



International Journal of Recent Development in Engineering and Technology
Website: www.ijrdet.com (ISSN 2347-6435 (Online) Volume 15, Issue 04, April 2026)

Exploring Explicit and Implicit Determinants of GST Compliance: A Factor-Analytic Evidence from Textile Traders in North India

Vinay Kumar Dawar¹, Dr Parampreet Singh², Dr Karun Kant Uppal³

¹Assistant Professor, Sri Aurobindo College of Commerce and Management, Ludhiana, Punjab, India

²Assistant Professor, P.G. Department of Commerce and Management, Sri Guru Teg Bahadur Khalsa College, Sri Anandpur Sahib, Punjab, India

³Assistant Professor, P.G. Department of Commerce and Management, Kamla Lohtia SD College, Ludhiana, Punjab, India

Abstract— This study delves into the multiple determinants of Goods and Services Tax (GST) compliance, revealing both explicit and implicit factors that influence textile merchants in North India. Using primary data gathered from 540 dealers in Punjab and Haryana, the study uses Exploratory Factor Analysis (EFA) to identify latent structures that underlie compliance behavior. The findings show that a six-factor structure, which includes Psychological and Operational Stress, Infrastructure and IT Costs, Business Strategy and Operational Performance, Ethics and Tax Practices, Human Resource and Professional Services, and Registration-Related Perceptions, explains 72.23% of the total variance. Substantial internal consistency across all constructs is validated by reliability analysis. By combining behavioral and economic viewpoints, the results expand the body of research on tax compliance and show that decisions about compliance are influenced by psychological stress, ethical orientation, and strategic factors in addition to material expenses. The paper provides significant policy recommendations for enhancing GST compliance by using a balanced approach that addresses both behavioral dynamics and structural constraints.

Keywords— GST Compliance, Textile Traders, Exploratory Factor Analysis, Tax Compliance Behavior, Compliance Cost

I. INTRODUCTION

India's indirect taxation system underwent a paradigm shift with the introduction of the Goods and Services Tax (GST), which sought to improve transparency, reduce cascading effects, and create a single market. Despite these supposed advantages, GST compliance nevertheless presents a number of difficulties, especially for small and medium-sized businesses (SMEs), who sometimes have scarce resources and technological expertise. Textile dealers are a particularly significant category due to their fragmented system, reliance on unregulated procedures, and minimal levels of digital integration. Although GST has streamlined taxation by introducing mechanisms like input tax credit and digital return filing, these regulations have also made compliance more difficult for small traders.

The majority of the literature currently available on tax compliance focuses on structural and economic factors like administrative load, regulatory complexity, and compliance costs. However, new behavioral economics research indicates that psychological stress, ethical issues, and perception-based factors all have an equal impact on compliance behavior. These behavioral aspects become especially important in the context of GST, because compliance entails ongoing reporting, technological adaptation, and regulatory knowledge. Although this, there are barely any empirical studies that combine implicit (behavioral, perceptual) and explicit (physical, cost-related) elements into a cohesive framework. This disparity is notably noticeable in sector-specific research, particularly in the textile industry. In order to fill this gap, the current study uses Exploratory Factor Analysis (EFA) to determine the fundamental aspects of textile traders' GST compliance. The study offers a thorough grasp of compliance behavior in a real business environment by identifying latent variables and categorizing them into explicit and implicit categories.

II. LITERATURE REVIEW

In a study conducted by Garg, Modi, & Bhayani (2024) in which Surveys and expert interviews are used to examine the impact of GST on MSMEs in Rajasthan state. While acknowledging positives such as simpler compliance and enhanced transparency, it also emphasizes key concerns such as increasing compliance costs, IT expenses, delayed input tax credit refunds, and GSTN portal issues. Many MSMEs had cash flow challenges and depended largely on tax consultants. The report finds that, while GST has long-term promise, it has caused MSMEs to face short-term financial and operational challenges. Policymakers should put an emphasis on resolving the difficulties MSMEs experience especially those related to cash flow and the burden of compliance (Kesarwani, 2023).



Ghosh (2022) investigates in his study how small enterprises' informal methods of operation were disrupted by the implementation of the GST. Although the goal was to increase the number of enterprises in the formal system, it was discovered that many MSMEs encountered difficulties nominal benefits. Similarly, Shacheendran (2024) reported in his study using ISM approach that small firms found the registration and compliance procedure challenging due to issues like a lack of educated staff, insufficient digital infrastructure, and limited IT experience. One of the most mentioned factors that influence the compliance behavior is the *compliance cost*, which includes employing tax experts, buying accounting software, and training human resources (Pope, 1993; Pope & Rametse, 2001). A study by Pandey, Saxena, & Paliwal (2025) investigates the impact of GST on various stakeholders in Surat's textile industry, including manufacturers, wholesalers, retailers, consumers, and tax specialists. The authors employed surveys and interviews, as well as logit regression analysis, to determine if GST had increased the ease of doing business. Although GST compliance has grown simplified, but the findings reveal that the monthly filing obligation has increased dependency on tax professionals, rising operational costs. Furthermore, delays in tax refunds continue to be a major issue limiting corporate efficiency after GST.

