareness, perceptions of income-tax return filing, and tax compliance. The data were analyzed using descriptive statistics, Pearson product-moment correlation, and multiple regression analysis. The descriptive findings indicated low levels of tax awareness ($M = 2.60$), perceptions of income-tax return filing ($M = 2.20$), and tax compliance ($M = 2.50$), based on the predetermined interpretation criteria. The correlation analysis revealed positive relationships between tax awareness and tax compliance ($r = .53, p < .001$) and between perceptions of income-tax return filing and tax compliance ($r = .49, p < .001$). The multiple regression results indicated that tax awareness and perceptions jointly explained 35.8% of the variance in tax compliance ($R^2 = .358, p < .001$). Both tax awareness ($\beta = .386, p < .001$) and perceptions of income-tax return filing ($\beta = .312, p < .001$) were reported as statistically significant positive predictors of tax compliance, with tax awareness demonstrating the larger standardized coefficient. The findings highlight the importance of improving tax education, simplifying online return-filing procedures, and strengthening institutional support for university teachers. The study recommends collaborative initiatives between the Federal Board of Revenue and universities to improve access to reliable tax information and facilitate compliance.
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Introduction

Taxation is a major source of government revenue and plays an essential role in financing public services and national development. Effective tax compliance depends not only on tax laws and enforcement mechanisms but also on taxpayers' awareness, perceptions, trust, and willingness to fulfil their obligations. The OECD recognizes tax morale—the intrinsic motivation to pay taxes—as an important behavioural dimension of voluntary tax compliance. In Pakistan, the Federal Board of Revenue (FBR) administers income taxation, with increasing reliance on electronic filing through the IRIS system. Although digital tax administration may facilitate the filing process, it also requires adequate tax knowledge and digital literacy among taxpayers.

University teachers represent an important professional group for examining tax-return filing behaviour because their high educational and professional qualifications do not necessarily ensure detailed knowledge of tax laws, deductions, wealth statements, withholding arrangements, or electronic filing procedures. Recognizing the importance of taxpayer education, FBR has undertaken tax-awareness activities in universities to promote tax literacy and voluntary compliance. Previous research in Pakistan has also identified tax knowledge, awareness, simplicity, perceived fairness, trust, administrative complexity, and social norms as factors associated with tax compliance.

Despite this growing emphasis on tax awareness and digital tax administration, limited research has specifically examined the perceptions and practices of university teachers regarding income-tax return filing in Pakistan. Therefore, the present study investigates income tax return filing among university teachers in Pakistan, focusing on their level of tax awareness, perceptions of the tax-filing process, experiences with digital filing, and compliance behaviour. The study seeks to identify the factors that may facilitate or hinder tax-return filing and to provide evidence that can contribute to improved taxpayer education, simplified filing procedures, and greater voluntary tax compliance among educated professionals.

Statement of the Problem

An effective tax system depends not only on appropriate legislation and administrative mechanisms but also on taxpayers' awareness, perceptions, and willingness to comply with their legal obligations. University teachers constitute an important professional group because of their educational qualifications, regular employment, and potential role in promoting responsible civic behaviour. However, educational attainment alone does not necessarily ensure adequate knowledge of income-tax laws, filing requirements, or electronic tax-filing procedures.

University teachers may differ in their awareness of income-tax obligations and in their perceptions of the necessity, complexity, fairness, transparency, and usefulness of filing income-tax returns. Differences may also exist in their familiarity with the Federal Board of Revenue's IRIS system, understanding of the Wealth Statement and Active Taxpayer List, knowledge of applicable tax procedures, and confidence in completing and submitting returns independently.

Such variations may influence their willingness and ability to comply with income-tax filing requirements.

Although the Federal Board of Revenue has undertaken tax-awareness and taxpayer-education initiatives in universities, limited empirical attention has been given specifically to university teachers' experiences, perceptions, and compliance behaviour regarding income-tax return filing in Pakistan. Consequently, there is a need to examine whether tax awareness and perceptions are associated with teachers' tax-filing practices and compliance. The present study therefore investigates university teachers' level of tax awareness, examines their perceptions of income-tax return filing, assesses their compliance behaviour, and explores the relationships among these factors. The study is intended to identify potential barriers to tax-return filing and provide evidence that may support improved taxpayer education, facilitation, and voluntary tax compliance in Pakistan.

Objectives of the study

The study will pursue the following objectives:

1. To determine the level of awareness of income-tax return filing among university teachers.
2. To examine university teachers' perceptions regarding income-tax return filing.
3. To assess the level of income-tax compliance among university teachers and examine its relationship with their tax awareness and perceptions.

