

Full Length Research Paper

The effect of customer-to-customer interactions on satisfaction with the firm, loyalty to the firm and firm word-of-mouth: The case of Iran Air Company

Niloofer Imankhan¹, Meysam Fakharyan^{2*} and Sara Feyzabadi¹

¹Business Management, Islamic Azad University, Firoozkuh Branch (IAUFB), Firoozkooh, Iran.

²Young Researchers Club, Firozkooh Branch, Islamic Azad University, Firozkooh, Iran.

Accepted 30 May, 2012

Today's, customer to customer interactions (CCI) has attracted more attention among marketers and they believe that positive interactions are one of the most effective ways to create loyal customers. Current study tries to investigate the effect of customer-to-customer interactions on satisfaction with the firm, loyalty to the firm, and firm word of mouth in airline companies using modified service model of (2005). To collect data, a self-administrated questionnaire was developed. Population is the customers/passengers of Iran Air Company. The sample size was estimated 384 people. Data analysis was based on one-sample t-test and structural equation modeling. Results indicated that: (1) service atmospherics has a significant impact on CCI and firm satisfaction, (2) CCI has a significant impact on firm satisfaction and firm WOM, (3) firm satisfaction has a significant impact on firm loyalty and firm WOM, (4) satisfaction with the service provider has a significant impact on firm satisfaction and loyalty to the service provider, (5) there was no significant relationship between CCI and firm loyalty, and (6) loyalty to the service provider was not related to firm loyalty.

Key words: Satisfaction, loyalty, word of mouth, customer, Airline Company.

INTRODUCTION

In recent years, service researchers have increasingly given attention to the multitude of relationships that may occur in the production, delivery and consumption of services. An important driver of this tendency has been the rise of the relationship-marketing paradigm. This paradigm has equipped marketing management with a theoretical foundation for going beyond the customer-supplier dyad and incorporating other relationships. The customer-to-customer relationship is one such relationship (Nicholls, 2010). Although it can occur in a number of different contexts, this paper concentrates on

direct interactions between customers taking place in physical service settings, that is, customer-to-customer interaction (CCI). In doing so, this paper addresses the following research question: Does CCI affect satisfaction with the firm, loyalty to the firm, and firm word-of-mouth?

It is now two decades since the publication of Martin and Pranter's (1989) seminal paper on CCI. Their article was the first paper to be published in an international journal that presented and explored CCI in a comprehensive manner.

Recently, Moore et al. (2005) proposed a unique model to empirically examine the development and influence that CCI has in a high personal contact setting. Their model has provided useful framework for current study.

The remainder of the paper is organised as follows: Subsequently, we discuss theoretical foundation of our

*Corresponding author. E-mail: meysam.fakharyan@yahoo.com.

Table 1. Customer-to-customer interaction studies.

Study	Effect on service quality/customer satisfaction	Interaction frequency	Typology of interaction types/roles	Effect on WOM	Effect on purchase intention	Effect of service environment	Effect on loyalty
Adelman et al. (1994)			x				
Anderson and Zemke (1990)			x				
Grove and Fisk (1997)	x	x					
Harris et al. (1994)		x					
Harris et al. (1997)	x				x		
Harris et al. (1999)	x		x				
Hoffman and Bateson (1997)			x				
McGrath and Otnes (1995)			x				
Martin (1997)	x						
Moore et al. (2005)	x			x		x	x
Lin and Lin (2011a, b)	x			x	x	x	
Fowler and Bridges (2012)						x	

study. From this theoretical foundation, we develop ten key hypotheses relating to CCI and firm satisfaction, firm loyalty, and firm WOM. The sample and methodology are then described. The paper then presents the findings with regard to a modified model recommended by Moore et al. (2005) in the “airline services” context. The paper concludes with a discussion of the conclusions and implications of the study for service managers.

THEORETICAL BACKGROUND

The focus by service management researchers on employee-to-customer interaction has eclipsed another very common type of human interaction taking place in services: the interaction occurring between customers. There has been some, more limited research that has considered customer-to-customer interaction. The nature and scope of a number of studies in this area are summarized in Table 1.

Many service encounters take place in the presence of other customers. This applies to day-to-day services (for example public transport or shopping) regular repeat services (the hairdresser or local bar etc.) and infrequent services (such as flights, holidays or conferences) (Parker and Ward, 2000). These other customers may be friends or “purchase pals” (McGrath and Otnes, 1995), casual acquaintances (that is, familiar strangers) or complete strangers.

The behaviour of fellow customers has an effect on satisfaction/dissatisfaction with the service experience (Martin, 1996), and may affect consumer purchase intentions (Harris et al., 1997). There are some services, such as adventure holidays (Price et al., 1995), and academic conferences, where customer-to-customer interactions are a planned and integral part of the service

experience. Moreover, some services, such as quiz nights and bowling competitions, rely on customer teamwork (Martin, 1997).

