

“Sobel’s Model for Testing Intermediate Effect of Customer Satisfaction”

Dr. Raju Roshia¹, Dr. Fabio Rogerio De Morais²

¹Department of Commerce and Management, Tara Vivek College Gajjanmajra, Sangrur, Punjab, India.

²Management and Business, Applied Social Science Center, Rondônia Federal University, Brazil

ABSTRACT

The state of Punjab literally means Punj (five) ab (waters). The land of five rivers is situated in the northwestern corner of the India. Approximately 1068 travel agents were registered under Punjab Travel Professional Regulation Act 2012. This research identified the intermediate effect of customer satisfaction between reliability service quality dimension and behavior intentions of customers. The sample size consisted of 22 travel agents with 1000 respondents were selected for the research study. Customers who were interested to fill the questionnaire distributed by the front-desk employees of the travel agents office were invited to participate in this study. All the valid responses were interpreted and analysed by using Sobel’s Model. This research study strongly supported the intermediate effect of customer satisfaction between reliability service quality dimension and behavior intentions of customers. In past none of the study related to Sobel’s model in the state of Punjab were presented in the review of literature.

Keywords: *State of Punjab, Sobel’s model, travel agents.*

1. INTRODUCTION

Services are everywhere (Hoffman & Bateson, 2011). Accompanied by the disagreements and debates, the definition of services has never reached consensus. (American Marketing Association, 1960) defined services as “activities, benefits or satisfactions which are offered for sale, or are provided in connection with the sale of goods”. Researchers and scholars have different perspectives over the years (Parry, Newnes, & Huang, 2011) classified the services by

four features: intangible, heterogeneous, inseparable and perishable. These four ‘IHIP’ characteristics are features of what makes the service. To identify the intermediate effect of customer satisfaction between RATER service quality dimensions and behavior intentions of customers’ meets (Ahmed, Nawaz, Usman, Shaukat, & Ahmed, 2010) recommendations for more research in service sector while taking customer satisfaction as the mediating variable. This study extended linkage between RATER service quality dimensions and behaviour intentions of the customers while taking customer satisfaction into consideration. In review of literature, many researchers confirmed that customer satisfaction leads to favorable behaviour intentions. This study confirmed the intermediate effect of customer satisfaction between reliability service quality dimension and behavior intentions of customers in the state of Punjab. The research gap related to the lack of studies related (Ahmed et al., 2010) to study the impact of customer satisfaction as an intervening variable between service quality dimensions as independent variables (reliability) and behavior intentions as dependent variables with respect to service provided by travel agents in Punjab. (Bucy & Tao, 2007) proposed the causal model to explain the role of mediator and moderator variables in the research studies.

2. OBJECTIVE & RESEARCH HYPOTHESIS

The objective was “to identify the intermediate effect of customer satisfaction between reliability service quality dimension and behavior intentions of customers”. Accordingly, the null hypotheses were: **H₀**: There is no intermediate effect of customer satisfaction between reliability service quality dimensions and behavior intentions of customers.

3. LITERATURE REVIEW

(A. Parasuraman, Zeithaml, & Berry, 1994) developed three formats for questionnaire to assess the customer perceptions, Customers expectations and Behaviour intention battery. Exploratory factor analysis was employed to extract the factors for service quality dimensions. All the RATER dimensions showed a significant factor loading. Problems faced by the respondents to complete two set of questionnaires, before and after the benefits of the service were also

discussed. (Zeithaml, Berry, & Parasuraman, 1996) studied that dimensions of customer behaviour intentions were influenced by service quality. It included those organizations whose primary offering was tangible goods and mentioned some approaches to improve after sales and services benefits. (Zeithaml et al., 1996) developed some strategies to meet customer expectations and for survival in competitive environment. Three actionable dimensions were also added to previously mentioned dimensions: interaction, out come and environmental quality. (Michel, 2002) defined customer satisfaction as a subjective evaluation of the service encounters. It was defined as the foundation of marketing in services for satisfying customer's needs and wants as per requirement. Researcher also defined customers' satisfaction in terms of different kinds of cognitive experiences with the service provider. (A Parasuraman, Zeithaml, & Berry, 1988) suggested that behaviour intentions of the customers were the accurate indicators of the customer retentions. Increase in customer retention was the most important factor which produced the profits for the business. (A Parasuraman, Zeithaml, & Berry, 1988) list out loyalty, pay more, internal and external response as a dimensions of positive behaviour intentions. (Rust & Zahorik, 1993) provided the mathematical model to investigate loyalty and behaviour retentions. Both these dimensions played an important role to build up market share of the company. Pilot study was conducted to determine customer satisfaction and service quality elements. (Usman Babar, 2015) used the cross sectional and causal research design to investigate the relationship among three dimensions such as satisfaction level of the customers, behaviour intentions of the customers and service value. It was concluded from the study that service value has positive relation with behaviour intentions of the customers. Mediating impact of switching behaviour lies between satisfaction of the customers and behaviour intentions of the customers. Behaviour intentions of the customers' were influenced by service value which means higher the service value leads to satisfactory customer and lower switching behaviour among customers. (Bucy & Tao, 2007) explained the role of mediator and moderator variables in the research studies. Statistical procedures and SPSS analyses described that customer perceptions were acting as mediators and customer individual efficacy were acting as the moderator variables. The main purpose of mediating variable was to determine the effect of independent variable on the