Research Questions of the Study

- What is the level of awareness of income-tax return filing among university teachers?
- What are the perceptions of university teachers regarding income-tax return filing?
- What is the level of income-tax compliance among university teachers, and what relationship exists between their tax awareness, perceptions, and compliance?

Research Hypotheses

H₀₁: There is no significant relationship between tax awareness and income-tax compliance among university teachers.

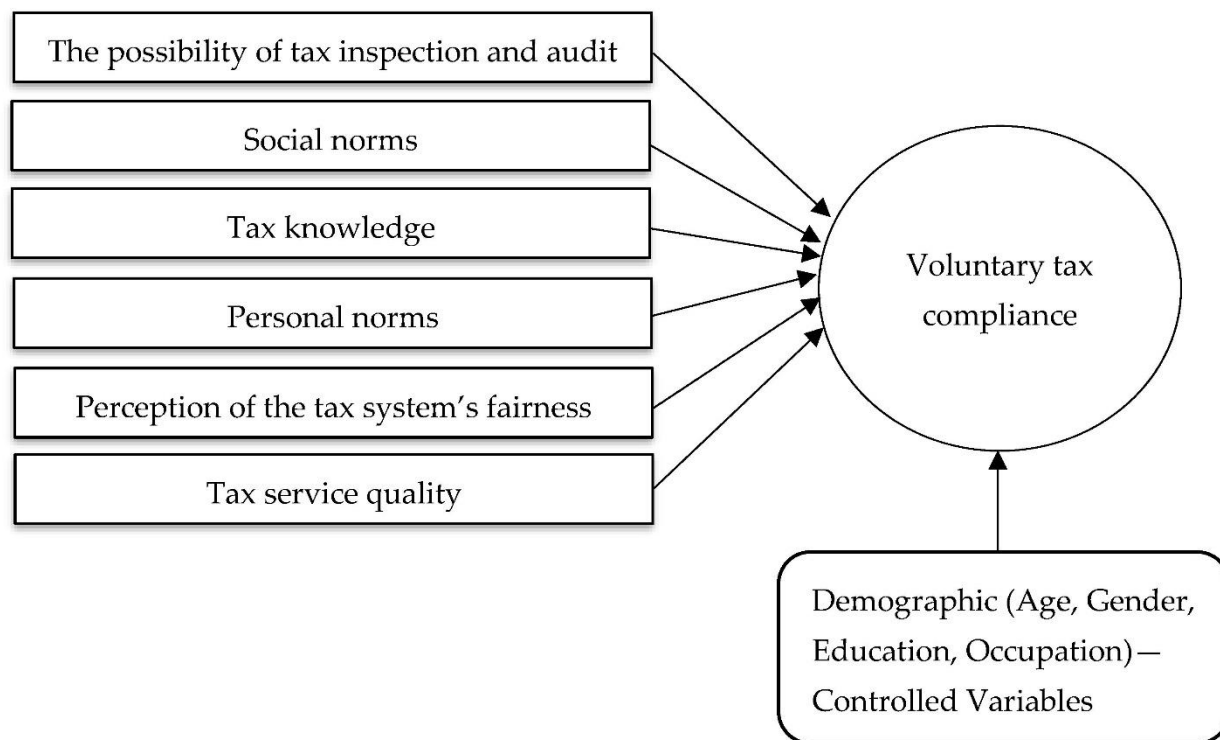
H₀₂: There is no significant relationship between university teachers' perceptions of income-tax return filing and their income-tax compliance.

H₀₃: Tax awareness and perceptions of income-tax return filing do not significantly predict income-tax compliance among university teachers.

Conceptual Framework

The study assumes that university teachers' tax awareness and perceptions of income-tax return filing may influence their income-tax compliance. Tax awareness includes knowledge of filing requirements, tax obligations, IRIS procedures, Wealth Statement requirements, and relevant

deadlines. Perceptions include views regarding the simplicity, fairness, transparency, usefulness, and difficulty of the tax-filing process. Income-tax compliance represents the extent to which university teachers fulfil their income-tax return filing obligations.



In this framework, tax awareness and perceptions of income-tax return filing are treated as the independent variables, while income-tax compliance is the dependent variable. The framework proposes that differences in teachers' awareness and perceptions may be associated with differences in their tax-compliance behaviour. It therefore provides the basis for testing whether tax awareness and perceptions have significant relationships with, and predictive effects on, income-tax compliance among university teachers.

