



## Mediating effects of employees' education on service quality and customer satisfaction: A study of resorts in Nepal

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### ABSTRACT

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This study was conducted to measure the mediating effect of employees' education on their service quality and customer satisfaction at selected resorts in Nepal. Six components of the contextualized SERVQUAL instrument were used to measure service quality and customer satisfaction. All components of service quality were not significant, with a positive direction for all components of customer satisfaction. However, service quality in terms of responsiveness was positively correlated to all six components of customer satisfaction. Assumptions of regression analysis were satisfied with education status, service quality in terms of responsiveness, and customer satisfaction. Therefore, to measure the mediating effect of employees' education on service quality and customer satisfaction, Hayes' simple mediation process model and multiple mediation analysis model-4 were used in this study, taking service quality in terms of responsiveness. To justify the results, segregated effects of employees' education status and its covariates were identified. In order to isolate the impact of employees' educational status, six covariates were employed: gender, age, ethnicity, experience, training, and professional education. The desegregated mediating effect of education status was 16.26% positive change on the dependent variable, customer satisfaction, whereas the segregated effect was 11.32% employing a simple mediation process model and a multiple mediation analysis model, respectively. Therefore, a positive and significant mediating effect of employees' education status was revealed on service quality in terms of responsiveness and all components of customer satisfaction in the resorts of Nepal.

**Contribution/Originality:** The article studies how employees' education influences service quality and customer satisfaction in Nepali resorts. It surveys 303 employees and customers and uses mediation models to analyze the data. It finds that education improves customer satisfaction through responsiveness, which is the key service quality factor. It advises resorts to hire and train educated employees.

### 1. INTRODUCTION

In the Ministry of Culture, Tourism, and Civil Aviation (MCTCA), one hundred one (101) tourist standard resorts were registered in Nepal on March 10, 2021 (Department of Tourism, 2021). Among them, one is characterized as luxury, one is deluxe, and fifty-seven (57) are for general tourist residents (resorts). Forty-two are still undefined (Department of Tourism, 2021). In the Nepali hospitality and leisure sector, some of the customers report having experienced low service quality in different tangible and intangible encounters, especially in the standard tourist resorts (Bista, 2009). It is very sensitive and crucial for customer loyalty and satisfaction (Mustafa

et al., 2022). Some resorts are still running without having their categories, such as general, deluxe, and luxury, defined by the government (Department of Tourism, 2021). Thus, the Ministry of Culture, Tourism, and Civil Aviation Department of Tourism (2014) observed that the quality of employees, quality of service, profitability, and legacy of the resorts were not up to the mark of their standard. Basically, service quality literature focused on improving the different tangible and intangible administered continuums and encounters (Khatoon, Zhengliang, & Hussain, 2020; Prasad, Wirtz, & Yu, 2014) of the hospitality industry but was not adequately focused on the impact of employees' education on the relationship between service quality and customer satisfaction at the workplace (Andi, 2019). Therefore, a rigorous study in this context was essential to fostering the resorts' performance.

Likewise, the empowerment of employees in different organizations probably ensures better performance. Bello (2012) and Bello and Bello (2015) argued that the performance of employees is significantly correlated to service quality and customer satisfaction in the different service sectors, more importantly in the hospitality and leisure industry. The educational background, training, and professional experience of employees have a pivotal role in determining their level of empowerment. Within the realm of hospitality business, it is observed that employees assume the role of representing the organization, thereby serving as the primary point of contact between the consumer and the organization (Bello, Bello, & Ifegbu, 2017). However, due to the different schooling of the employees, Nepali resorts are not able to claim their legacy of quality service across the country (Ministry of Culture Tourism & Civil Aviation Department of Tourism, 2014). According to the report of the University Grants Commission (2022), 46.24% of students are pursuing management, 22.18% in education, 7.98% in the humanities, 2.28% in law, 0.53% in Sanskrit, and 0.06% in Buddhism in general higher education. Similarly, Science and Technology cover 8.30%, Engineering 5.56%, Medical Science 5.38%, Forestry 0.21%, Agriculture 1.03%, Arteriovenous Fistula (AVF) 0.16%, and Ayurveda 0.08% of technical higher education. Most employees and professionals are joining from the first and few from the second discipline of education in the hospitality and leisure industry. According to the Hotel Association Nepal [HAN] (2021), two hundred thousand direct and 1.2 million indirect jobs are possible in the tourism industry of Nepal. Among them, eighty thousand females are directly involved, and four hundred thousand are indirectly involved in the tourism sector (Hotel Association Nepal [HAN], 2021). Thus, most of the required employability in the hospitality, tourism, and service sectors is supplied by different existing schools, universities, and institutions, whereas Nepali resorts are not behind in this scenario.

Service quality refers to how well a company delivers services that match or exceed the expectations of its customers (Okoeguale & Onobhayedo, 2022). It is a composite measure of the entire service system and its interactions with the customers, which involves the service environment, facilities, equipment, and the contact staff of the organization (Prasad et al., 2014). Many researchers, such as Khatoon et al. (2020), Parasuraman et al. (1985), and Parasuraman, Zeithaml, and Berry (1988), have defined service quality as meeting or surpassing the customer's expectations. Parasuraman et al. (1985) proposed a SERVQUAL model that consists of five dimensions of service quality: assurance, empathy, reliability, responsiveness, and tangibles. Assurance means the knowledge and courtesy of employees and their ability to inspire trust and confidence. Empathy refers to the act of delivering compassionate and individualized care to clients. Reliability refers to the ability to consistently and precisely deliver the committed service. Responsiveness refers to the inclination to assist clients and deliver timely service. Tangibles mean the appearance of physical facilities, equipment, personnel, and communication materials (Williams, 1998). The contextualized SERVQUAL model includes an 'Expectation' dimension that captures the customers' quality standards, brand standards, and experience-based norms, which was added through a modified Delphi technique.