Equally, there are many other services where issues of customer compatibility or incompatibility are important considerations for service management. One positive/negative interaction with a fellow customer in a service setting may determine repatronage decisions. Empirical work by Grove and Fisk (1997) and Harris et al. (1994) has demonstrated the frequency of customer-to-customer interactions in leisure and retail settings.

Further study of the content and process of customer-to-customer oral interactions can provide insights into the roles that fellow customers adopt in service settings. Some fellow customers can spoil a service experience through “inappropriate” public behaviour (Hoffman and Bateson, 1997). These behaviours have been profiled by Anderson and Zemke (1990) under the banner of “customers from hell”. Fellow customers, however, can positively enhance a service setting through providing information (Harris et al., 1999) or social support (Adelman et al., 1994).

In fact, it is argued that managing customer-to-customer interaction is often a significant aspect of managing a service. In many service settings other customers frequently impact the customer’s service experience (Nicholls, 2011). Managing CCI is particularly important in airline services. A number of post-trip survey comments referred positively to meeting others from different backgrounds.

Bitner et al. (1994), in a study exploring hotel, restaurant and airline encounters from an employee perspective, identified some sub-categories of “problem customer behavior” linked to negative CCI. These included verbal and physical abuse, and drunkenness. The first decade of the twenty-first century has seen increasing

numbers of empirical studies of CCI in travel contexts.

Harris and Baron (2004) utilised an ethnographic approach to generate a wide range of insights into the nature of passenger-to-passenger conversation during rail travel. Some of the conversations observed were positive exchanges, of a social exchange nature, between passengers of different nationalities.

Huang and Hsu (2009) utilized virtual focus groups and interviews to investigate interactions between cruise passengers. Their findings include detailed insights into: the diversity of CCI on cruises; how customer-to-customer (C2C) relationships develop during extended tourism encounters and the meaning which customers attach to these relationships; and the connection between intra-group and inter-group interactions.

Since the early 1990s, increasing numbers of empirical studies investigating the interactions between service customers have appeared in the service management literature. However, despite both the growing interest in CCI and the increasing globalization of services, there has been negligible attention paid by researchers to CCI in an airline context.

In a high personal contact service setting, Moore et al. (2005) tried to wed highly documented firm-related aspects of the service encounter (that is, atmospherics and the role of the service provider), to directly examine how CCI influences customer evaluations of three important outcome variables: firm satisfaction, firm loyalty, and word-of-mouth (WOM) communications concerning the firm. They found that higher levels of perceived service atmospherics is associated with more positive CCI effects.

Findings have also shown that retail atmospherics that is, characteristics of the actual physical surroundings, such as music (North et al., 2003), smells (Spangenberg et al., 1996) as well as ambient lighting and the number of employees (Baker et al., 1992) can influence approach and avoidance behaviors of customers.

Kotler (1973:50) drew attention to “atmospherics,” or “the conscious designing of space to create certain effects in buyers.” Since then, visual, aural, olfactory, and tactile dimensions of service environments have been examined to assess their abilities to capture consumer attention (Bellizzi et al., 1983), convey important information (Baker et al., 2002; Chebat and Morrin, 2007), and arouse emotions (Bitner, 1992; Ryu and Jang, 2008). Building upon this literature, the present study considers the impact of environmental characteristics (visual, aural, olfactory, and tactile) on the interactions between consumers.

Recently, Fowler and Bridges (2012) indicated that service provider evaluations of the physical environment improve in the presence of an appropriate ambient scent. Behavioral responses were also enhanced. In addition, Lin and Lin (2011a, b) found that service environment positively influences customer emotion and service outcomes.

Moore et al. (2005) also suggested that positive CCI effects are positively associated with firm satisfaction, firm loyalty, and firm WOM (Moore et al., 2005). Therefore, based on the preceding discussion, we suggest the following hypotheses:

H₁: Service atmospheric is positively and directly associated with CCI.

H₂: CCI is positively and directly associated with firm satisfaction.

H₃: CCI is positively and directly associated with firm loyalty.

H₄: CCI is positively and directly associated with firm WOM.

To examine service place atmospherics, Bitner (1990, 1992) has introduced the servicescape context that emphasizes how the perceived service setting environment influences the interaction between and among customers and service contact personnel. Bitner proposes that perceived positive responses to the servicescape may enhance the quality of between customer interactions as well as the overall satisfaction with the service and subsequent firm loyalty and WOM.

Recently, Proenca and Rodrigues (2011), in their study of 300 customers in Portuguese, showed that customer satisfaction with banking services is associated with increased loyalty. Their finding is significant because it has previously been shown that customer loyalty is associated with greater profits, lower costs, larger volume of purchases, less price-sensitivity, and positive WOM (Zeithaml and Bitner, 2000; Lin and Lin, 2011a, b).