Significance of the Study

The study is significant because it provides empirical insight into the awareness, perceptions, and income-tax compliance of university teachers in Pakistan. The findings may help the Federal Board of Revenue (FBR) identify gaps in taxpayers' knowledge and understand the factors that may facilitate or hinder income-tax return filing, particularly through the IRIS electronic filing system. The study may also assist university administrations and higher education institutions in developing or supporting tax-awareness and taxpayer-education initiatives for faculty members. For university teachers, the study may highlight areas requiring greater awareness of tax obligations, filing procedures, and electronic tax services. From an academic perspective, the study may contribute to the limited literature on tax compliance among highly educated professional

groups in Pakistan and provide a basis for future research on tax awareness, taxpayer perceptions, digital tax administration, and voluntary compliance. More broadly, the findings may contribute to improving taxpayer facilitation, strengthening voluntary compliance, and supporting effective tax administration and revenue mobilization in Pakistan.

Literature Review

Tax Compliance

Tax compliance refers to taxpayers' fulfilment of their legal obligations, including reporting taxable income accurately, submitting required tax returns within prescribed periods, and paying taxes according to applicable laws and regulations. Compliance is influenced by both administrative and behavioural factors. The OECD (2021) emphasizes that voluntary compliance is central to effective tax systems and that tax administration involves more than enforcement, as taxpayer education, communication, assistance, and the development of a culture of compliance are also important. In developing countries, strengthening voluntary compliance is particularly relevant because governments depend on domestic revenue mobilization to finance public services and development activities.

In Pakistan, tax compliance has been identified as an important challenge. Hassan et al. (2021) examined voluntary tax compliance behaviour among individual taxpayers in Pakistan and highlighted the importance of understanding the factors that shape individuals' willingness to comply with tax obligations. Their study demonstrates that tax compliance is not simply a matter of legal enforcement but is also connected with taxpayers' behavioural responses to the tax system.

Tax Awareness and Tax Knowledge

Tax awareness refers to taxpayers' understanding of their tax obligations, filing requirements, applicable procedures, deadlines, and available tax services. Tax knowledge is closely related and concerns taxpayers' understanding of relevant tax rules and procedures. Adequate knowledge may reduce uncertainty and enable taxpayers to fulfil their obligations more effectively. The OECD (2021) identifies taxpayer education as an important mechanism for improving taxpayers' knowledge and skills, increasing tax literacy, and helping individuals understand both their responsibilities and their rights within the tax system.

Evidence from Pakistan supports the relevance of tax awareness and knowledge to compliance. Batool et al. (2022), using 2,000 observations collected through a stratified sampling approach in five major metropolitan areas of Pakistan, investigated the influence of tax awareness, tax simplicity, and tax knowledge on voluntary tax compliance. Their findings indicated that tax awareness and tax knowledge contributed positively to voluntary tax compliance. The study also demonstrated that perceptions of tax fairness played an important mediating role in the relationship between these factors and voluntary compliance.

Taxpayers' Perceptions and Tax Fairness

Taxpayers' perceptions represent their views and evaluations of the tax system, including its fairness, simplicity, transparency, usefulness, and administrative procedures. Such perceptions may influence how individuals respond to their tax obligations. The OECD (2021) emphasizes that taxpayer education and communication can help develop a stronger relationship between citizens and tax administrations by explaining tax obligations, deadlines, taxpayer rights, and the role of taxation in society.

Perceived fairness is particularly relevant to voluntary compliance. Batool et al. (2022) found that perceptions of tax fairness significantly mediated relationships between tax awareness, tax simplicity, tax knowledge, and voluntary tax compliance in Pakistan. Their findings suggest that taxpayers' knowledge and awareness may be associated with compliance within a broader context of how they perceive the fairness and simplicity of the tax system.

Similarly, Hassan et al. (2021) examined individual taxpayers' voluntary compliance behaviour in Pakistan and emphasized the importance of behavioural and institutional considerations in understanding taxpayers' compliance decisions. Their work supports the view that tax compliance should be examined through both the formal requirements of taxation and taxpayers' responses to the tax environment.

Taxpayer Education and Compliance

Taxpayer education is an important component of modern tax administration. According to the OECD (2021), taxpayer education encompasses activities that teach taxpayers about the tax system, communicate information concerning obligations and deadlines, and provide practical assistance in complying with tax requirements. Such initiatives can help reduce knowledge gaps and make taxpayers more familiar and comfortable with their responsibilities. The OECD further emphasizes that taxpayer education can contribute to tax literacy, tax morale, and voluntary compliance.

