

## **CUSTOMER LOYALTY THROUGH THE LENS OF CUSTOMER RELATIONSHIP MANAGEMENT IN HIGHER EDUCATION SECTOR BALOCHISTAN**

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### **ABSTRACT**

*The imperative basis for profitability and increased market share for the businesses is the customer loyalty. To improve customer loyalty, the firms have to establish lasting relationship with customers. The present study investigates the influence of customer relationship management (CRM) on customer loyalty (CL). Moreover, it reveals whether service quality (SQ) and customer satisfaction (CS) functions as mediators. Data were collected using purposive sampling. Structural equation modeling via AMOS and PROCESS macro were used for the data validity, direct hypotheses' testing, and the mediating effects' estimation. The results reveal that the CRM directly and indirectly via SQ and CS influence CL. The current study enhances the understanding of the function of CRM in manipulating CL in higher education sector Balochistan.*

**Keywords:** Customer Relationship Management, Customer Loyalty, Service Quality, Customer Satisfaction

### **INTRODUCTION**

Customer loyalty (CL) is essential for businesses to attract new and retain current customers as it confirms consumers' conversion into customers (Mokhtar & Sjahrudin, 2019). CL also decreases the marketing related costs (Al-Gasawneh et al., 2022). After customers become loyal and develop opinions of an institute, managers should recognize customers and their desires through customer relationship management (CRM) to provide better services to their customers (Teo et al., 2006). CRM is prevalent approach to communicate with customers as it involve activities for instance; to identify and acquire new customers, to retain present customers, and to bring previous customers back, consequently it reduces customer service costs (Bahader, 2022).

The CRM can affect customer satisfaction (CS) and CS has vital outcomes for the financial performance as CL can be enhanced through entertaining their complaints and supported by CRM system (Cavaliere et al., 2021). For a business keeping current customers satisfied is among the trickiest responsibility, because dissatisfied customers in due course decides to discontinue business with the institute and this requires invest time and resources to bring back the customer and their loyalty (Rahayu et al., 2022). They further argued all businesses must constantly enhance their abilities to serve with the highest standards and by studying the customers' patterns of behavior can improve SQ and enhance CL.

CL in education is related to student loyalty (SL) which is necessary for the existence of a university as loyal students are assets (Safitri & Nurwulandari, 2022). They further argued that literature shows inconsistencies in SQ-CL relationship. Alves et al. (2022) also did not find any direct effect of SQ on CL. Chandra et al. (2022) also found no significant influence of SQ on student loyalty. An overabundance of research on CL in other sectors is observed with a relatively less attention in higher education (Latif et al., 2021). There is also relatively less research on CRM and CL in higher education (HE) sector Balochistan and no study was found which investigated the direct and indirect effect (through the mediation of SQ and CS) of CRM on CL in the HE sector in Balochistan. To fill these gaps there is a need of research in a comparatively less developed area of Pakistan. The CRM, SQ, CS, and CL are interrelated concepts which affect each other in a sequence. The present study investigated the

direct and indirect effect of CRM on CL in the higher education sector in Balochistan. This study can improve the understanding of the CL in an environment where the customer relationship is managed and the focus is on the SQ and CS.

### **Theoretical underpinning**

The effect of CRM on CL through CS is explained on the basis of social exchange theory (SET), as the interaction of CRM and CS leads to CL (Adeiza et al., 2022). They further explained that the foundation of CRM is that improved connections with customers are rewarded with CL, hence if organizations have strong relationships with consumers, they can be satisfied and loyal and high CL depends on how satisfied they are with the services. The other theory employed is the reciprocity theory which involves the obliging rewards have behavioral reactions as the parties entailed are indebted reciprocally-a compensatory action (Gontur et al., 2022). They emphasized that it leads to develop a strong future link, since a high SQ can develop CL in the context of service industry which is aimed at influential mutually advantageous relationship.