Lloyd and Luk (2011) also investigated the service interaction behaviors that elicit a sense of comfort for the customer in the service encounter, and the mediating role of comfort on assessments of quality, customer satisfaction and positive word-of-mouth in two industries. They found that customer satisfaction has a positive effect on positive word-of-mouth behaviors. Therefore, we hypothesize:

H₅: Service atmospheric is positively and directly associated with firm satisfaction.

H₆: Firm satisfaction is positively and directly associated with firm loyalty.

H₇: Firm satisfaction is positively and directly associated with firm WOM.

The interaction between the service provider and the customer has been investigated from two distinct viewpoints. The first viewpoint holds the role of the customer as co-producer of the service encounter, especially for customized offerings. Scripts or roles are established that allow each actor (service provider or consumer) to understand when they contribute to the service encounter (Surprenant and Solomon, 1987).

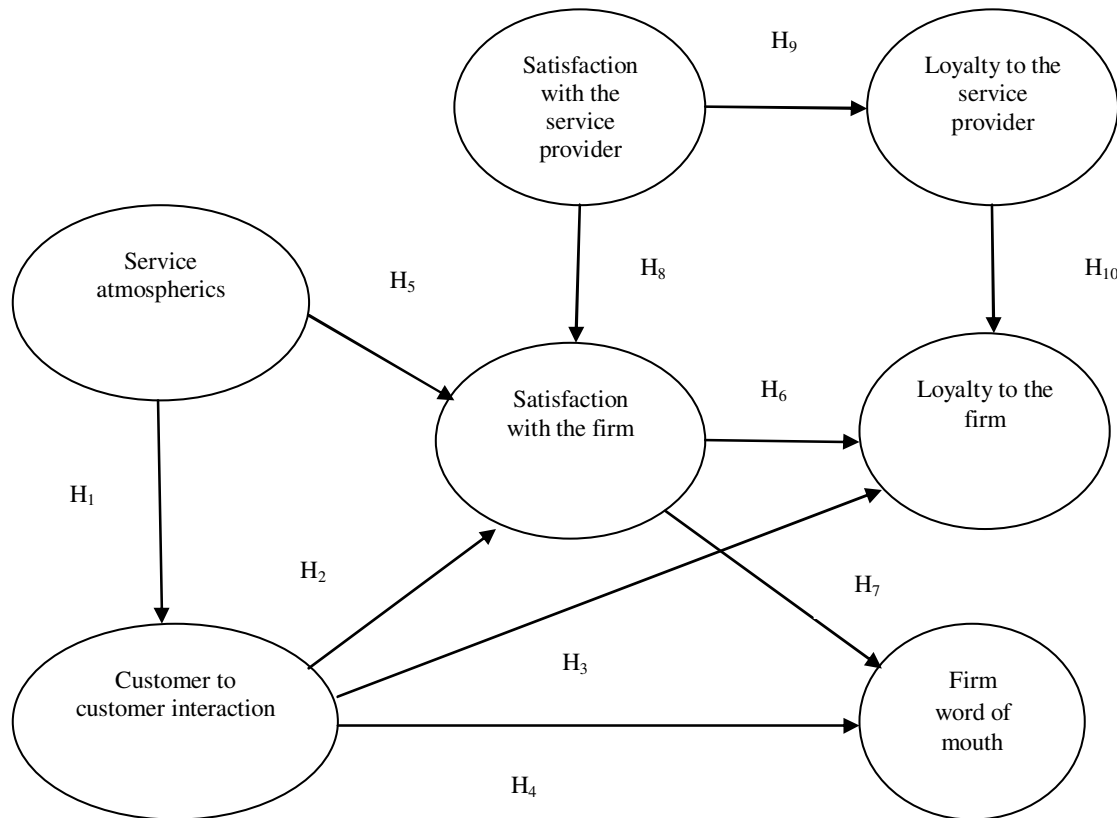


Figure 1. Conceptual framework.

As the co-producer of the service (for example, medical treatment), the information that the customer provides affects the quality of the service that is provided, subsequent satisfaction with the service personnel and satisfaction with the firm in general (Wind and Rangaswamy, 2001). The second compatible viewpoint in which the relationship between service provider and customer is examined suggests that the service contact person is viewed as instrumental in the formation of a long-term positive association between the firm and the customer (Parasuraman et al., 1985). In their study of long-term customer-salesperson relationships, Reynolds and Beatty (1999) model the influence of accrued relationship benefits as antecedents to satisfaction with the service provider (Beatty et al., 1996). They then utilize the extant literature to support their hypothesis that satisfaction with the service provider is a driver of several key outcome measures, including satisfaction with the firm, loyalty to the firm and WOM about the firm.