According to the literature, customer satisfaction refers to consumers' post-consumptive assessments of particular goods or services. The expectancy disconfirmation paradigm of Oliver (1980) compared the perceived performance of a product or service to the customer's expectations to measure their satisfaction. Hence, the gap between performance and expectations statistically determines the customers' satisfaction. Bello et al. (2017) claimed, "If the perceived performance is less than the customer's expectations, then customer is dissatisfied; if the

perceived performance is exactly equal to the expectation of the customer, the customer is satisfied. Customers are said to be extremely satisfied when the perceived performance exceeds the customer's expectation." (p. 79). Therefore, statistically, satisfaction can be elaborated as the following equation:

$$\text{Dissatisfaction/Disconfirmation } (-S) = (P < E) \quad (1)$$

$$\text{Satisfaction } (S) = (P = E) \quad (2)$$

$$\text{Extreme Satisfaction } (+S) = (P > E) \quad (3)$$

Whereas P = performance level of service quality (perceived performances of the customer), E = expectation level of service quality (expectations of the customer) in different organizational settings.

Customers can be satisfied in two ways: by receiving services that meet or exceed their expectations or by receiving performances that match those expectations. The purpose of this paper was to measure the mediating effects of employees' education on service quality and customer satisfaction at the resorts in Nepal. The researchers believe the worldview of a single reality is what allows them to employ the deductive research approach. Therefore, three major variables were considered to conduct this study. Service quality was considered an independent variable, customer satisfaction was dependent variable, and the education status of the resorts' employees was the mediating variable in this regard.

## 2. LITERATURE REVIEW

Service providers possess or are associated with service quality, whereas consumers who purchase a good or service to satisfy a desire possess or are associated with satisfaction. Different studies conclude their opinions on the relationship between service quality and customer satisfaction. Liljander and Strandvik (1995) argued that customer satisfaction and quality are parallel. Similarly, Andreassen (2000) stated that service quality is crucial to customer satisfaction. In general, the higher the service quality of different continuums or encounters, the higher the satisfaction of the customers. Similarly, lower service quality is an orientation towards evils for the loyalty and brand recognition of the property (Andaleeb, 2001). According to Prasad et al. (2014) and other academics, acquiring new customers costs around five times as much in terms of money, resources, and time as retaining existing ones. If this statement is accurate, customer satisfaction is the heart of the service industry. We are unable to conceive of existence without it. On the other hand, a positive and significant correlation was identified by Bello et al. (2017) between service quality and customer satisfaction. Thus, a proper understanding and extraordinary attention with a high monetary value of service organization and individualized service quality are essential to addressing customer satisfaction in the hospitality and leisure industries.

The term education has a broad meaning. Service quality and customer satisfaction are assessments of the total administered service experience as well as the degree of education (empowerment) of employees inside an organization (Bello & Bello, 2015). Therefore, the employees are the name, fame, face, and voice of the organization and require adequate authority to make decisions on any matters concerning service delivery to customers (Bello et al., 2017). General and professional education as well as continuous training for quality service orientation is essential to employees' empowerment. Bello (2012) suggested that education and training of employees did not lead to customer satisfaction without providing excellent services. Thus, for service quality, education and training have positive and significant effects like service quality and customer satisfaction. Employee education and training mould the quality service, which could lead to customer satisfaction (Bello et al., 2017). Hence, the researchers are satisfied by the literature to argue that education could have a positive mediating effect in various forms of organizational settings. To test this argument, this research could be fruitful in the context of Nepali resorts.

## 3. CONCEPTUAL FRAMEWORK

This study adapted the concept from Parasuraman et al. (1985) contextualized SERVQUAL model. The six contextualized SERVQUAL components were used to measure the service quality from the perspective of the

resort’s employees. The actual service quality that was perceived by the resorts’ customers was considered for the customers’ satisfaction. To meet or exceed the expectations of the customers on the six components of service quality, satisfaction was considered statistically as the result of perceived performance minus the expectations of the customers. The employees’ education status was used as a positive mediator between service quality and customer satisfaction at the resorts. If all components of service quality were fulfilled with empowered performance (employees’ education) as per the customer’s expectation, which was considered to lead to the customer’s satisfaction, which has been presented in the Figure 1:

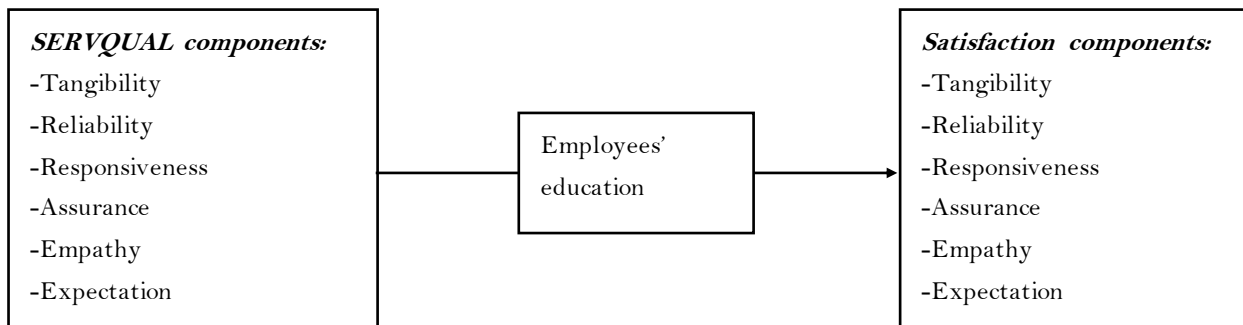


Figure 1. Components of SERVQUAL and satisfaction with employees’ education.