### **REVIEW OF LITERATURE**

The current study examines the direct effect of CRM on CL and indirect influence of CRM (through the mediation of SQ and CS) on CL in the HE sector in Balochistan. The constructs used in this study are; customer loyalty, service quality, customer satisfaction, customer relationship management. Customer loyalty (CL) is affection with goods or services (in this study the students are consider as customers therefore, student loyalty is used interchangeably with CL) which clearly influence students' attitude, for example, retention; word of mouth (WoM), adoption of new courses, and conscription of new students (Jhantasana, 2022). Service quality (SQ) is the customer's appraisal of the benefit from goods or services and its extent is decided by the receiving party, because they can determine SQ based on their expectations and satisfaction (Alves et al., 2022). Customer satisfaction (CS) is customer response or emotional reaction to a product or service and it is vital for service organizations as it has a strong association with excellence of service (Trisela & Hermanto, 2022). Customer relationship management (CRM) is a strategy that incorporates technology, business activities, and processes around the customer (Syaeful & Indradewa, 2022). It is a means to form and retain excellent relationships with customers (Sampurna & Miranti, 2022).

The extreme competition in the market forces the organizations to constantly improve SQ (Andriana et al., 2022). Customer service function is planned to keep customers satisfied while protecting the interests of the corporation (Fiiwe et al., 2023). CRM is an approach that institutes employ to retain customers and keep a good relationship with them and the employment of CRM in businesses unquestionably affects SQ positively (Al-Gasawneh et al., 2022). Based on above studies, a significant relationship is predicted between CRM and SQ, and the following hypothesis is proposed.

*H1: CRM has positive impact on SQ*

CRM has a favorable effect on CS as relationship building is enhanced by technologies to expand understanding of the customers' behavior and manage data about customers (Zainurrafiqi, 2023). In the present century, CRM has the key competitive edge in the market for attaining CS (Fiiwe et al., 2023). Managing the customer relationship effectively has a positive and significant effect on CS (Fithrianto et al., 2023). The findings of (Bahader, 2022) emphasized the workers to be more proactive in achieving CS and loyalty and would contribute to enhance the SQ. Based on above studies, a significant relationship is predicted between CRM and CS, and the subsequent hypothesis is proposed.

*H2: CRM has positive impact on CS*

CL is believed as a student's sympathetic relations to the HEI via positive comments about the HEI to others as high CL is a resource that brings competitive advantage and developing CL is vital to the existence of every HEI (Koomson, 2022). CL increases learning processes of an individual and the HEI's positive perception consequently having both individual and institutional consequences (Özdogru & Akyürek, 2022). The development of real loyalty, CS is required and it is essential to sustain close relationships to customers and the SQ and CRM have a noteworthy influence on CL (Farida & Jannah, 2022). Based on above studies, a significant relationship is predicted between CRM and CL, and the following hypothesis is proposed.

*H3: CRM has positive effect on CL*

The excellent SQ increases customer retention, adds extra purchases, enhances CL, and in addition builds and maintains a lifelong association with customers (Magasi, 2022). SQ in HE gradually

becomes more indispensable to success of a student and CS is persuaded by the SQ provided by an HEI consequently SQ positively affect CL (Mohammed, 2023). The high SQ becomes a more noticeable enticement since customers stay longer as they feel more satisfied and growing competition in the service sector push businesses to attain and retain customers and create CL (ClaraK et al., 2022). Based on above studies, a significant relationship is predicted between SQ and CL, and the subsequent hypothesis is proposed.

*H4: SQ has positive impact on CL*

CS determines the customer’s psychological state of an experience and reveals the feelings in reaction to students’ exchanges as unsatisfied customer may end their relation and the past studies have revealed that CS is essential in attaining continuation of behavior (Iranmanesh et al., 2022). CL develops when satisfied customers show interest in the organization’s products and these customers are not vulnerable to the influence of competitors (Naini et al., 2022). Founded on previous studies, a significant relationship is predicted between CS and CL, and the following hypothesis is proposed.