Beatty et al. (1996) note that loyalty to the firm is highly contingent upon the sales person. This dependency can be explained through the importance of the interpersonal loyalty developed with the contact person as part of a human relationship (Czepiel, 1990). We therefore propose:

H₈: Satisfaction with the service provider is positively and directly associated with firm satisfaction.

H₉: Satisfaction with the service provider is positively and directly associated with loyalty to the service provider.

H₁₀: Loyalty to the service provider is positively and directly associated with firm loyalty.

The hypothesized relationships (Hypotheses 1 to 10) are included in the framework in Figure 1. Relationships among the constructs were empirically tested.

METHODOLOGY

Participants

We recruited customers/passengers who have used Iran Air Company services. Then, population was customers/passengers of Iran Air Company in Tehran who referred to its agencies during the period of research. Sample selection was a result of the convenience method. International visitors were selected at ten different agencies. These agencies were chosen based on customers/passengers referrals. As to size, although initially 450 questionnaires were collected, some had to be rejected because they were not correctly filled in, finally resulting in a sample of 384 valid respondents.

Data was gathered during the months of November and

Table 2. Demographical characteristics of respondents.

Characteristic	Percentage
Age	
20 or Under	13.2
20-29	34.9
30-39	25.3
40-49	18.1
Above 50	8.5
Gender	
Male	38.4
Female	61.6
Marital status	
Single	39.5
Married	60.5
Education	
Below high school graduate	3.2
High school	24
2 year college or associate's degree	11.7
Bachelor's degree	42.1
Postgraduate	19
Customer/passenger background (year)	
Less than 1	5.1
1-3	10.4
4-6	10.9
7-9	2.9
10-12	2.1
More than 13	14.2
Missing	54.4

December 2011. The questionnaire was administered personally to the respondents. Of a sample of 384 respondents, 61.6% were female; 34.9% were aged 20 to 29; 60.5% were married; and about 42.1% had a bachelor's degree. In terms of customer/passenger background, 14.2% had more than 13 years experience with the airline companies. Table 2 shows the demographic characteristics of the respondents.

Instrument

The primary goal of this study was to examine the effect of CCI on firm satisfaction, firm loyalty and firm WOM. To do so, the researchers modified existing scales, which were translated into Persian. Socio-demographic information of research participants was obtained by items including gender, age, marital status, education and customer/passenger background.

Following Moore et al. (2005) and Reynolds and Beatty (1999), we measured the customer-to-customer interaction and the customer-service provider interaction using 27 items. Customers/passengers were asked to rate their agreement to questions on a five-point Likert scale ranged from strongly agree to

strongly disagree.

Data analyses

Before analyzing predictor variables, we analyzed descriptive statistics and psychometric properties of the measurement scale. We conducted an exploratory factor analysis (EFA) using LISREL 8.85. Several goodness of fit indices were evaluated including chi-square statistic (χ^2), normed chi-square statistic (χ^2/df), the root mean square error of approximation (RMSEA), goodness-of-fit index (GFI), and comparative fit index (CFI).

The cut-off value of Normed chi-square (χ^2/df) is less than 3.0 (Hu and Bentler, 1999). The RMSEA value below 0.05 indicates an excellent fit and values below 0.06 indicate a good fit (Hu and Bentler, 1999). The GFI is an absolute index and measures the relative amount of variance and covariance in the sample data (Byrne, 1998). The CFI value takes sample size into account and should be the index of choice (Bentler, 1990), and values equal to or greater than 0.95 are indicative of good-fitting model (Hu and Bentler, 1999).

To confirm validity of the instrument, we consulted with five

Table 3. One-sample *t*-test.

Variable	Mean	S. D	Lower	Upper	Status
Service atmospherics	2.7548	1.02460	-0.3505	-0.1399	Average
CCI	2.7912	0.72473	-0.2829	-0.1347	Average
Satisfaction with the service provider	2.8196	0.75856	-0.1016	-0.2593	Suitable
Firm loyalty	3.1576	0.87207	0.0682	0.2470	Suitable
Loyalty to the service provider	2.9405	0.93343	-0.1500	-0.0401	Suitable
Firm WOM	3.1248	1.03089	0.0200	0.2296	Suitable
Firm satisfaction	3.5078	0.61483	0.4326	0.5830	Suitable

experts in the area of CCI. In addition, exploratory factor analysis was used to summarise and reduce the data. For scale reliability, internal consistency measure (Cronbach alpha) was tested. Alpha reliability coefficients were calculated for the identified factors. Cronbach's alpha values greater than 0.07 are acceptable and deemed to be adequate (Nunnally and Bernstein, 1994). This coefficient for all items was 0.930, which is satisfactory in social sciences research. The Cronbach's alpha for CCI, firm satisfaction, loyalty to the service provider, firm loyalty, satisfaction with service provider, service atmospherics, and firm WOM were 0.737, 0.608, 0.676, 0.802, 0.840, 0.792, and 0.906, respectively.