To talk about the research gap, even though there has been a lot of research on tax compliance, most of it has only looked at behavioral and economic factors. There is inadequate empirical research incorporating these imensions into a single analytical paradigm. Furthermore, the application of Exploratory Factor Analysis to find a comprehensive factor structure for GST compliance is underexplored, particularly among small textile dealers. Using an independent statistical method, this study aims to close this gap by finding and validating both explicit and implicit variables of GST compliance.

III. RESEARCH OBJECTIVE

- To identify the underlying factors affecting GST compliance among textile traders using Exploratory Factor Analysis.
- To classify the identified factors into explicit and implicit determinants of GST compliance.

IV. RESEARCH METHODOLOGY

A. Data Collection and Instrument Design

The study is based on primary data obtained via a structured questionnaire intended to collect information on the various aspects of GST compliance. The questionnaire included many statements scored on a five-point Likert scale that ranged from "strongly disagree" to "strongly agree." The items were created using existing literature and realistic understanding of GST compliance-related issues.

B. Sample Design

A total of 540 textile traders were chosen from key trading locations in Punjab and Haryana. The sample includes both GST-registered and non-registered traders with annual sales less than ₹50 lakhs, assuring representation of small-scale business entities.

C. Analytical Framework

Exploratory Factor Analysis (EFA) was used to find latent constructs that underpin GST compliance. Factor extraction was carried out using Principal Component Analysis (PCA), followed by Varimax rotation to provide a simpler and more interpretable factor structure. Moreover, Cronbach's alpha was used to determine the reliability of the extracted factors.

V. RESULTS AND ANALYSIS

A. Suitability of Data

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.922
Bartlett's Test of Sphericity	Approx. Chi-Square	18667.252
	df	861
	Sig.	0.000

The Kaiser-Meyer-Olkin (KMO) index of sample adequacy was 0.922, indicating that the data was well-suited to factor analysis. Bartlett's Test of Sphericity was statistically significant ($\chi^2 = 18667.252$, $p < 0.001$), demonstrating the correlation matrix's suitability for factor extraction and the presence of meaningful correlations across variables.

B. Factor Structure and Variance Explained

Total Variance Explained			
Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	6.463	15.387	15.387
2	5.987	14.255	29.642
3	5.215	12.416	42.058
4	4.965	11.823	53.880
5	4.274	10.177	64.057
6	3.433	8.173	72.230

Extraction Method: Principal Component Analysis.

The analysis yielded six factors with eigenvalues greater than one, which accounted for 72.23% of the total variance. This high level of explained variance suggests that the investigated parameters accurately describe the underlying aspects of GST compliance. The scree plot provides additional support for the retention of six variables, as a noticeable break is evident after the sixth component.

C. Extracted Factors and their composition

Sr. No.	Factor	Statement	Rotated Factor Loading	Reliability (Chronbach Alpha)
1	Psychological & Operational Stress	S37	.938	0.955
		S12	.934	
		S29	.931	
		S40	.923	
		S39	.905	
		S35	.835	
		S31	.757	
2	Infrastructure and IT Costs	S36	.755	0.933
		S5	.895	
		S7	.865	
		S14	.858	
		S3	.852	
		S13	.819	
		S17	.795	
		S8	.764	
		S4	.731	
3	Business Strategy & Operational Performance	S18	.709	0.941
		S21	.925	
		S32	.906	
		S16	.900	
		S19	.848	
		S33	.847	
4	Ethics & Tax Practices	S15	.803	0.934
		S22	.785	
		S30	.918	
		S38	.889	
		S23	.887	
		S20	.858	

		S24	.857	
		S34	.790	
		S9	.722	
5	HR & Professional Services	S2	.929	0.924
		S6	.910	
		S11	.904	
		S27	.845	
		S1	.784	
		S10	.727	
6	Registration-Related Perceptions	S41	.883	0.892
		S28	.823	
		S25	.808	
		S42	.759	

D. Classification of Extracted Factors into Explicit and Implicit Dimensions

Based on the conceptual character of the retrieved elements, they were classed as explicit or implicit substitutes of GST compliance. Explicit elements pertain to concrete, measurable, and cost-related aspects of compliance, whereas implicit variables include behavioral, psychological, and perceptual dimensions that influence decisions related to compliance.

The variables "Infrastructure and IT Costs," "Human Resource and Professional Services," and "Registration-Related Perceptions" were designated as explicit factors since they indicate direct financial and resource costs borne by traders in complying with GST regulations. Investments in software, IT equipment, internet facilities, and professional skills are all monetary.