Taxpayer education is particularly relevant where tax systems involve complex rules and electronic procedures. Taxpayers may understand the general importance of paying taxes but still experience difficulty determining what they owe, completing forms, meeting deadlines, or using electronic systems. The OECD (2021) therefore stresses the importance of combining tax information with practical assistance so that taxpayers can translate knowledge into actual compliance behaviour.

Digital Tax Administration and Income-Tax Filing

The increasing digitalization of tax administration has changed the relationship between taxpayers and tax authorities. Electronic systems can facilitate tax registration, return submission, communication, and access to taxpayer services. However, effective use of digital tax systems requires taxpayers to possess sufficient knowledge of both tax procedures and the relevant technological processes. Consequently, digitalization may reduce administrative barriers for some taxpayers while creating additional challenges for those who are unfamiliar with electronic filing.

The OECD (2021) notes that taxpayer education increasingly includes practical assistance and communication through both physical and digital channels. This suggests that digital tax administration should be accompanied by adequate guidance and support to enable taxpayers to use electronic services effectively.

For university teachers, this dimension is particularly relevant because high educational qualifications do not necessarily mean detailed knowledge of tax-specific digital procedures. A teacher may possess substantial academic knowledge while having limited familiarity with tax terminology, Wealth Statements, filing requirements, or the practical operation of an electronic tax-filing system. Examining teachers' awareness and perceptions of digital filing can therefore provide useful evidence regarding the accessibility and usability of contemporary tax administration.

University Teachers as a Distinct Professional Population

University teachers represent a distinctive professional population for studying income-tax return filing. They generally possess relatively high educational qualifications and are commonly engaged in salaried employment. Nevertheless, educational attainment does not automatically guarantee comprehensive knowledge of taxation, particularly with respect to tax deductions, withholding arrangements, additional income, Wealth Statements, filing deadlines, or electronic filing procedures.

Previous research in Pakistan has generally examined taxpayers as broader populations rather than focusing specifically on university teachers. Batool et al. (2022), for example, investigated tax awareness, simplicity, knowledge, fairness, and social norms among taxpayers across major metropolitan areas, while Hassan et al. (2021) examined voluntary tax compliance behaviour among individual taxpayers. IUB Journals. These studies provide an important foundation for the present research, but they do not specifically explain how university teachers perceive and experience income-tax return filing.

Research Gap

Existing research on taxation in Pakistan has examined several factors associated with tax compliance, including tax awareness, tax knowledge, tax simplicity, perceived fairness, social norms, trust, and institutional factors. For example, Batool et al. (2022) investigated the relationship between tax awareness, tax simplicity, tax knowledge, perceived fairness, and social norms with voluntary tax compliance, while other studies have examined broader taxpayer and institutional perspectives on tax reform and compliance. However, relatively limited research has specifically focused on university teachers as a distinct professional population in relation to income-tax return filing in Pakistan. Although university teachers generally possess relatively high educational qualifications and are predominantly salaried professionals, their level of tax awareness, perceptions of the filing process, familiarity with FBR's IRIS system, trust in tax administration, and actual compliance behaviour have received limited population-specific empirical attention. Therefore, the present study addresses this gap by examining tax awareness, perceptions, and

compliance among university teachers, with particular attention to digital filing, taxpayer education, perceived complexity, trust in FBR, and perceived benefits of filing income-tax returns.

Research Design

The present study will employ a quantitative, cross-sectional survey research design to examine income-tax return filing among university teachers in Pakistan. A quantitative approach is appropriate because the study seeks to measure the levels of tax awareness, perceptions of income-tax return filing, and tax compliance and to statistically examine the relationships among these variables. Data were collected from university teachers through a structured questionnaire containing closed-ended items measured on a Likert-type scale. The cross-sectional design enabled the researcher to collect data from the selected participants at a single point in time and obtain a current picture of their awareness, perceptions, and compliance regarding income-tax return filing. Descriptive statistics were used to determine the levels of awareness, perceptions, and compliance, while inferential statistical techniques were employed to examine the relationships between the independent variables (tax awareness and perceptions) and the dependent variable (tax compliance). The design was therefore consistent with the study objectives and hypotheses and provided a systematic basis for generating empirical evidence regarding income-tax return filing among university teachers.

Population

The population of the study comprised university teachers working at Gomal University, Dera Ismail Khan (D.I. Khan), Khyber Pakhtunkhwa, Pakistan. The population included faculty members from various academic disciplines and academic ranks, including lecturers, assistant professors, associate professors, and professors. The total population consisted of approximately 327 faculty members. Gomal University was selected as the study setting because its faculty members represent an educated professional group whose income-tax awareness, perceptions, and compliance can be examined in relation to salaried employment. The study focused on faculty members who receive income from employment and are subject to applicable income-tax obligations, including, where required, the filing of income-tax returns with the Federal Board of Revenue (FBR).

