

## **Sentiment Analysis of Pilgrims at Bakreshwar Sati Peeth, Birbhum District, West Bengal**

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**Abstract:** Pilgrimage destinations in India evoke profound emotional and spiritual responses among visitors, which increasingly appear in digital narratives such as online reviews and social media comments. Analysing these textual expressions offers valuable insight into pilgrim perception and satisfaction. This study investigates sentiments associated with Bakreshwar Sati Peeth in Birbhum district of West Bengal, a revered Shakti shrine renowned for geothermal springs and Shaiva-Shakta worship traditions. A mixed-method framework combining questionnaire surveys (n = 250) and textual review mining (n = 520) was applied. Natural language processing techniques classified pilgrim sentiment polarity, while statistical procedures including reliability analysis, factor analysis, and structural equation modelling examined determinants of sentiment and satisfaction. Findings reveal predominantly favourable perceptions shaped by spiritual ambience and sacred bathing experience, whereas congestion and infrastructure limitations contribute to negative reactions. The study demonstrates how sentiment analytics can support evidence-based pilgrimage management and sustainable religious tourism planning.

**Keywords:** Pilgrimage Perception, Sentiment Mining, Religious Tourism, Shakti Peeth, Birbhum, Structural Equation Modelling

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