The tangibility component of service quality covers the physical aspects of the resorts, such as the facilities, equipment, personnel, and communication materials. The reliability component measures how well the resorts can deliver the service they promise in a dependable and accurate way. The responsiveness component reflects the readiness of the resorts to assist the customers and provide timely service. The assurance component assesses the level of expertise and professionalism exhibited by personnel, as well as their capacity to instill trust and inspire confidence in clients. The empathy component assesses how much the resorts care for and give individualized attention to their customers. The expectation component captures the quality standards, brand standards, and experience-based norms of the customers. Moreover, the education level of the employees is used as a mediator between service quality and customer satisfaction at the resorts.

**4. RESEARCH QUESTION AND HYPOTHESIS**

RQ1: To what extent does the employee’s education have a mediating effect on service quality and customer satisfaction in the resorts of Nepal?

H1: *There is a mediating effect of employees’ education on the relationship between service quality and customer satisfaction in the resorts of Nepal.*

**5. RESEARCH METHOD**

*5.1. Research Design*

The quantitative survey design was employed in this research to make statistical inferences about the total population. Statistical inferences strongly depend on the survey questionnaire (Groves et al., 2009). Data are collected on quantitative scales and analyzed using statistical tools, and also hypothesis is tested for generalizable findings at a certain level of significance.

*5.2. Population and Sample*

Most of the categorized resorts (81%) are established in the Bagmati province of Nepal (Department of Tourism, 2021). Therefore, 1320 employees working in the resorts of Bagmati province (Department of Tourism, 2021) are the units of the population to measure the service quality and employee education of this research.

Similarly, the number of guests visiting the resorts, out of those who stay at least one night, was the respondent's population to measure the customer satisfaction of the resorts. The sample for the study was collected from 303 respondent employees, and 303 respondent customers of different resorts were selected through a random sampling method.

### 5.3. Sources of Data

Primary data was collected using structured survey questionnaires through Google Forms. Similarly, secondary data were used for the different related documents and relevant literature. The variables of this study were measured by analyzing the contextualized SERVQUAL instrument's question statement, which was constructed using the Modified Delphi Technique using 10 anonymous stakeholders and experts. The questionnaires were distributed to the respondents through online.

### 5.4. Data Analysis Tools

The data were collected from the Bagmati province of Nepal using two sets of questionnaires. First is the Service Quality Survey Questionnaire (QSSQ) used to measure service quality. An extra section of employees' demography was also included in QSSQ to measure the mediating effect of education. Second, the Customer Satisfaction Survey Questionnaire (CSSQ) was used to measure customer satisfaction.

## 6. RESULTS AND DISCUSSION

### 6.1. Cronbach's Alpha

The study used Cronbach's Alpha to test the reliability of the questionnaires. 29 question statements were used to measure the service quality and customer satisfaction. More than 10% (31 employees and 32 customers) of samples were used for the pilot test to measure reliability and internal consistency. For validity, three stages of Modified Delphi Technique were conducted during the tool construction process. To assure reliability and internal consistency, Cronbach's Alpha was identified for all components of service quality and customer satisfaction, which are presented in Table 1:

Table 1. Alpha of QSSQ and CSSQ components.

S.N.	Components	Items	QSSQ alpha	CSSQ alpha	
				Performance	Expectation
1.	Tangibility	5	0.914	0.871	0.913
2.	Reliability	6	0.980	0.897	0.968
3.	Responsiveness	4	0.976	0.765	0.887
4.	Assurance	4	0.937	0.867	0.945
5.	Empathy	5	0.931	0.853	0.878
6.	Expectation	5	0.952	0.717	0.908
7.	Entire alpha	29	0.989	0.954	0.981

Cronbach's Alpha of the entire components in QSSQ and CSSQ (performance and expectation) showed the results in all components of service quality and customer satisfaction were more than the acceptable level ( $\alpha > 0.70$ ) that showed QSSQ and CSSQ were valid and reliable tools (George & Mallery, 2003) to measure the service quality and customer satisfaction of the resorts.

### 6.2. Respondents' Profile

#### 6.2.1. Employees' Profile

Employees working in all categorized resorts in Bagmati province, including Luxury, Deluxe, and General, were the population. Therefore, 303 employees out of the 1320 population were the sample respondents to this study. Their demographic profile has been presented in Table 2:

Table 2. Employees' demography.

Demography types		Frequency	Percent	Cumulative percent
Gender	Male	184	60.7	60.7
	Female	119	39.3	100
Age	Up to 20 years	12	4.0	4.0
	21 to 30 years	147	48.5	52.5
	31 to 40 years	111	36.6	89.1
	Above 40 years	33	10.9	100
Education status	Illiterate	22	7.3	7.3
	Literate	71	23.4	30.7
	Basic	82	27.1	57.8
	Secondary	100	33.0	90.8
	Higher education	28	9.2	100
Experience	Up to one year	26	8.6	8.6
	2 to 5 years	140	46.2	54.8
	6 to 10 years	93	30.7	85.5
	11 to 15 years	26	8.6	94.1
	Above 15 years	18	5.9	100
Ethnicity	Brahmin/Chhetri	110	36.3	36.3
	Madeshhi	35	11.6	47.9
	Janajati	112	37.0	84.8
	Dalit	24	7.9	92.7
	Others	22	7.3	100
Education type	General education	248	81.8	81.8
	Prof. education	55	18.2	100
Professional education	10+2 degree	85	28.1	28.1
	Bachelor's degree	30	9.9	38.0
	Masters or above	9	3.0	40.9
	Not received	179	59.1	100
Training duration	Up to one week	54	17.8	17.8
	15 days	88	29.0	46.9
	One month	113	37.3	84.2
	Three months	30	9.9	94.1
	6 months or above	18	5.9	100
Governmental training	Yes	150	49.5	49.5
	No	153	50.5	100
Private/Foreign training	Yes	154	50.8	50.8
	No	149	49.2	100

Table 2 showed that most of the service providers were male and young people aged 21 to 30 years with secondary education and 2 to 5 years of working experience. Therefore, regarding the service quality of the resorts, the majority of service quality is executed by the young, energetic, and dynamic employees having at least a secondary level of education from the *Janajati* ethnic culture of Nepal.