RESULTS

One-sample *t*-test

To examine the importance and status of research variables, we conducted one sample *t*-test. As a five-point Likert scale was used in questionnaire, the average was considered three ($H_0: \mu = 3$). As shown in Table 3, all the variables have a suitable ($\mu \geq 3$) or average status.

Exploratory factor analysis

While this analysis is used to reduce numerous variables to a more manageable set of factors (Aaker and Day, 1986), no constraints are made on the variable loadings. Therefore, each variable will indicate loadings on the set of factors. Consequently, exploratory factor analysis is used to summarize and reduce the data.

Using SPSS, the results of exploratory factor analysis, with the assumption of extracting via principal components method and rotating via varimax, are given in Table 4. There were 17 questions in relation to research dependent variables. The results of exploratory factor analysis indicated that data is significant for implementing factor analysis ($KMO = 0.918 \geq 0.7$, $p = 0.000 \leq 0.05$). After exploratory factor analysis for dependent variables, five main factors were recognized. According to the literature and conceptual model, these factors named as firm satisfaction, CCI, firm loyalty, loyalty to the service provider, and firm WOM.

Additionally, the result of varimax for independent vari-

ables revealed two main factors. According to the literature and conceptual model, we named these two factors as satisfaction with the service provider and service atmospherics after exploratory factor analysis of independent variables ($KMO = 0.913 \geq 0.7$, $p = 0.000 \leq 0.05$).

Structural equation model test

Figures 2 and 3 show the specified relationship between CCI, loyalty, satisfaction, and WOM. The overall model fit was good, $\chi^2 = 726.30$, Normed $\chi^2 = 2.32$, RMSEA = 0.059, GFI = 0.91, CFI = 0.96 and NFI = 0.94 (Table 5).

Hypotheses testing

All tests are directional *t*-tests of the critical ratios (CR) of the regression weight estimates over the estimates of their standard errors (S.E.) provided in the LISREL output. As shown in Figure 2, of ten paths specified in the hypothesized model, eight are found to be statistically significant. When *t*-values are in the range of -1.96 to 1.96, the hypothesis will be rejected (Hair et al., 1998).

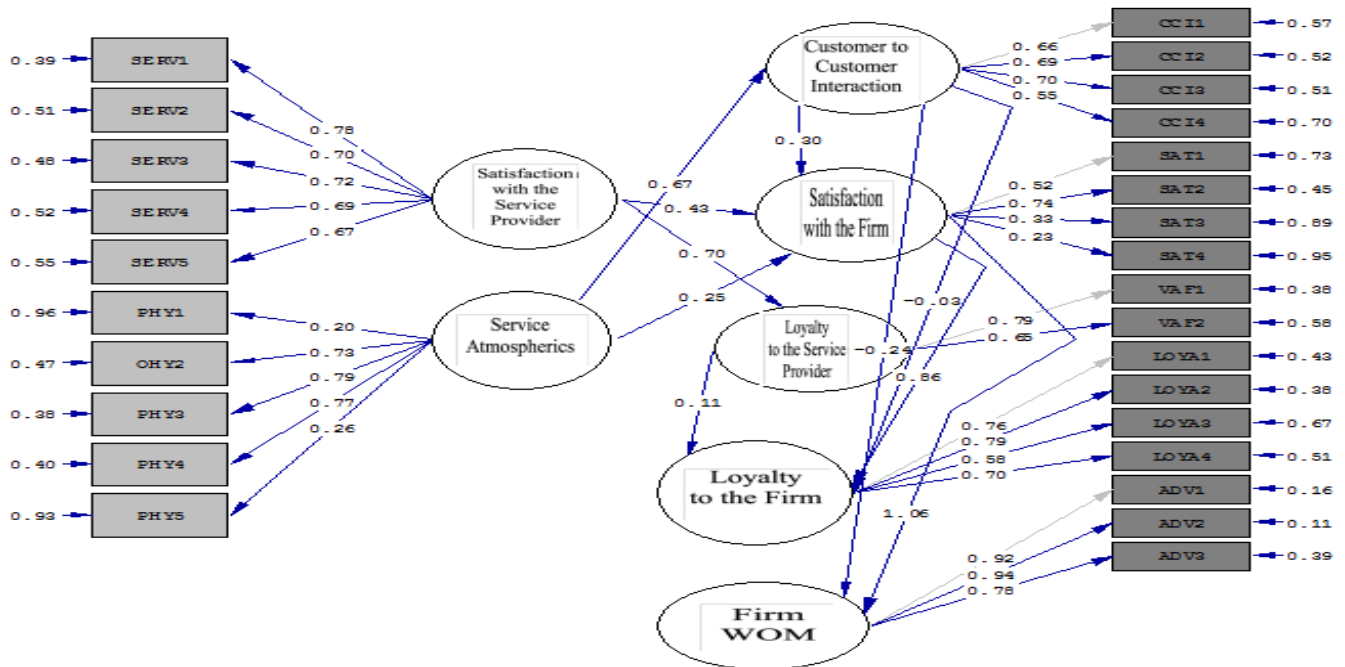
As predicted, H_1 was largely supported by the data of this study, in that service atmospherics had a positive and significant effect on CCI ($\beta = 0.67$, $t = 9.43$). As predicted by H_2 , CCI was supported by the data, in that CCI had a positive and significant effect on firm satisfaction ($\beta = 0.30$, $t = 3.44$). Contrary to our prediction, CCI had not a positive and insignificant effect on firm loyalty ($\beta = -0.003$, $t = -0.036$). Therefore, the results do not support H_3 . It seems that there was negative word of mouth in the direct and indirect customer-to-customer interactions that led to preventing customer to be loyal to the firm. It is concluded that loyal customers are vital for dissemination of positive word of mouth among others.