*H5: CS has positive impact on CL*

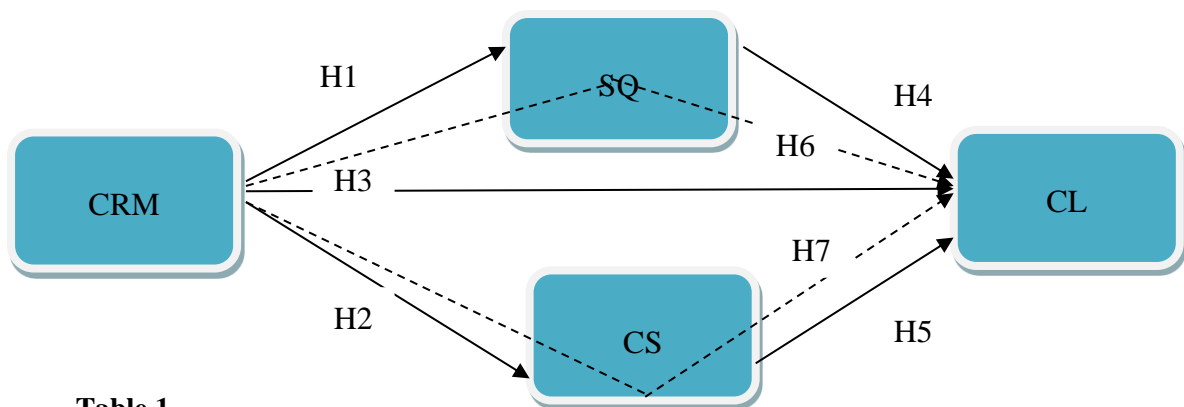
Sugiato et al. (2023) emphasized that CRM and SQ can effectively add to CS and CRM and SQ affect customer retention mediated by CS which can effectively contribute to the role of CS as a good mediator between CRM and other constructs. Pertiwi and Kusuma (2020) found that CRM indirectly influence customer retention through SQ as effect of CRM was significant, endorsing the effect of SQ as a mediator. Accordingly, Arianty & Marfah (2023, February) established that CRM indirectly has a positive and significant affect on CL through CS as mediating variable.

The focus of a recent research was to investigate the mediating effect of CS in the link between CRM and CL resulted in findings that CS partially mediates between CRM and CL (Adeiza et al., 2022). They argued that the intent to employ a CRM approach has an important effect on CS and CRM is among the most suitable means for retaining customer relationships which provides an opportunity for competitive edge as CRM is an essential to success. Based on earlier studies, SQ and CS are confirmed to have significant roles as mediators between CRM and CL, and the following hypotheses are proposed.

*H6: SQ mediates the relationship between CRM and CL*

*H7: CS mediates the relationship between CRM and CL*

**Figure 1**  
*Theoretical Framework*



**Table 1**  
Summary of the hypotheses

Hypothesis	Description
<i>H1:</i>	CRM has a significant effect on SQ
<i>H2:</i>	CRM has positive effect on CS
<i>H3:</i>	CRM has positive effect on CL
<i>H4:</i>	SQ has positive impact on CL
<i>H5:</i>	CS has positive impact on CL
<i>H6:</i>	SQ mediates the relationship between CRM and CL
<i>H7:</i>	CS mediates the relationship between CRM and CL

## **RESEARCH METHODOLOGY**

### **Research Design**

Research design gives the primary guidelines for the execution of a research (Hair et al., 2020). The most frequently research designs used are casual, descriptive, and exploratory (Chang & Hsieh, 1997). Descriptive research is applied to test hypotheses (based on theory) and is intended to measure the attributes expressed given in research questions (Hair et al., 2020), which is used in the present study.

### **Questionnaire Development**

The questionnaire is adopted from extant literature to ensure the reliability and validity.