For service delivery, education and literacy are not mandatory. Intrinsic curtesy and values of hospitality are an inborn gift of eastern philosophy, whereas a countable number of illiterate (N = 22, 7.3%) employees were also observed as resort service providers. As to Nepalese normative notions and values, "*Atithi Devo Bhava*," or "the courteous and generous treatment of guests or customers," is the practice of treating guests or customers as though they are gods. In overall observation, the results indicated that the resorts required young and highly energized employees. The majority of the employees were least experienced (N = 140, 46.2%), and the least employees were highly experienced (N = 18, 5.9%). Similarly, most employees were generalists (N = 248, 81.8%) rather than specialists (N = 55, 18.2%) in the hospitality and leisure industry. Among the specialists, most employees had a degree of 10+2 from professional education. As per the course duration, the highest number of employees (N = 113) were one-monthly trained in the private or foreign hospitality and leisure industries and other professional training institutions.



### 6.2.2. Customers' Profile

A total of 303 respondents, resort customers from Bagmati province of Nepal, were taken for the database. Their demography has been mentioned in the following Table 3:

Table 3. Customers' demography.

Demography types		Frequency	Percent	Cumulative percent
Gender	Male	159	52.5	52.5
	Female	143	47.2	99.7
	Others	1	0.3	100
Age	Up to 20 years	12	4.0	4
	21 to 40 years	148	48.8	52.8
	41 to 60 years	131	43.2	96
	61 to 80 years	12	4.0	100
Region	Nepal	132	43.6	43.6
	Asia	93	30.7	74.3
	Europe	38	12.5	86.8
	America	23	7.6	94.4
	Australia	11	3.6	98
	Others	6	2.0	100

The customer's profile showed many of them were males, constituting 52.50% (N = 159) of the leading customers of the resorts. Nevertheless, male-dominated culture is shifting now, and as a result of this paradigm, the number of female customers is also getting high, constituting 47.2% (N = 143). Hence, the service provider required eagerness for the service types of both males and females to enhance the resort's service quality. Only negligible (N = 1, 0.3%) were from the other gender as a resort customer.

The majority of the resort's customers were middle-aged, between 21 and 40 years old (N = 148, 48.80%). The senior citizens were very few (N = 12, 4%). Therefore, the service provider should consider the service compatible with people under 60 years. The second group was also higher (N = 131, 43.2%) in the total of resort customers. However, from the perspective of behavior aspect, middle-aged (21 to 40 and 41 to 60) people may be professionally, biologically, and financially sound in their lives, and they can afford the cost of the resorts. Considering the region, most customers were Nepali (N = 132, 43.60%) and Asian (93, 30.70%). During data collection, most of the resorts were either closed or partly in operation due to Covid-19 pandemic. Thus, the possibility of more customers from abroad was very low. Therefore, most of the resorts were sustained by Nepali and Asian customers. After Nepali and Asian, European (N = 38, 12.5%) and American (N = 23, 7.60%) people were the second options for Nepali resorts. Somehow Australians (N = 11, 3.60%) and others (N = 6, 2%) also contributed to the revenue. Hence, overall observation of the database showed that Nepali resorts were focused on European and American clients to generate revenue after domestic and Asian clients.

### 6.3. Correlation Analysis

The normality of the data was checked before examining the correlation and regression between service quality and customer satisfaction. The average mean of six service quality components and customer satisfaction, as well as the SERVQUAL and satisfaction scores, were tested using Skewness and Kurtosis (Smalheiser, 2017). The normality assumption for  $\alpha = 0.05$  requires that the test statistics of Skewness and Kurtosis fall between  $\pm 1.96$  (Chin & Lee, 2008). However, most of the service quality statistics did not meet these assumptions (see Appendix 1). Therefore, the data did not follow a normal distribution. This ruled out the use of parametric tests. Instead, a non-parametric test, Spearman's correlation, was used to test the hypothesis. However, for regression, Hayes's (2022) model was used thereafter. In this study, Table 4 shows the relationship between each service quality (SQ) component and customer satisfaction (CS) component that has been presented below:

Table 4. Spearman's correlation between all components of SQ and CS.