The structural equations results supported H_4 for CCI. The results are shown in Table 6. As predicted by H_4 , CCI was related to firm WOM ($\beta = -0.24$, $t = -2.50$); supporting H_4 . However, the relationship between CCI

Table 4. Results of exploratory factor analysis.

Questions	Firm satisfaction	CCI	Firm loyalty	Loyalty to the service provider	Firm WOM
CCI1	0.158	0.815	0.044	0.113	0.088
CCI2	0.193	0.755	0.249	0.020	0.055
CCI3	0.185	0.592	0.417	0.251	0.001
CCI4	0.190	0.505	0.302	0.306	0.141
SAT1	0.713	0.117	0.318	0.005	-0.003
SAT2	0.677	0.153	0.388	0.071	0.120
SAT3	0.565	0.119	0.504	0.156	0.121
SAT4	0.976	0.107	0.078	0.046	0.081
VAF1	0.297	0.144	0.216	0.733	0.071
VAF2	0.209	0.106	0.008	0.869	-0.007
LOYA1	0.100	0.117	0.699	0.345	0.056
LOYA2	0.140	0.204	0.773	0.110	-0.008
LOYA3	-0.209	0.485	0.557	0.118	0.034
LOYA4	0.042	0.342	0.664	0.172	-0.043
ADV1	0.064	0.092	0.243	0.184	0.807
ADV2	0.051	0.096	0.289	0.171	0.813
ADV3	0.047	0.173	0.296	0.148	0.736

KMO = 0.918, p-value = 0.000.



Chi-Square=726.30, df=313, P-value=0.00000, RMSEA=0.059

Figure 2. Standardized path coefficient.

firm WOM was negative. Further, service atmospherics was positively and directly related to firm satisfaction ($\beta = 0.25, t = 2.41$), supporting H₅.

As predicted by H₆, firm satisfaction had a positive and significant impact on firm loyalty ($\beta = 0.86, t = 7.29$); supporting H₆. Firm satisfaction was also positively and