### **Measurements**

The questionnaire includes items estimating the independent (CRM), dependent (CL) mediating (SQ and CS) variables with items adopted from extant literature. The basis of item scoring is 7-point Likert scale ranging from ‘1’ “*strongly disagree*” to ‘7’ “*strongly agree*”. SQ is measured with four items adopted from Todea, et al., (2022). Sample item includes “The courses and seminars offered by this university are always of a high quality”. CS is measured with six items adopted from Paul and Pradhan (2019). Sample item includes “I am satisfied with the quality of teaching”. CL is measured with four items adopted from Todea, et al., (2022). Sample item includes “If I had to choose a university today, I would choose this university”. CRM is measured with eight items adopted from Adikaram et al. (2016). Sample item includes “The Institution maintains a continuous dialogue with students”.

### **Questionnaire Pre-testing**

For the present study, the researcher conducted a pilot test of the questionnaire by studying selected 25 students from UoLi. This was conducted for the purpose of determining the reliability of the questionnaire. However, because the items are adopted, therefore, there might not be reliability issue, but as the context is different, a pre-testing was done.

### **Sampling Design and Sample Size**

Purposive sampling was employed, because of two reasons. First, the subjects are students of HIEs. Second, the cases are selected in purposive sampling with hope that they give unique and helpful information (Etikan et al., 2016). Hair et al. (2014) proposed several considerations that affect the sample size, which are: the missing data, normality, model complexity, techniques of estimation, and the reflective indicators’ average error variance. According to Hair et al. (2014), as indicated by the requirement of SEM (AMOS), recommended to multiply the manifest variables by 10 to get an appropriate sample size, therefore, the selected sample size for the present study is  $22 \times 10$  is equal to 220. After data collection the final sample size used for data analysis is 219.

### **Data Collection and Analysis Tools**

The researcher in his own supervision approached and collected data from the appropriate respondents. The data was collected from cases in the local universities (including UOLi, BUITEMS, and University of Baluchistan). For the preliminary data analysis and descriptive statistics, SPSS (Statistical Package for Social Sciences) version 20 was used. The other software employed was AMOS to run the SEM (Structural Equation Modeling) intended to elucidate the relations between variables. PROCESS Macro was used to estimate the mediating effects.

### **Data Analysis and Results**

The data were analyze for outliers, normality and missing values. The descriptive composition of the respondents are illustrated in Table 2. Prior to employing SEM, the data distribution normality is a requisite. Hence, for the purpose to check the normality of the data skewness and kurtosis were estimated. These indicators have the values much smaller than the predetermined values from -2 to +2, representing acceptable normality (Chan & Saad, 2019).

**Table 2**

*The Characteristics of the Respondents*

<b>Variables</b>	<b>Categories</b>	<b>Frequency</b>	<b>Percent</b>
<b>Gender</b>	Male	160	73.1
	Female	59	26.9
	Total	219	100.0
<b>Age</b>	18-24	121	55.3
	25-34	72	32.9
	35-44	26	11.9
	44 and above	-	-

<b>Education</b>	Total	219	100.0
	Undergraduate	135	61.6
	Postgraduate	84	38.4
<b>Marital status</b>	Total	219	100.0
	Single or unmarried	151	68.9
	Married	68	31.1
<b>Monthly income</b>	Total	219	100.0
	Less than 20,000	80	36.5
	20,000-49,000	55	25.1
	50,000 or above	84	38.4
	Total	219	100.0

Additionally, to evaluate the normal distribution of the data, the multivariate kurtosis was calculated and its critical ratio (C.R.) value indicates Mardia's normalized estimation (Byrne, 2013). A recommended value of greater than five of C.R. denotes the non-normal distribution. The value of -1.298 of C.R. categorically confirm normality.