dependent variable with the help of middle mediation variable. Strength and direction of moderator variable was investigated by using multiple regression analysis.

4. RESEARCH METHODOLOGY

This study employed a descriptive single cross sectional design. The data were collected by applying the area sampling technique at travel agents registered and licensed under Punjab Travel Professional Regulation Act, 2012. The data about travel agents and their geographical locations were collected from the secondary sources namely, Office of Deputy Commissioner and District Magistrate of 22 districts of the Punjab. A total of 1349 research questionnaires ‘SAQ’ were handed over to office receptionist of the surveyed 22 travel agents in different cities of Punjab. Out of 1349 distributed questionnaires, 1000 usable questionnaires were returned resulting in a 74.12 percent of response rate.

5. RESULTS AND DISCUSSIONS

Research objective was to identify the intermediate effect of customer satisfaction between reliability service quality dimensions and behavior intentions of customers. This section of the research study outlines the findings for research hypothesis in order to achieve research objective.

Sobel Test for mediation:

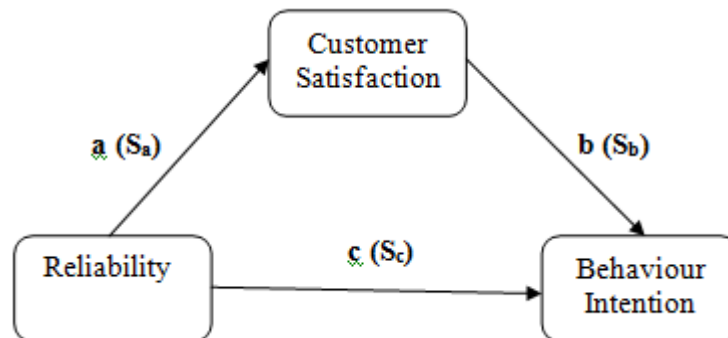


Figure: 1 Flowchart for Sobel Test for mediation (Reliability - CS – BI)

Sobel’s test of significance is performed to find the extent to which the customer behaviour (mediator) contributed to the total effect on the outcome variable. Aroian test and Goodman test proposed different standard error to test indirect effect. Sobel test was used to test the mediation on the given construct, where a,b & c are unstandardized regression path coefficients between their respective variables. S_a , S_b & S_c are standard errors.

Input:		Test statistic:	Std. Error:	p-value:
a	.278	Sobel test: 6.74557698	0.01978185	0
b	.480	Aroian test: 6.73865276	0.01980218	0
s_a	.039	Goodman test: 6.7525226	0.0197615	0
s_b	.023	Reset all	Calculate	

Picture: 1 Test statistic (Reliability - CS – BI)

After performing the Sobel test (online) as shown in picture 1 for mediation on the given construct, p – values for Sobel test < 0.05, for Aroian test < 0.05, for Goodman test < 0.05 respectively were obtained. This means mediation was statistically significant. It was depicted that customer satisfaction plays the mediation role between reliability service quality dimensions and behavior intentions of consumers.

6. CONTRIBUTIONS OF THE RESEARCH STUDY

This research study makes number of contributions to build on practical understanding of the travel agent service sector. Achieving research objective ‘to identify the intermediate effect of customer satisfaction between reliability dimensions and behavior intentions of customers’ meets (Ahmed et al., 2010) recommendations for more research in service sector while taking customer satisfaction as the mediating variable. This study extended linkage of reliability dimensions and behavior intentions while taking customer satisfaction into consideration. In review of literature many researchers confirmed that customer satisfaction leads to favorable behaviour intentions, this study confirmed the intermediate effect of customer satisfaction between reliability dimensions and behavior intentions of customers in the state of Punjab.