Spearman's correlation between all components of SQ and CS		CS tangibility mean	CS reliability mean	CS responsiveness mean	CS assurance mean	CS empathy mean	CS expectation mean	Average mean of CS	
Spearman's rho (ρ)	SQ tangibility mean	Correlation coefficient	-0.141*	-0.125*	-0.111	-0.171**	-0.085	-0.078	-0.129*
		Sig. (2-tailed)	0.014	0.030	0.055	0.003	0.138	0.175	0.024
		N	303	303	303	303	303	303	303
	SQ reliability mean	Correlation coefficient	0.107	0.055	0.079	0.082	0.095	0.157**	0.094
		Sig. (2-tailed)	0.064	0.337	0.169	0.155	0.100	0.006	0.101
		N	303	303	303	303	303	303	303
	SQ responsiveness mean	Correlation coefficient	0.163**	0.157**	0.170**	0.118*	0.151**	0.178**	0.162**
		Sig. (2-tailed)	0.004	0.006	0.003	0.040	0.008	0.002	0.005
		N	303	303	303	303	303	303	303
	SQ Assurance mean	Correlation coefficient	0.007	0.017	0.025	-0.004	0.024	0.054	0.010
		Sig. (2-tailed)	0.904	0.772	0.661	0.948	0.677	0.346	0.863
		N	303	303	303	303	303	303	303
	SQ empathy mean	Correlation coefficient	-0.007	0.033	0.003	-0.017	-0.032	0.018	-0.021
		Sig. (2-tailed)	0.897	0.563	0.956	0.764	0.580	0.758	0.713
		N	303	303	303	303	303	303	303
	SQ expectation mean	Correlation coefficient	-0.117*	-0.043	-0.105	-0.075	-0.057	-0.033	-0.085
		Sig. (2-tailed)	0.043	0.453	0.069	0.191	0.320	0.567	0.138
		N	303	303	303	303	303	303	303
	Average mean of SQ	Correlation coefficient	0.011	0.036	0.023	-0.008	0.036	0.072	0.023
		Sig. (2-tailed)	0.854	0.537	0.691	0.887	0.535	0.213	0.696
		N	303	303	303	303	303	303	303

Note: \*. Correlation is significant at the 0.05 level (2-tailed), \*\*. Correlation is significant at the 0.01 level (2-tailed).



In this study, service quality in terms of tangibility and expectation components was negatively correlated with all components of satisfaction. Their direction with most of the components of customer satisfaction was also not significant. Nevertheless, service quality in terms of reliability was positively correlated with all components of customer satisfaction, but they were not significant to each other except the expectation component of customer satisfaction. Similarly, the assurance and empathy component of service quality had a positive as well as negative correlation with no significant direction to all components of customer satisfaction. However, it was fair to say that only service quality in terms of responsiveness was positively correlated with all components of customer satisfaction, explaining the significant direction in the resorts. Hence, to find out the effect of service quality on customer satisfaction, including education status as a mediating variable, only service quality in terms of responsiveness was taken for this study.

6.4. Regression Analysis

The binary logistic regression model showed significance for only two variables: service quality in terms of responsiveness and employee education status, which were positively significant to customer satisfaction. The professional education of employees also showed no significant result. Therefore, further statistical analysis of the effect among these variables has been performed. Considering the assumptions of statistical tests, normality, linearity, and homoscedasticity (presented in Appendices 2, 3, and 4) are satisfied for these variables: service quality in terms of responsiveness, education status of employees, and customer satisfaction, so Hayes’s Simple Mediation Process Model is employed to examine the direct, indirect, and total effect of service quality in terms of responsiveness and the mediating effect of employees’ education status on customer satisfaction (Hayes, 2022). Its summary has been presented in Appendix 5.

This mediation model was used to examine the causal antecedent variable of service quality in terms of responsiveness ( $X$ ) and transmit its effect on a consequent variable, customer satisfaction ( $Y$ ). It is the basic model, which includes two consequent variables, employees’ education status ( $M$ ) and customer satisfaction ( $Y$ ), and two antecedents, service quality in terms of responsiveness ( $X$ ) and employees’ education status ( $M$ ), with service quality in terms of responsiveness ( $X$ ) causally influencing customer satisfaction ( $Y$ ), and employees’ education status ( $M$ ) causally influencing customers satisfaction ( $Y$ ), which has been presented in the Figure 2:

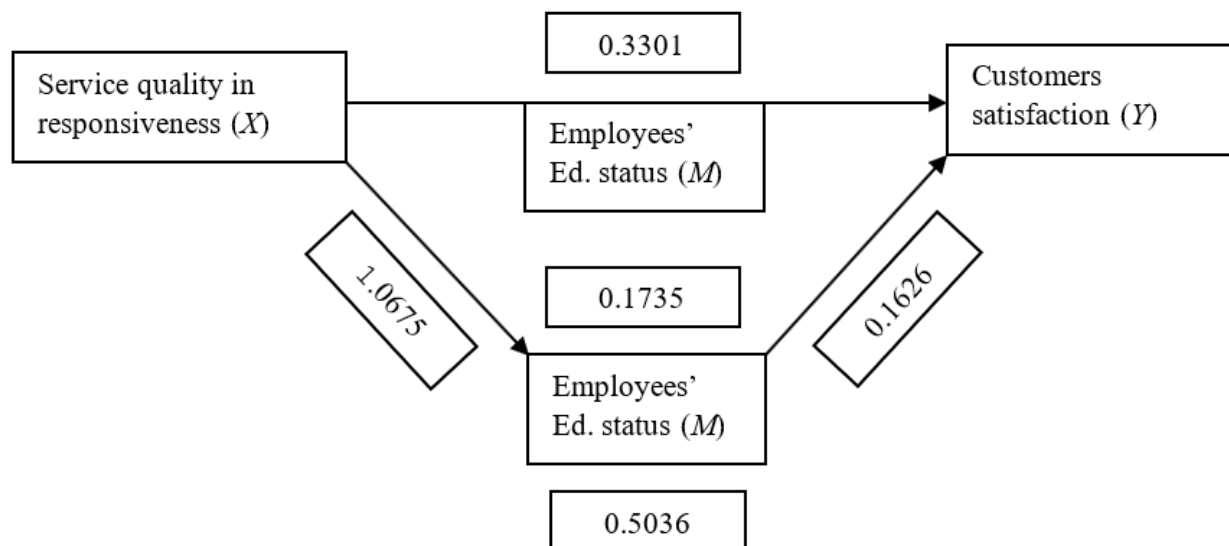


Figure 2. Effect of service quality with desegregated education status on customer satisfaction.