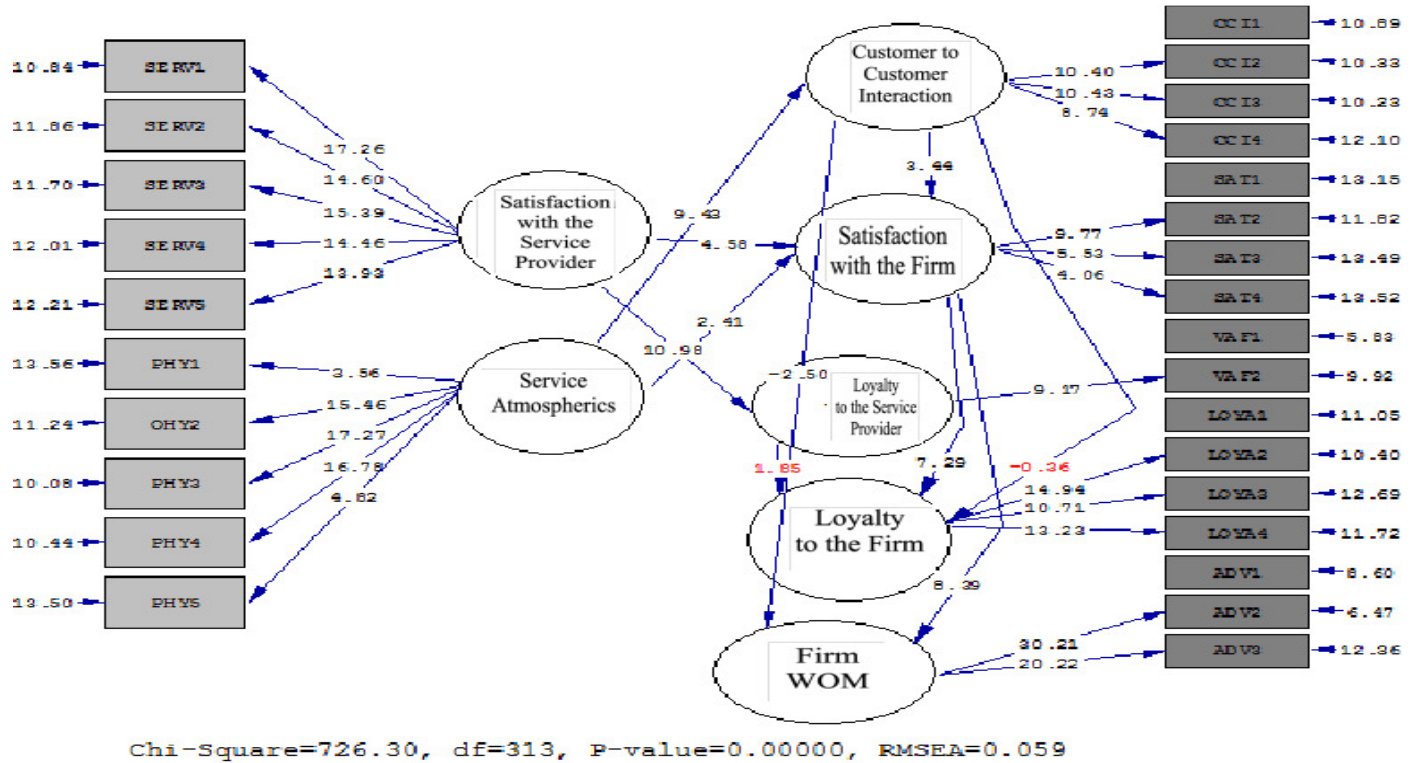


Figure 3. Significant coefficients.

Table 5. Results of structural equation model test.

Fit indices	Value	Cut-off value
Chi-Square / df	2.32	<3
Root mean square error of approximation (RMSEA)	0.059	<0.08
Normed fit index (NFI)	0.94	>0.9
Non-normed fit index (NNFI)	0.96	>0.9
Comparative fit index (CFI)	0.96	>0.9
Goodness of fit index (GFI)	0.91	>0.9
Adjusted goodness of fit index (AGFI)	0.9	>0.9
Incremental fit index (IFI)	0.96	>0.9
p-value	0.000	<0.05

directly related to firm WOM ($\beta = 0.86, t = 7.29$). Thus, the results supported H₇. The results indicated that satisfaction with the service provider is positively and directly related to firm satisfaction ($\beta = 0.43, t = 4.58$) and loyalty to the service provider ($\beta = 0.70, t = 10.98$); supporting H₈ and H₉. Finally, loyalty to the service provider was not related to firm loyalty ($\beta = 0.11, t = 1.85$); supporting H₁₀.

DISCUSSION AND MANAGERIAL IMPLICATIONS

The main purpose of current study was to examine the effect of customer-to-customer interactions on satisfac-

tion with the firm, loyalty to the firm and firm word-of-mouth based on the modified model of Moore et al. (2005) in an airline context. Results indicated that service atmospherics has a positive and direct effect on CCI. Increasing competitive scene and providing similar services in the same prices lead to attracting more attention to the service physical atmospherics in an attempt to differentiate the company from the competitors and attracting more and more customers.

According to findings, physical characteristics of environment such music, furniture, equipments, personnel frequency and other visible properties can affect the behaviors of customers and be considered as a

Table 6. Hypotheses testing.

Hypothesis	Independent variable	Dependant variable	β	t-value	Result
H ₁	Service atmospherics	CCI	0.67	9.43	Supported
H ₂	CCI	Firm satisfaction	0.30	3.44	Supported
H ₃	CCI	Firm loyalty	-0.03	-0.36	Not supported
H ₄	CCI	Firm WOM	-0.24	-2.50	Supported (Negative impact)
H ₅	Service atmospherics	Firm satisfaction	0.25	2.41	Supported
H ₆	Firm satisfaction	Firm loyalty	0.86	7.29	Supported
H ₇	Firm satisfaction	Firm WOM	1.06	8.39	supported
H ₈	Satisfaction with the service provider	Firm satisfaction	0.43	4.58	Supported
H ₉	Satisfaction with the service provider	Loyalty to the service provider	0.70	10.98	Supported
H ₁₀	Loyalty to the service provider	Firm loyalty	0.11	1.85	Not supported

measure of service quality by the customers.