7. IMPLICATIONS OF THE RESEARCH

This research study gives a framework for better understanding the mediating effect of customer satisfaction between RATER dimensions and behavior intentions of customers. (Baker & Crompton, 2000) suggested structural equation model to study the effect of customer satisfaction between PSQ and behavior intentions of the customers. The finding of the research study shows that customer satisfaction has moderating effect between RATER dimensions and behavior intentions of customers. The significant relationship between these three constructs can be interpreted as positive behaviour intentions such as intention to revisit, intention to recommend and intention to pay more being positively influenced by encounter a best quality of service when customer is highly satisfied with the services of the travel agents. These research findings contribute to general body of knowledge on service quality by providing meaningful mediating linkage between reliability service quality dimension, customer satisfaction and behaviour intentions. The knowledge about the behaviour intentions of the consumers with respect to intention to revisit, intention to recommend and intention to pay more can enhance performance of the service provider travel agents by improving current strategies. This gives travel agents the ability to control unique resources to build superior profits. Travel agents managers should consider reliability dimensions and customer satisfaction as the determinants of the behavior intentions. Based on this research, satisfied customers have significant impact on behaviour intentions in terms of intention to revisit, intention to recommend and intention to pay more. Ultimately positive behaviour intentions lead to customer loyalty and long term profitability for the travel agents.

8. BIBLIOGRAPHY

Ahmed, I., Nawaz, M. M., Usman, A., Shaukat, M. Z., & Ahmed, N. (2010). A mediation of customer satisfaction relationship between service quality and repurchase intentions for the telecom sector in Pakistan: A case study of university students. *African Journal of Business Management*, 4(16), 3457–3462.

American Marketing Association. (1960). *Marketing definitions: A glossary of marketing*

terms. American Marketing Association.

Baker, D. A., & Crompton, J. L. (2000). Quality, satisfaction and behavioral intentions. *Annals of Tourism Research*, 27(3), 785–804. [https://doi.org/10.1016/S0160-7383\(99\)00108-5](https://doi.org/10.1016/S0160-7383(99)00108-5)

Baron, R. M., & Kenny, D. A. (1986). Baron & Kenny, 1986. *Journal of Personality and Social Psychology*, 51, 1173–1182.

Bucy, E. P., & Tao, C.-C. (2007). The Mediated Moderation Model of Interactivity. *Media Psychology*, 9(3), 647–672. <https://doi.org/10.1080/15213260701283269>

Hoffman, K. D., & Bateson, J. E. G. (2011). *Services Marketing: Concepts, Strategies, & Cases*. Retrieved from [http://202.74.245.22:8080/xmlui/bitstream/handle/123456789/304/Services Marketing%3A Concepts%2C Strategies%2C %26 Cases?sequence=1](http://202.74.245.22:8080/xmlui/bitstream/handle/123456789/304/Services%20Marketing%20Concepts%20Strategies%20Cases?sequence=1)

Michel, S. (2002). Exploring the service recovery paradox. *AMA Summer Educators' Conference*, 0–18.

Parasuraman, a, Zeithaml, V. a, & Berry, L. L. (1988). SERQUAL: A Multiple-Item scale for Measuring Consumer Perceptions of Service Quality. *Journal of Retailing*, 64, 28. [https://doi.org/10.1016/S0148-2963\(99\)00084-3](https://doi.org/10.1016/S0148-2963(99)00084-3)

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1994). Reassessment of Expectations as a Comparison Standard in Measuring Service Quality: Implications for Further Research. *Journal of Marketing*, 58(1), 111. <https://doi.org/10.2307/1252255>

Parry, G., Newnes, L., & Huang, X. (2011). Service Design and Delivery, 19–30. <https://doi.org/10.1007/978-1-4419-8321-3>

Rust, R. T., & Zahorik, A. J. (1993). Customer satisfaction, customer retention, and market share. *Journal of Retailing*, 69(2), 193–215. [https://doi.org/10.1016/0022-4359\(93\)90003-2](https://doi.org/10.1016/0022-4359(93)90003-2)

Usman Babar, M. (2015). Impact of service value on service satisfaction and behavioral intentions: Mediating role of switching barrier. *IOSR Journal of Business and Management* Ver. 1, 17(4), 2319–7668. <https://doi.org/10.9790/487X-17414751>

Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The Behavioral Consequences of Service Quality. *Journal of Marketing*, 60(2), 31. <https://doi.org/10.2307/1251929>