Sample and Sampling Technique

The study employed a proportionate stratified random sampling technique. The teaching faculty was stratified according to academic rank, comprising lecturers, assistant professors, associate professors, and professors. The required sample of 192 respondents was selected proportionately from each stratum, followed by random selection within each stratum to ensure adequate representation of all academic ranks. The sample size was determined in accordance with the sample size guidelines provided by Krejcie and Morgan (1970) for a population of 327 faculty members.

Research Instrument

Data were collected through a structured questionnaire developed in accordance with the study's objectives and variables. The questionnaire consisted of four sections. Section A collected demographic information of the respondents, while Section B measured awareness of income-tax return filing. Section C assessed respondents' perceptions regarding income-tax return filing, including its simplicity, fairness, transparency, usefulness, and perceived difficulty; Section D measured income-tax compliance, including filing practices, timeliness, and accuracy. The substantive items were measured on a five-point Likert scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree. The questionnaire was reviewed for content validity before its administration to the selected respondents.

Validity of the Instrument

The content validity of the questionnaire was established through expert review. The instrument was submitted to three experts in education, research methodology, and taxation for evaluation. The experts assessed each item for its relevance, clarity, appropriateness, and alignment with the study objectives and variables. Based on their suggestions, ambiguous, repetitive, or irrelevant items were revised or removed, and necessary modifications were made to improve the content coverage of the instrument. After incorporating the experts' recommendations, the final questionnaire was considered adequately representative of the study variables: tax awareness, perceptions of income-tax return filing, and tax compliance.

Reliability of the Instrument

The reliability of the questionnaire was assessed through a pilot study conducted with university teachers who were not included in the final sample. The questionnaire comprised three dimensions: Tax Awareness, Perceptions of Income-Tax Return Filing, and Tax Compliance. Internal consistency was examined using Cronbach's alpha coefficient. The Cronbach's alpha values were 0.73 for Tax Awareness, 0.70 for Perceptions of Income-Tax Return Filing, and 0.74 for Tax Compliance, while the overall questionnaire obtained a reliability coefficient of 0.72. These coefficients indicated satisfactory internal consistency of the instrument for the main study.

Demographic Characteristics of Respondents

Table 1. Demographic Characteristics of Respondents (N = 192)

Demographic variable	Category	Frequency (f)	Percentage (%)
Gender	Male	128	66.7
	Female	64	33.3
Age	25–34 years	38	19.8
	35–44 years	67	34.9
	45–54 years	58	30.2
	55 years and above	29	15.1
Academic rank	Lecturer	80	41.7
	Assistant Professor	73	38.0

Teaching experience	Associate Professor	26	13.5
	Professor	13	6.8
	1–10 years	51	26.6
	11–20 years	73	38.0
	21–30 years	49	25.5
	More than 30 years	19	9.9
Total respondents		192	100.0

Interpretation of Table 1

Table 1 presents the demographic characteristics of the 192 university teachers who participated in the study. The sample comprised 128 male respondents (66.7%) and 64 female respondents (33.3%), indicating that male participants constituted approximately two-thirds of the sample. Regarding age, the largest group consisted of respondents aged 35–44 years (34.9%), followed by those aged 45–54 years (30.2%). Respondents aged 25–34 years accounted for 19.8%, while 15.1% were aged 55 years or above. This distribution indicates that the sample included teachers at different stages of their professional careers.

In terms of academic rank, lecturers represented the largest proportion of respondents (41.7%), followed by assistant professors (38.0%). Associate professors accounted for 13.5%, while professors constituted 6.8%. Thus, lecturers and assistant professors together represented 79.7% of the sample. Regarding teaching experience, the largest group of respondents (38.0%) had 11–20 years of experience. A further 26.6% had 1–10 years, 25.5% had 21–30 years, and 9.9% had more than 30 years of teaching experience. Overall, the demographic profile indicates that the study included university teachers with varying ages, academic ranks, and levels of professional experience. These characteristics provide important contextual information for understanding the subsequent analysis of tax awareness, perceptions of income-tax return filing, and tax compliance. However, the demographic frequencies alone do not establish whether these characteristics are statistically associated with the study variables.