In contrast, "Psychological and Operational Stress," "Business Strategy and Operational Performance," and "Ethics and Tax Practices" were classified as implicit factors because they reflect non-monetary influences such as mental burden, strategic planning adjustments, and ethical considerations. These characteristics are subjective in nature and cannot be precisely quantified in financial terms.

This classification demonstrates that GST compliance is influenced not just by economic costs but also by behavioral and perceptual aspects, emphasizing the multifaceted character of compliance behavior.

VI. DISCUSSION

This study's findings support the multidimensional character of GST compliance by illustrating the importance of both explicit and implicit factors. While economic theories focus on monetary reasons, the current study emphasizes the equally significant role played by behavioral and psychological aspects.



International Journal of Recent Development in Engineering and Technology

Website: www.ijrdet.com (ISSN 2347 - 6435 (Online)) Volume 4, Issue 6, June 2015)

The widespread presence of psychological stress shows that streamlining compliance procedures and removing ambiguity can greatly increase compliance rates. Similarly, the prevalence of informal practices highlights the need for more robust enforcement and awareness campaigns.

By combining structural and behavioral perspectives, the study gives a more thorough explanation of compliance behavior that is consistent with current methodologies in tax compliance research.

VII. CONCLUSION, POLICY IMPLICATIONS, AND FUTURE RESEARCH DIRECTIONS

The current study conducts a thorough assessment of the drivers of GST compliance among textile traders, identifying and categorizing both explicit and implicit factors using Exploratory Factor Analysis. The findings show that GST compliance is intrinsically complex, influenced not only by real financial and infrastructure constraints, but also by behavioral, psychological, and strategic factors. The identification of six distinct factors—psychological and operational stress, infrastructure and IT costs, business strategy and operational performance, ethics and tax practices, human resource and professional services, and registration-related perceptions—shows that compliance behavior goes beyond traditional economic explanations. The division of these factors into explicit and implicit dimensions contributes to a better understanding of how measured costs and subjective judgments influence compliance.

From a policy standpoint, the findings indicate that attempts to improve GST compliance should not be restricted to lowering the financial burden alone. While streamlining procedures, lowering compliance costs, and providing technological support are critical for overcoming apparent hurdles, implicit factors such as psychological stress, ethical orientation, and perception of the tax system must also be addressed. Policymakers should prioritize lowering procedural complexity, guaranteeing clarity and stability in GST legislation, and boosting awareness campaigns that foster trust and boost tax morale among traders.

Furthermore, capacity-building activities that improve digital literacy and provide accessible professional support can dramatically reduce compliance issues for small enterprises.

Despite its positive attributes, this study has a few limitations. The study focuses on textile traders in Punjab and Haryana, which may limit the findings' applicability to other sectors or areas. Furthermore, the study uses cross-sectional data, which only reflects perceptions at one point in time and may not reflect changes in compliance behavior over time. Future research can address these limitations by expanding the study to include additional industries and geographical areas, as well as using longitudinal approaches to investigate the dynamic nature of GST compliance. Furthermore, additional analytical approaches such as Structural Equation Modeling (SEM) can be employed to validate and expand the factor structure discovered in this study.

REFERENCES

- [1] Garg, R., Modi, R. K., & Bhayani, S. (2024). Impact of GST on MSMEs: A Critical Assessment of Rajasthan State. *Journal of Commerce and Accounting Research*, 13(4), 92–99. <https://doi.org/10.21863/jcar/2024.13.4.010>
- [2] Ghosh, Sangeeta. (2022). Formalising the Informal through GST: Evidence from a Survey of MSMEs. *Review of Development and Change*, 27(2), 150–169. <https://doi.org/10.1177/09722661221130138>
- [3] Kesarwani, P. (2023). Impact of GST on the MSME Sector. *Jus Corpus Law Journal*, 3.
- [4] Pandey, A., Saxena, N., & Paliwal, U. (2025). Perceptions of the textile industry stakeholders on a multi-slab goods and services tax system in India. *Research Journal of Textile and Apparel*, 29(1), 149–161. <https://doi.org/10.1108/RJTA-04-2023-0046>
- [5] Pope, J. (1993). Compliance Costs of the Wholesale Sales Tax/Payroll Tax and the Proposed Goods and Services Tax. *Economic Papers*, 12(1), 69–77. <https://doi.org/10.1111/j.1759-3441.1993.tb00873.x>
- [6] Pope, J., & Rametse, N. (2001). Small Business and the Goods and Services Tax: Compliance Cost Issues and Estimates. *Small Enterprise Research*, 9(2), 42–54. <https://doi.org/10.5172/ser.9.2.42>
- [7] Shacheendran, V. (2024). An Analysis of GST Barriers Faced by Business Owners in India: An ISM Approach. *Metamorphosis*, 23(1), 46–61. <https://doi.org/10.1177/09726225241247353>