### Model Assessment with CB-SEM

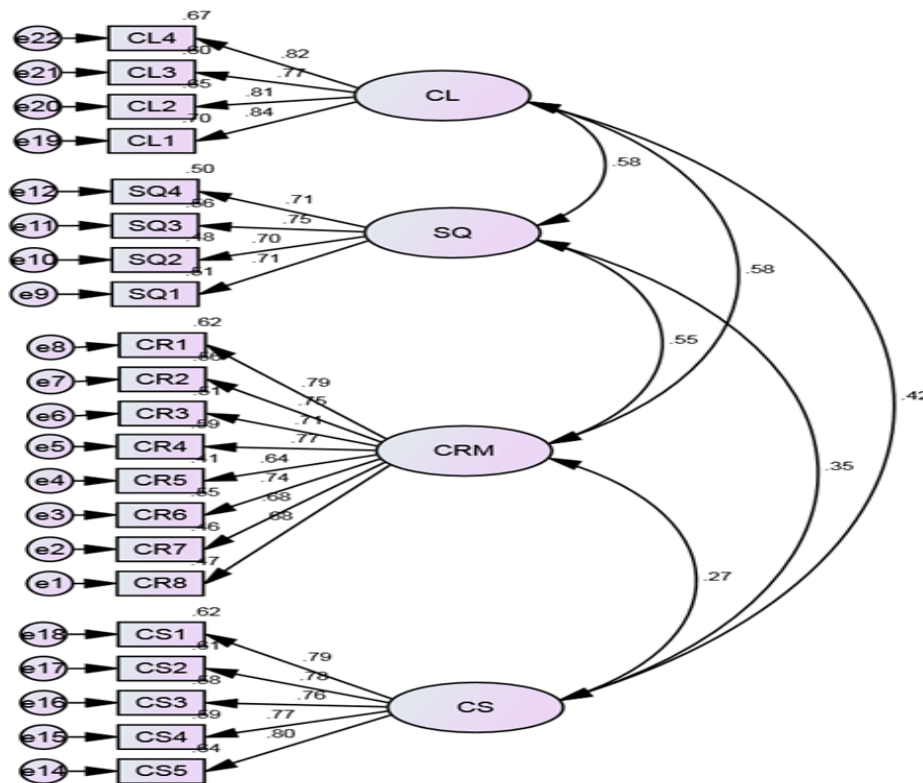
The CB-SEM analysis has two steps (Hair et al., 2018), which are measurement and structural model. The first explains the links among the indicators and related latent variables. The second explains the relations of the latent variables.

#### The Measurement Model

This model of SEM estimates the reliability and validity estimation in the connection among constructs and their items (Figure 2). The estimates of the measurement model are presented in Table 3, which illustrates all the loadings are higher than 0.5 and construct reliability (CR) is greater than 0.7 threshold value. Lastly, The AVE values are above 0.5 for each construct which was as per the required cutoff-value of 0.5. These threshold were achieved after the deletion of item CS6.

**Figure 2**

*The Measurement Model*



**Table 3**  
*The Measurement Model Evaluation*

Construct	Items	Standardized Loadings	C.R.	AVE
<b>Customer Relationship Management (CRM)</b>	CR8	.682	0.896	0.520
	CR7	.676		
	CR6	.744		
	CR5	.639		
	CR4	.769		
	CR3	.715		
	CR2	.748		
	CR1	.786		
<b>Service Quality (SQ)</b>	SQ4	.709	0.807	0.512
	SQ3	.745		
	SQ2	.696		
	SQ1	.711		
<b>Customers Satisfaction (CS)</b>	CS5	.802	0.885	0.607
	CS4	.768		
	CS3	.758		
	CS2	.778		
	CS1	.788		
<b>Customers Loyalty (CL)</b>	CL4	.820	0.884	0.655
	CL3	.774		
	CL2	.807		
	CL1	.836		

Note. CR = Composite Reliability, AVE = Average Variance Extracted.

The validity was evaluated; all loadings were significant showing convergent validity (Table 3); the construct's reliability values were higher than the 0.70 and all AVE values were more than the 0.50 threshold. To confirm the discriminant validity, the square root of AVE of each latent variable was estimated and was above than the correlations between the constructs (Table 4).