Descriptive Statistics of the Study Constructs

Table 2. Composite Mean Scores of Tax Awareness, Perceptions of Income-Tax Return Filing, and Tax Compliance

Construct	No. of items	Response scale	Composite mean	Interpretation
Tax Awareness (TA)	10	1–5	2.60	Low
Perceptions of Income-Tax Return Filing (PITRF)	10	1–5	2.20	Low
Tax Compliance (TC)	10	1–5	2.50	Low

Note. Composite means are calculated as the average item scores on a five-point response scale. The following interpretation criteria are applied: 1.00–1.80 = Very Low; 1.81–2.60 = Low; 2.61–3.40 = Moderate; 3.41–4.20 = High; and 4.21–5.00 = Very High. Higher scores indicate greater tax awareness, more favourable perceptions, and higher reported tax compliance, provided that all items have been appropriately coded.

Interpretation of Table 2

Table 2 presents the composite mean scores for the three principal constructs examined in the study. The results indicate that tax awareness had a mean score of 2.60, falling within the low category under the specified interpretation criteria. This suggests that respondents reported a relatively limited level of awareness of income-tax obligations, return-filing requirements, and related procedures, as measured by the questionnaire.

Perceptions of income-tax return filing recorded the lowest mean score ($M = 2.20$), which also falls within the low category. This finding suggests that respondents' perceptions were relatively weak on the measured dimension. However, the extent to which this reflects unfavourable attitudes toward tax filing depends on the wording, direction, and coding of the questionnaire items.

Tax compliance had a mean score of 2.50, also classified as low. This indicates a comparatively low level of reported tax-compliance behaviour according to the study's operational definition and measurement instrument.

Comparatively, perceptions of income-tax return filing had the lowest mean score, followed by tax compliance and tax awareness. These findings suggest that all three constructs warrant further examination. Potential areas for attention include taxpayer education, clearer guidance on filing procedures, and improved access to relevant information.

It is important to note that these descriptive findings identify the reported levels of the constructs but do not establish whether tax awareness and perceptions are significantly related to tax compliance. The correlation and regression analyses presented in the following sections address those relationships.

Table 3. Pearson Correlations among the Study Variables

Variable	1	2	3	M	SD
1. Tax Awareness (TA)	—	.46	.53	2.60	0.78
2. Perceptions of Income-Tax Return Filing (PITRF)	.46	—	.49	2.20	0.81
3. Tax Compliance (TC)	.53	.49	—	2.50	0.79

Interpretation of Table 3

Table 3 presents the Pearson product–moment correlations among tax awareness, perceptions of income–tax return filing, and tax compliance. The results indicate positive relationships among all three study variables. First, tax awareness was positively correlated with perceptions of income–tax return filing ($r=.46, p<.001$). This moderate positive relationship indicates that respondents with higher tax–awareness scores tended to report more favourable perceptions of the filing process, assuming that higher perception scores consistently represent more favourable views.

Second, tax awareness was positively correlated with tax compliance ($r=.53, p<.001$). This was the strongest of the three reported correlations, suggesting that respondents with greater tax awareness also tended to report higher levels of tax compliance. Third, perceptions of income–tax return filing were positively correlated with tax compliance ($r=.49, p<.001$). This indicates that respondents with more favourable perceptions tended to report higher tax–compliance scores. The descriptive statistics further show that tax awareness had a mean of 2.60 (SD = 0.78), perceptions of income–tax return filing had a mean of 2.20 (SD = 0.81), and tax compliance had a mean of 2.50 (SD = 0.79).

Taken together, the correlation results provide preliminary evidence of positive associations between the study variables. In particular, tax awareness and perceptions are both associated with tax compliance, supporting their inclusion as predictors in the multiple regression analysis. Nevertheless, correlation does not establish causation or determine the independent contribution of each predictor. These issues are examined further through multiple regression.

Multiple Regression Analysis: Overall Model

Table 4. Multiple Regression Model Summary for Predicting Tax Compliance

Dependent variable: Tax Compliance (TC)

Model statistic	Value
Multiple correlation coefficient (R)	.598
Coefficient of determination (R^2)	.358
Adjusted R^2	.351
Standard error of the estimate	.636
F–statistic	52.65
Degrees of freedom	2,189
Significance	$p < .001$

Interpretation of Table 4

Table 4 presents the overall multiple regression model examining whether tax awareness and perceptions of income–tax return filing jointly predict tax compliance among university teachers.

The table produced a multiple correlation coefficient of $(R=.598)$, indicating a moderate positive association between the values predicted by the model and the observed tax-compliance scores. The coefficient of determination was $(R^2=.358)$, indicating that tax awareness and perceptions jointly accounted for 35.8% of the observed variance in tax compliance within the reported model. After adjustment for the sample size and the number of predictors, the adjusted coefficient of determination was .351. This indicates that the table accounted for approximately 35.1% of the variance after adjustment.