Figure 2 shows the effects of employee service quality with their education on customer satisfaction. A direct effect of service quality in terms of responsiveness on customer satisfaction is 0.3301 (When there is one unit of positive change in service quality in terms of responsiveness but the same in employees’ education status, 0.3301

units of positive change will occur in customer satisfaction). The mediating effect of employee education on customer satisfaction is 0.1626 (When there is one unit change in employees' education status, remaining service quality in terms of responsiveness is the same, 0.1626 units of positive change will occur in customer satisfaction). Indirect effect of service quality in terms of responsiveness on customer satisfaction is  $(1.0675 \times 0.1626) = 0.1735$  (When there is one unit change in service quality in terms of responsiveness where employees' education status is the same, 0.1735 units of positive change will occur in customer satisfaction as a result of the effect of service quality in terms of responsiveness on employees' education status, which in turn affects customer satisfaction). The total effect of service quality in terms of responsiveness on customer satisfaction can be measured by adding the value of direct and indirect effects of service quality in terms of responsiveness on customer satisfaction which is  $(\text{Direct effect} + \text{Indirect effect} = 0.3301 + 0.1735) = 0.5036$  (When there is one unit change in service quality in terms of responsiveness, 0.5036 units of positive change will occur in customer satisfaction).

Initially, Hayes (2022) Simple Mediation Process Model was employed to examine the direct, indirect, and total effects of service quality on responsiveness and the mediating effect of education status on customer satisfaction. However, the education status of the employee as a mediating variable was desegregated from the other possible affected variables to measure the effect on the dependent satisfaction variable of the resorts. Therefore, covariates of this study, such as gender, age, ethnicity, experience, professional education, and training of the employees, were identified. Subsequently, the researchers implemented to mitigate the influence of said covariates in order to access the impact of service quality, specifically in terms of responsiveness. Additionally, the researchers examined the mediating impacts of employees' education status on customer satisfaction to substantiate the assertions made in this study. Hayes (2022) Process Macro Multiple Mediation Analysis Model 4 was used to control the covariates of this study and its result has been presented in Figure 3:

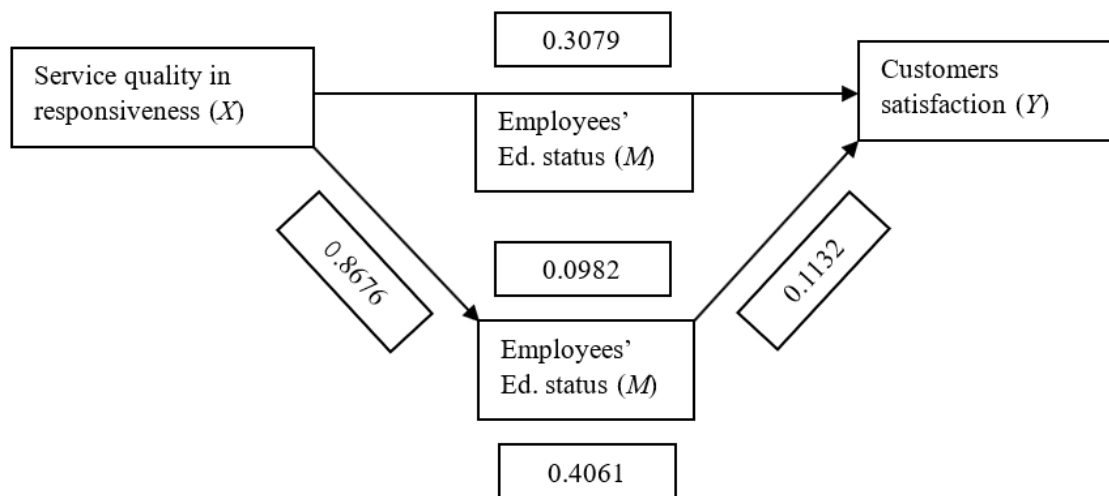


Figure 3. Effect of service quality with segregated education status on customer satisfaction.

In Figure 3, segregated mediating effect without covariates showed a 11.32% positive change in the dependent variable, customer satisfaction. However, the segregated mediating effect of education status was lower than  $(0.1132 < 0.1626)$  desegregated previous findings. Therefore, all six covariates of this study (gender, age, professional education, ethnicity, experience, and training of the employees) can have a 5.04%  $(0.1626 - 0.1132)$  significantly positive effect on the customer satisfaction of the resorts. Now, the researchers can claim that there is a significant and positive mediating effect of education status on the relationship between service quality in terms of responsiveness and all components of customer satisfaction in the resorts of Nepal.

## 7. DISCUSSION

Some studies have found a positive and significant link between service quality and customer satisfaction in the hotel industry (Bello et al., 2017; Bigne, Moliner, & Sánchez, 2003; Ham & Hayduk, 2003). However, this study did not find the same result for all aspects of service quality and customer satisfaction in Nepali resorts. Only responsiveness, one of the service quality components, had a positive and significant relationship with all customer satisfaction components. Therefore, this study partly supports the findings of previous studies (e.g., (Bello et al., 2017; Bigne et al., 2003; Ham & Hayduk, 2003).

Regarding the mediating effects, Bello and Bello (2015) indicated that hospitality employees are the organization's 'face and wealth'. Therefore, service quality could be updated by the employees' training and education status (demographic variables), which was a positive direction and explained significantly in the service quality of the resorts in Nepal. Similarly, the antecedents of gaps and employees' education (empowerment) shape the service quality standard. Therefore, employees' education is a crucial positive mediator between service quality and customer satisfaction in the resorts of Nepal.