**Table 4**  
*Validity Test*

	CR	AVE	MSV	MaxR(H)	CS	SQ	CL	CRM
<b>CS</b>	0.885	0.607	0.179	0.886	<b>0.779</b>			
<b>SQ</b>	0.807	0.512	0.334	0.808	0.348	<b>0.715</b>		
<b>CL</b>	0.884	0.655	0.334	0.886	0.423	0.578	<b>0.810</b>	
<b>CRM</b>	0.896	0.520	0.333	0.900	0.273	0.546	0.577	<b>0.721</b>

Note. CR = Composite Reliability, AVE = Average Variance Extracted, MSV = Maximum Shared Variance. And diagonal bolded values show the square root of AVE.

#### Fitness of the Model

The hypothetical model must fit with the data collected. The results (Table 5) show the  $\chi^2$  value (230.675) is significant ( $p < 0.05$ ). The  $\chi^2$  to degrees of freedom ratio ( $\chi^2/df=1.261$ ) is below two threshold (Schreiber et al., 2006).

**Table 5**  
*Fit Indices from CFA*

Fit indices	Types	Cutoff value	Literature	Results
<b>Absolute Fit</b>	CMIN/DF	<2	Schreiber et al., 2006	1.261
	RMSEA	<0.06		0.035
<b>Relative Fit</b>	TLI	>0.9	Hair et al., 2014	0.976

	CFI	>0.9		0.979
<b>Parsimony Fit</b>	PCFI	> 0.50 - $\geq$ 0.90	Herman, 2016	0.853

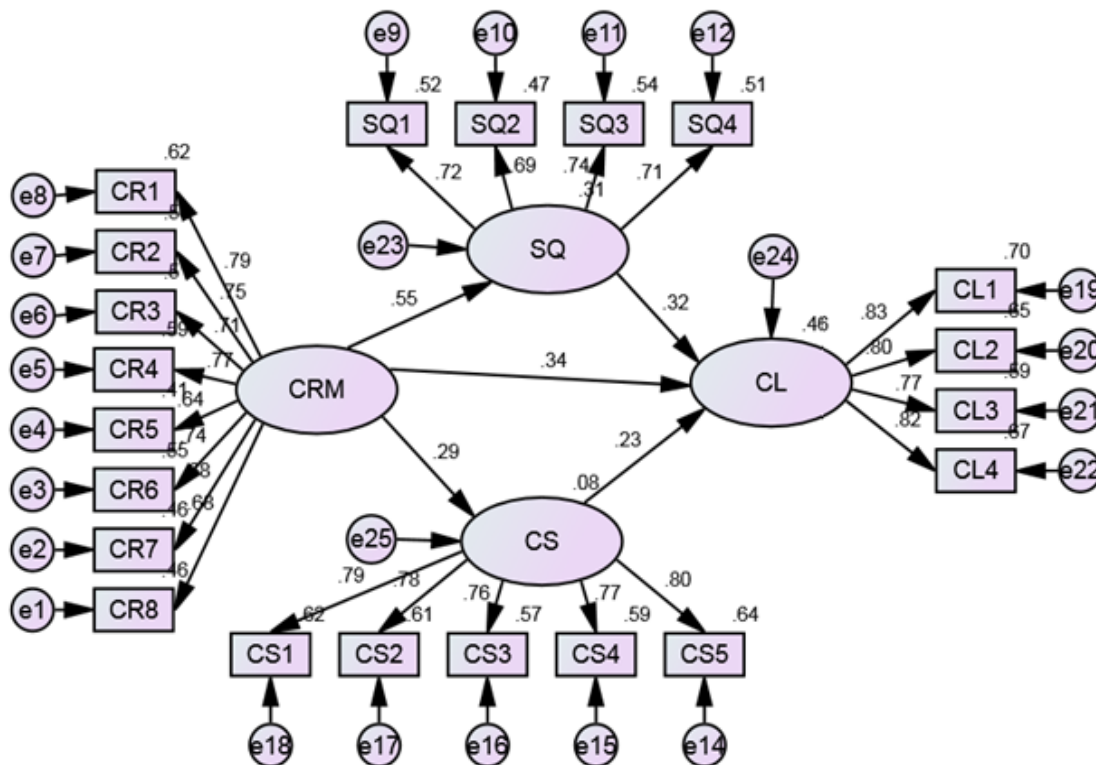
Source. Authors' Calculation.