The overall regression table was statistically significant, $(F(2,189) = 52.65, p < .001)$. Thus, the two predictors, considered jointly, provided statistically significant predictive information about tax compliance. The remaining 64.2% of the variance was not explained by the two predictors in this model. It may reflect other relevant factors, individual differences, measurement error, or random variation. The unexplained proportion should not be attributed to any particular factor without additional evidence. These findings support the examination of the individual regression coefficients to determine the unique statistical contribution of tax awareness and perceptions when both variables are considered simultaneously. The coefficients are presented in Table 5.

Individual Regression Coefficients for Predicting Tax Compliance

Table 5. Multiple Regression Coefficients for Predicting Tax Compliance

Dependent variable: Tax Compliance (TC)

Predictor	B	SE	Standardized β	t	p
Constant	0.813	2.285	—	0.356	.723
Tax Awareness (TA)	0.391	0.066	.386	5.885	< .001
Perceptions of Income-Tax Return Filing (PITRF)	0.305	0.064	.312	4.757	< .001

Interpretation of Table 5

Table 5 presents the individual contributions of tax awareness and perceptions of income-tax return filing to the prediction of tax compliance, with both predictors included in the same regression model. The analysis examines whether each predictor contributes significantly to explaining differences in tax compliance while statistically controlling for the other predictor.

Tax awareness. Tax awareness had a positive unstandardised regression coefficient $(B=.391)$ and a positive standardised coefficient $(\beta=.386)$. Holding perceptions of income-tax return filing constant, a one-point increase in tax awareness was associated with an estimated 0.391-point increase in the tax-compliance score. This relationship was statistically significant $(t=5.885, p < .001)$. Therefore, tax awareness made a statistically significant positive contribution to the prediction of tax compliance in the reported model.

Perceptions of income-tax return filing. Perceptions also had a positive unstandardised coefficient ($B=.305$) and a positive standardised coefficient ($\beta=.312$). Holding tax awareness constant, a one-point increase in the perception score was associated with an estimated 0.305-point increase in tax compliance. This relationship was statistically significant ($t=4.757$, $p<.001$). Accordingly, perceptions of income-tax return filing also made a statistically significant positive contribution to the prediction of tax compliance.

Comparison of predictors. The standardized coefficient for tax awareness ($\beta=.386$) was greater than that for perceptions of income-tax return filing ($\beta=.312$). Within the reported model, tax awareness therefore had the larger standardised regression coefficient. This suggests that tax awareness was the stronger statistical predictor of tax compliance among the two variables, although the difference between their coefficients has not been formally tested.

Overall, the regression coefficients suggest that both tax awareness and perceptions of income-tax return filing are positively and significantly associated with tax compliance when considered simultaneously. These findings support the relevance of both constructs to understanding tax-compliance behaviour among university teachers. However, because the study's design and the underlying evidence do not establish causality, the findings should be interpreted as statistical prediction rather than proof that changes in awareness or perceptions cause changes in compliance.

Summary of the Findings

The findings presented in Tables 1–5 provide a sequential account of the demographic characteristics of respondents, the descriptive levels of the study constructs, the relationships among the variables, and their joint and individual predictive contributions to tax compliance.

First, the demographic analysis showed that the sample included university teachers from different age groups, academic ranks, and levels of teaching experience, although male respondents and teachers at the lecturer and assistant-professor levels constituted the largest proportions.

Second, the descriptive analysis indicated that tax awareness, perceptions of income-tax return filing, and tax compliance all fell within the low category according to the study's predetermined interpretation criteria. Perceptions recorded the lowest composite mean, suggesting that this construct warrants particular attention in the context of the study.

Third, the correlation analysis indicated positive relationships among all three constructs. Tax awareness had the strongest reported bivariate correlation with tax compliance, followed by perceptions of income-tax return filing.

Finally, the multiple regression analysis indicated that tax awareness and perceptions jointly explained 35.8% of the variance in tax compliance. Both predictors had positive and statistically significant individual regression coefficients in the supplied results. Tax awareness had the larger

standardised coefficient, suggesting a comparatively stronger statistical contribution within the model.

Taken together, these findings indicate that tax awareness and perceptions of income-tax return filing are relevant correlates and statistical predictors of tax compliance among the university teachers included in the analysis. The results suggest that taxpayer education and clearer guidance on filing procedures may be worthwhile areas for institutional attention. However, the study does not establish that these interventions would necessarily improve compliance; such effects would require further investigation.