## 8. CONCLUSION AND IMPLICATIONS

This study examined how service quality affects customer satisfaction through the mediating role of employees' education. It found that responsiveness, one of the service quality components, had a positive and significant direct effect on customer satisfaction, accounting for 30.79 percent of the change. When employees' education was added as a mediator, the indirect effect of responsiveness and education on customer satisfaction was 9.82 percent. The total effect of responsiveness alone and responsiveness and education together on customer satisfaction was 40.61 percent. The mediating effect of employees' education alone was 11.32 percent. Therefore, this study concluded that both responsiveness and employees' education are important factors for enhancing customer satisfaction and resort performance.

Regarding the relationship between service quality and customer satisfaction, the willingness to help the customer and to provide prompt services of the resorts is significantly positively correlated with satisfying their customers, rather than other aspects. Hence, more focus on responsiveness is essential than other service quality components. A notable positive mediating effect of the educational status of the employees is revealed in the relationship between service quality and customer satisfaction. Therefore, maintaining the required educational status of the employees is essential to enhancing the resort's performance. Functionally, customer satisfaction is the function of a direct effect in terms of responsiveness and an indirect effect by mediating the effect of employees' education status. Therefore, service quality in terms of responsiveness and the education status of employees are functionally correlated to satisfy resort customers.

## 9. FUTURE SCOPE

The concerned Nepali service providers, resort customers, and hospitality professionals in general can understand the relationship between the service quality of the resorts and consumer satisfaction from this study. The stakeholders can also benefit from the finding that service quality in terms of responsiveness is given greater importance than other components of service quality. It could be better if the resorts started improving their service based on the employees' responsiveness component and education status. Therefore, they should focus on their willingness to help customers and provide prompt service to enhance their satisfaction and loyalty. Similarly, the broader geographical scope can be taken for future studies by the upcoming scholars to know and find out whether other factors or components, or even the newer ones, are more important to mould the customer's satisfaction towards the different resort's services in Nepal, and other mediating or moderating factors can be identified for future implication.

## 10. LIMITATIONS OF THE STUDY

The SERVQUAL model has been used to measure service quality (Parasuraman et al., 1988), and the expectancy-disconfirmation (Oliver, 1980) model has been used to measure customer satisfaction. Satisfaction was realized and quantified from the evaluative judgment of the customer after consuming specific products or services (perceived performance minus expectation of the customers), and service quality was realized from the perspective of resort employees. Therefore, the findings of this study can be taken as a reference only for standardizing the service quality components to meet or exceed the customer's expectations of the resorts.

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**Institutional Review Board Statement:** The Ethical Committee of the Kathmandu University School of Education, Nepal has granted approval for this study on 25 July 2021 (Ref. No. PhD Re-Reg-021).

**Transparency:** The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

**Competing Interests:** The authors declare that they have no competing interests.

**Authors' Contributions:** All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.

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Appendix 1. Normality Test: Descriptive statistics.

Normality of SERVQUAL and satisfaction

	N	Skewness		Kurtosis	
		Statistic	Std. error	Statistic	Std. error
SQ Tangibility mean	303	-1.283	0.140	2.267	0.279
SQ Reliability mean	303	-1.134	0.140	1.694	0.279
SQ Responsiveness mean	303	-0.993	0.140	1.125	0.279
SQ Assurance mean	303	-1.231	0.140	2.184	0.279
SQ Empathy mean	303	-1.290	0.140	2.594	0.279
SQ Expectation mean	303	-1.096	0.140	1.398	0.279
Average mean of SQ	303	-1.398	0.140	2.487	0.279
CS Tangibility mean	303	-0.634	0.140	-1.129	0.279
CS Reliability mean	303	-0.638	0.140	-1.083	0.279
CS Responsiveness mean	303	-0.592	0.140	-0.904	0.279
CS Assurance mean	303	-0.678	0.140	-0.758	0.279
CS Empathy mean	303	-0.693	0.140	-0.846	0.279
CS Expectation mean	303	-0.697	0.140	-0.893	0.279
Average mean of CS	303	-0.662	0.140	-1.163	0.279
Valid N (Listwise)	303				

Note: SQ: Service quality, CS: Customer satisfaction (Failed the Normality test as per the literature)

Appendix 2. Normality test: Descriptive statistics

	N statistic	Maximum statistic	Skewness		Kurtosis	
			Statistic	Std. error	Statistic	Std. error
Average mean of satisfaction	303	0.48	-0.662	0.140	-1.163	0.279
SQ responsiveness	303	5.00	-0.993	0.140	1.125	0.279
Education status	303	5	-0.181	0.140	-0.793	0.279
Valid N (Listwise)	303					

Note: Test statistics of Skewness and kurtosis on customer satisfaction (Average Mean), SQ in terms of responsiveness, and Employees' Education Status is in between  $\pm 1.96$  (passed the normality test as per the literature).

Appendix 3. Linearity test.

ANOVA table (a)

			Sum of squares	df	Mean square	F	Sig.
Average mean of satisfaction responsiveness	Between groups	(Combined)	17.597	7	2.514	2.474	0.018
		Linearity	10.247	1	10.247	10.082	0.002
		Deviation from linearity	7.350	6	1.225	1.205	0.303
	Within groups	299.814	295	1.016			
Total			317.411	302			

ANOVA table (b)

			Sum of squares	df	Mean square	F	Sig.
Average mean of satisfaction Employee education	Between groups	(Combined)	20.774	4	5.193	5.217	0.000
		Linearity	14.842	1	14.842	14.910	0.000
		Deviation from linearity	5.932	3	1.977	1.986	0.116
	Within groups	296.637	298	0.995			
Total			317.411	302			