**Structural Model Assessment**

The hypothesized relations were estimated via structural model (Figure 3), the results show CRM positively contributed to SQ ( $\beta=.55, p<.001$ ), CS ( $\beta=.29, p<.001$ ), and CL ( $\beta=.34, p<.001$ ). All these relationships are significant, consequently, hypotheses (*H1, H2, and H3*) are supported. SQ positively contributed to CL ( $\beta=.32, p<.001$ ) and CS positively contributed to CL ( $\beta=.23, p<.001$ ). As the SQ and CS relationships with CL are significant, therefore, supporting hypotheses (*H4 and H5*). The results of all the direct relations are shown in the structural model estimated via CB-SEM (Table 6).

**Figure 3**

*The Structural Model*



**The Mediating Relationships**

The indirect effects were evaluated via the Hayes' PROCESS macro which instinctively creates a confidence interval using bootstrapping for an indirect effect of a model (Hayes, 2018).

**Table 6**  
*Structural Model (Direct Path)*

	$\beta$	S.E.	C.R.	P Values	Decision
<i>H1: CRM → SQ</i>	0.554	.110	6.224	***	Supported
<i>H2: CRM → CS</i>	0.286	.096	3.690	***	Supported
<i>H3: CRM → CL</i>	0.342	.149	4.019	***	Supported
<i>H4: SQ → CL</i>	0.320	.121	3.760	***	Supported
<i>H5: CS → CL</i>	0.233	.093	3.548	***	Supported

Note.  $P<0.001$  \*\*\* (two-tailed test), S.E. = standard error, C.R. = Critical ratio.



For the indirect effect of CRM on CL through SQ, the beta value is .099 and it falls between 0.049 and 0.164. The lower and upper confidence intervals do not have zero, representing an unquestionable indirect effect. The indirect effect of CRM on CL through CS, the beta value (.039) falls between 0.012 and 0.074 (Table 7). The lower and upper confidence intervals do not have zero, representing a categorical indirect effect.

**Table 7**  
*Summary of Indirect Paths*

			Beta value	95% Confidence Interval (CI)		Decision
				Lower Bound (LB)	Upper Bound (UB)	
<i>H6: CRM</i>	$\rightarrow$ SQ	$\rightarrow$ CL	0.099	0.049	0.164	Supported
<i>H7: CRM</i>	$\rightarrow$ CS	$\rightarrow$ CL	0.039	0.012	0.074	Supported

*Note.* Confidence interval based on 5000 bootstrap samples.

## DISCUSSION

The first hypothesis (*H1*) was to determine the connection between CRM and SQ. This relationship is significant and consequently, the findings of the above-mentioned relationship are similar to a few latest studies (e.g. BOUSSALEM, 2022). Al-Gasawneh et al. (2021), in a recent study, explained the effect of CRM on SQ. Their research findings proved a positive impact of majority of CRM dimensions on SQ in the Jordan hotel industry. These findings imply that CRM plays a significant role to have an effect on the SQ. The result of the present study also revealed the CRM in Balochistan's education sector has direct effect to the SQ.

The CRM and CS relationship is significant, hence *H2* is supported and these results reveal the reiteration of the relationship with the past research which found that CRM has a positive impact on CS (Samirudin et al., 2022). Moreover, Khaleghi (2023) explained that better CRM involves better reactions from customers like CS. His findings support that this relationship work a reaction starts from CRM to CS which in turn leads to profits to the business.