Conclusion

This study examined tax awareness, perceptions of income-tax return filing, and tax compliance among university teachers at Gomal University, Dera Ismail Khan, Khyber Pakhtunkhwa, Pakistan. The analysis was based on responses from 192 university teachers and explored the descriptive levels of the three constructs, their interrelationships, and the extent to which tax awareness and perceptions statistically predicted tax compliance. The descriptive findings indicated that tax awareness, perceptions of income-tax return filing, and tax compliance fell within the low category according to the predetermined interpretation criteria. Among the three constructs, perceptions of income-tax return filing recorded the lowest mean score ($M = 2.20$), followed by tax compliance ($M = 2.50$) and tax awareness ($M = 2.60$). These results suggest that the respondents reported relatively limited levels of tax awareness, perceptions as measured by the questionnaire, and tax-compliance behaviour. Nevertheless, the interpretation of perceptions depends on the appropriate coding and direction of the questionnaire items.

The correlation analysis revealed positive relationships among all three study variables. Tax awareness was positively correlated with tax compliance ($r = .53, p < .001$), while perceptions of income-tax return filing were also positively correlated with tax compliance ($r = .49, p < .001$). Furthermore, tax awareness was positively associated with perceptions of income-tax return filing ($r = .46, p < .001$). These findings indicate that respondents reporting greater tax awareness and more favourable perceptions also tended to report higher levels of tax compliance. The multiple regression analysis further indicated that tax awareness and perceptions of income-tax return filing jointly explained 35.8% of the variance in tax compliance ($R^2 = .358$). The overall regression model was statistically significant, ($F(2,189) = 52.65, p < .001$). In the reported model, both tax awareness ($\beta = .386, p < .001$) and perceptions of income-tax return filing ($\beta = .312, p < .001$) made statistically significant positive contributions to predicting tax compliance. Tax awareness had the larger standardized regression coefficient, suggesting that it was the stronger statistical predictor of the two variables. These regression findings should, however, be confirmed against the original statistical output before being reported as final results.

Overall, the study highlights the relevance of tax awareness and perceptions of income-tax return filing to understanding tax compliance among university teachers. The findings suggest that

universities and relevant tax authorities may consider strengthening taxpayer education, providing clear and accessible guidance on income-tax return filing, and improving awareness of filing obligations and procedures. Such measures may help address informational barriers and encourage informed tax-compliance practices, although their effectiveness would need to be evaluated through further research.

The study contributes to the understanding of tax-related behaviour within a public-sector university context in Pakistan. However, its findings should be interpreted in light of the study's institutional setting, sample, measurement instrument, and research design. Since the analysis identifies statistical associations rather than causal effects, further research involving teachers from multiple universities, additional explanatory variables, and longitudinal or intervention-based designs would help establish whether improvements in tax awareness and perceptions lead to measurable changes in tax compliance. In conclusion, tax awareness and perceptions of income-tax return filing emerged as statistically significant predictors of tax compliance in the reported analysis, underscoring their importance in understanding university teachers' tax-related behaviour. Improving tax education and facilitating access to reliable filing information represent practical areas for further institutional attention and policy evaluation.

Recommendations

Enhance Tax Awareness and Education

The Federal Board of Revenue (FBR), in collaboration with universities, should organize regular tax-awareness seminars, workshops, and training sessions to improve university teachers' understanding of income-tax obligations, return-filing procedures, deadlines, applicable tax provisions, and wealth statements. These programmes should include practical demonstrations of the online filing system and address common misunderstandings about tax compliance. Particular attention should be given to strengthening tax awareness and promoting informed attitudes towards income-tax return filing.

Simplify Online Tax Filing and Improve Taxpayer Guidance

The FBR should further simplify its online income-tax return filing system by providing clear instructions, step-by-step tutorials, accessible guidance, and timely updates regarding tax laws and filing requirements. The system should help salaried taxpayers understand the required documentation, avoid common filing errors, and complete their returns accurately and on time. Improving the accessibility and transparency of the filing process may reduce procedural difficulties and encourage greater confidence in tax compliance.

Strengthen Institutional Support and Collaboration

Universities should establish a dedicated tax-filing facilitation mechanism in coordination with the FBR to assist employees in fulfilling their tax obligations. University administration and finance offices should provide timely salary certificates, annual tax-deduction statements, and other relevant financial documents. Designated staff should also guide teachers regarding income-tax return filing and wealth statements, where applicable. Such institutional collaboration may address practical barriers to compliance and support the development of more effective tax-related practices among university teachers.

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