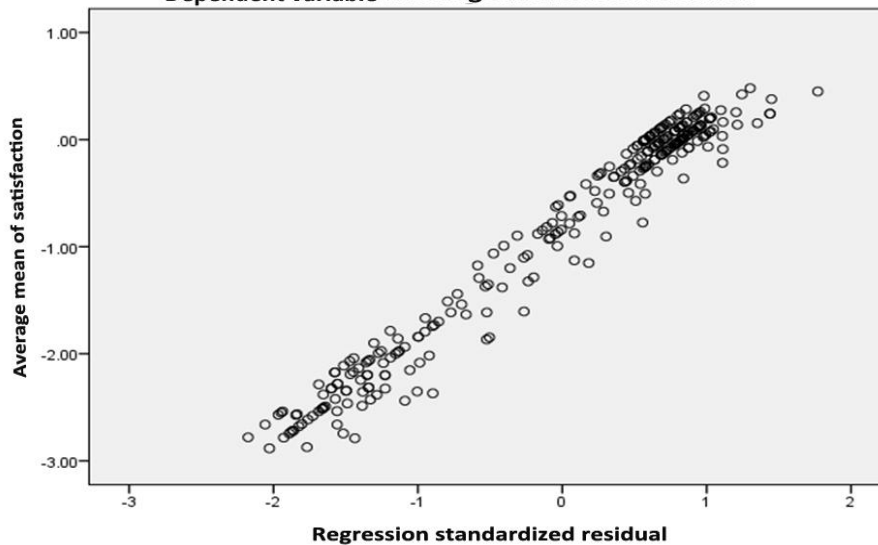
Note: Table (a) illustrates the average satisfaction on SQ in terms of responsiveness and Table (b) illustrates the average satisfaction on education status with significance (passed the linearity test as per the literature).

Appendix 4. Homoscedasticity test.

(a) Service Quality in terms of Responsiveness on Customer Satisfaction

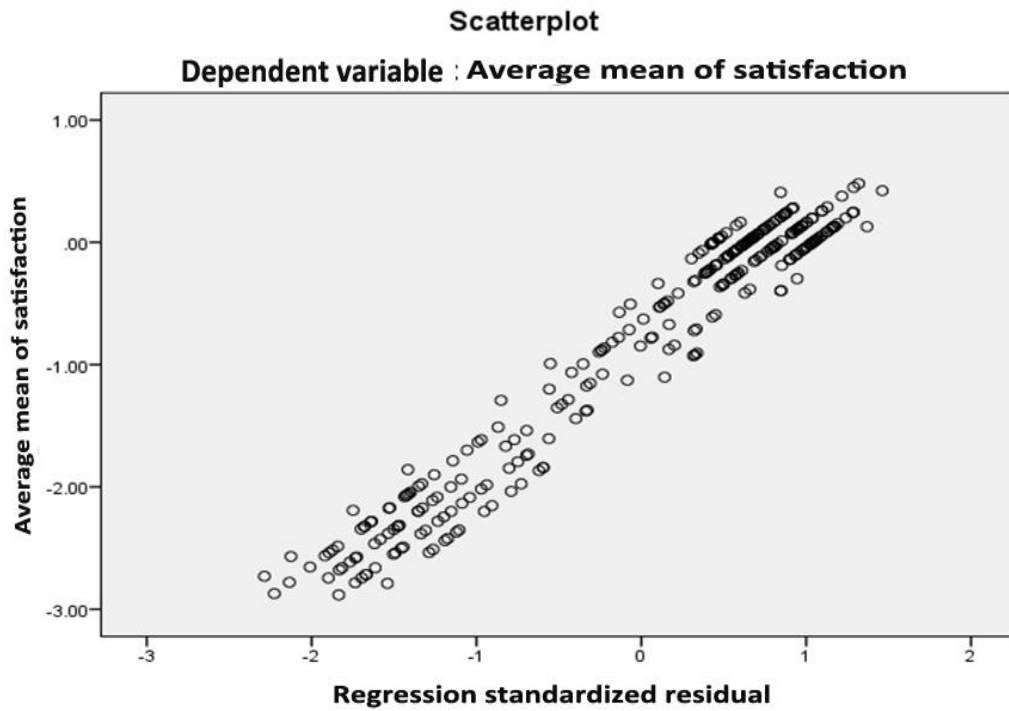
Scatterplot

Dependent variable : Average mean of satisfaction



Note: Passed the Homoscedasticity test.

(b) Employees' Education Status on Customer Satisfaction



Note: Passed the Homoscedasticity test.

**Appendix 5.** Desegregated effect of service quality in terms of responsiveness with education status on customer satisfaction.

<b>Outcome variable: Employees' Education</b>						
<b>Model summary</b>						
<b>R</b>	<b>R-sq</b>	<b>MSE</b>	<b>F</b>	<b>df1</b>	<b>df2</b>	<b>p</b>
0.3549	0.1260	1.0612	43.3825	1.0000	301.0000	0.0000
<b>Model</b>						
<b>coeff</b>	<b>se</b>	<b>t</b>	<b>p</b>	<b>LLCI</b>	<b>ULCI</b>	
constant	-1.7107	0.7381	-2.3176	0.0211	-3.1632	-0.2581
SE_Resp	1.0675.1621	6.5865	0.0000	0.7486	1.3864	

<b>Outcome variable: Customers' Satisfaction level</b>						
<b>Model summary</b>						
<b>R</b>	<b>R-sq</b>	<b>MSE</b>	<b>F</b>	<b>df1</b>	<b>df2</b>	<b>p</b>
0.2426	0.0589	0.9957	9.3844	2.0000	300.0000	0.0001

<b>Model</b>						
<b>Coeff</b>	<b>se</b>	<b>t</b>	<b>p</b>	<b>LLCI</b>	<b>ULCI</b>	
constant	-2.8224	0.7213	-3.9127	0.0001	-4.2419	-1.4028
Service quality in responsiveness	0.3301.1679	1.9656	0.0403	-0.0004	0.6605	
Employee education	0.1626.0558	2.9117	0.0039	0.0527	0.2724	

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