As the relationship between CRM and CL is significant, consequently supporting *H3*. These findings are consonant with a past study in which a positive relationship between CRM and CL was found (Al-Diabat, 2022; Mahendri & Azah, 2023). Accordingly, it can be understood that all sorts of implementations of HE institutions to satisfy their customers (students) and to improve continuously in all units, and aspire to improve their CRM will endow them with noteworthy opportunities. Yohans et al. (2023) were also of the opinion that CL is a key indicator of an organization's success in a competitive market and electronic CRM directly influence the CL.

The relationship between SQ and CL is significant, as a result *H4* is accepted. The findings show that the mentioned link is in agreement with the past study. For example, Mahendri and Azah, (2023) argued that SQ has a direct relationship with CL. They proved that high SQ creates a sense of loyalty and therefore, contented customer with high SQ is a precondition for enhancing CL. Similarly, Pratama et al. (2022) in their study about relationship marketing, CS, SQ, and CL in the context of HEIs in Bali and revealed that the SQ has a powerful effect on CL showing the significance of this relationship which finally leads to improved student satisfaction. The result of the present study is in line with Chris and Ramasamy (2022) who also concluded that SQ has a strong influence on CS and CL which could be helpful for universities in planning and providing education facilities to attract more students.

The relationship between CS and CL is significant; as a result *H5* is supported. The finding is consistent with the past studies (Manyanga et al., 2022). This is contrary to the study of Sriyanto et al. (2022) that found CS no significant impact on loyalty, which is a potential source of future profits, mainly via repeat purchases. It may be due to the issues (e.g. below standard fleet quality) with transportation modes in Jakarta to make customers loyal. The result of the present study is in line with Pratama et al. (2022) who also found that CS had a significant relation with CL and an understanding of the CS role was particularly vital in the context of the higher education sector.

The literature reveals that the mediating role of SQ and CS between CRM and other variables, as a result *H6* and *H7* is supported.. Researchers believe that SQ indirectly affects between CRM and other constructs and its indirect effect is significant. For example, Pertiwi and Kusuma (2020) found that CRM indirectly influence customer retention through SQ as effect of CRM was significant,



endorsing the effect of SQ as a mediator. In the present study the mediation role of SQ is established between CRM and CL in the context of higher education in Balochiatan.

Majority of researchers believe that CS is a proven mediator between CRM and other dependent variables for example CL (Kariman et al., 2022). This research also shows that CRM has indirect effect on CL through CS. The mediation effect of CS is also validated by the study of Sari et al. (2023) who found CS mediated the impact of complaint handling on CL. The result of the present study is in line with Emaluta et al. (2019) who investigated and revealed the CRM in Indonesia's service sector has indirect effect to the CL through CS that confirms CS's role as mediator between CRM and CL.

## CONCLUSION

This research through a conceptual model investigated the relationships between the variables by means of quantitative design. In the model, one variable was included as independent variable (i.e. CRM) to estimate its effects on one dependent variable (CL). Two more variables were incorporated as mediators (SQ and CS). The purposive sampling method was employed to collect data from students of HEIs in Pakistan. Moreover, the data was evaluated via SEM analysis in AMOS for direct effects and the indirect effects were estimated with PROCESS Macro. Subsequent to the data analysis, it was established that CRM has a vital function in influencing the CL directly and through SQ and CS.

### Limitations and future research recommendations

The current study has several limitations which are recognized as: First, the limited generalizability due to sampling technique utilized. Second, this research investigates one variable that is CRM as an IV. Future researchers should study other variables in combination with CRM in the same population that may provide important contribution to the academic literature. Third, the data in this study was collected only from a single industry (HE). Fourth, this research uses cross-sectional data. Finally, the research is based on quantitative design, where survey questionnaire was utilized. Future researchers can conduct this research via mix method design to unearth essential information about CRM and CL in the HE sector in Pakistan. The real problem that the researcher have encountered while doing this research was the trifling cooperation of the respondents.

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