

Leveraging NLP to Analyze Emotions in Customer-Agent Interactions: Impacts on Satisfaction and Recommendation Intentions

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We investigate the impact of customer and agent emotions, as well as emotional matching, on satisfaction and recommendation intentions in a utilitarian service context. Employing transformer-based NLP algorithms, we analyze observed data from 25,008 call center conversations and compare our findings with prior survey-based research. Our analysis reveals that positive customer sentiment more strongly influences satisfaction and recommendation than negative sentiment. Negative emotions, while less impactful than positive ones, have a relatively greater effect on recommendation than on satisfaction. Agent emotions have a smaller impact on both outcomes compared to customer emotions. Emotional matching is generally beneficial, except when dealing with high-arousal negative emotions like anger. Our conceptual framework is grounded in theories of delight, formality, source credibility, emotional arousal, and loss aversion.

Keywords: *Call Center, Emotion, Customer Satisfaction*

Track: *Methods, Modelling & Marketing Analytics*