The more change service atmospherics, the more change in CCI. Bitner (1990) found that positive perceptions of service physical atmospherics increase the quality of CCI and satisfaction with the firm. CCI had a significant and direct impact on firm WOM and firm satisfaction. However, CCI was not related to firm loyalty.

Satisfaction has been defined as the fulfillment of a need in that the consumer senses that the service outcome has at least met what they expected (Oliver, 1999), which in this case is the consumer's mental focus on receiving suitable airline services. The positive effects of CCI serve as an "extra" benefit that contributes independently to the service experience and subsequent established outcomes. Interestingly, the effect of CCI on firm WOM was negative.

A possible explanation for this negative relationship may be that there is a negative WOM in interpersonal interactions about the airline companies and the companies could not manage these interactions. In fact, they have not provided a strong linkage between company and customers. In addition, service atmospherics had a positive and direct impact on firm satisfaction.

According to Bitner (1992), perceived positive responses to the service place atmospherics enhance the overall satisfaction with the service and subsequent firm loyalty and WOM. Further, firm satisfaction was positively and directly associated with firm loyalty and firm WOM.

Recently, Kassim and Abdullah (2010) found that customer satisfaction has a significant effect on loyalty through word of mouth (WOM) while WOM is an antecedent of repeat visits or repurchase intentions. Indeed, satisfied customers are also known to provide positive WOM to individuals who have no relation to a specific transaction which eventually will influence their purchasing intentions. This type of loyalty is known as an emotionally expressed behavior (Ranaweera and Prabhu, 2003) where customers are willing to inform others on service incidents that have given them satisfaction.

Satisfaction with the service provider was directly and positively related to firm satisfaction and loyalty to the service provider.

Reynolds and Beatty (1999) showed that satisfaction with the service provider is a driver of several key outcome measures, including satisfaction with the firm and loyalty to the firm. Beatty et al. (1996) note that loyalty to the firm is highly contingent upon the sales person. They explained this dependency through the importance of the interpersonal loyalty developed with the contact person as part of a human relationship.

Finally, direct and positive relationship was not found between loyalty to the service provider and firm loyalty was not significant. This finding is consistent with Reynolds and Beatty (1999) findings on the relationship between loyalty to the service provider and firm loyalty.

Our research findings have several implications for airline company managers. First, managers should concentrate on the attraction service physical atmospherics. Physical atmospherics can motivate customers/passengers to buy airline services. Hence, positive perceptions of service atmospherics have positive influences in CCI and satisfaction with the firm. The more change in service atmospherics, the higher quality of CCI. They should not only focus on visible aspects, but also should pay more attention to the invisible aspects. In fact, it is necessary to provide a desirable and attractive atmosphere for customers/passengers.

Second, managers can provide personnel with training and motivate them in order to improve service encounters. This lead to control quality of provided services. Training can help personnel in the timely interference with customers' interactions. It may be helpful to manage negative CCI in relation to the firm.

Third, managers should also focus on customer relationship management (CRM) and creating loyal customers. It requires relationship marketing to maintain customers/passengers. Equitable interaction with customers, provide extra services and meeting their

expectations are strategies that must be employed to perform this.

Fifth, managers can follow customer loyalty programs to increase revenues and to establish a close relationship between firm brand and current customers. Sixth, managers should try to manage word of mouth by receiving customers' complaints. The airline companies should find the ways to motivate positive WOM about the firm.

Meeting customers' expectations help to increase their satisfaction with the firm and as a result, they disseminate positive recommendations about the firm to prospective customers. If the airline company addresses to the customers complaints, it may lead to control negative WOM and to prevent it.

Sixth, managers can provide customers/passengers with virtual networks of customer social relationships. Social networks like Facebook can serve as a main information source for customers. Customers can provide others with their experiences and ideas. Moreover, customer-to-customer interactions may affect perceived waiting time. When customers interact with other clients, the time spent waiting for a service to be delivered may seem to pass more quickly.

Finally, managers should inform service contact staff about the importance of customer-to-customer interactions and should train staff about when they should, and should not, intervene in such interactions. The use of signs saying can encourage homogenous customer groups and so encourage similar groups to congregate.

CONTRIBUTIONS, LIMITATIONS AND FUTURE RESEARCH RECOMMENDATIONS

Our study made an important contribution to knowledge. We proposed and validated a modified framework of the CCI model, which could be applied in other service contexts. We provided the consequences of CCI in the context of airline services and proposed CCI, satisfaction, loyalty, and WOM as the four most important criteria. This framework was effective because the three determinants are collectively exhaustive, preventing confusion and overlapping.

Moore et al. (2005) study proposed four hypotheses to investigate CCI. Our study proposed six more hypotheses to address CCI in a service context. The study, however, had a limitation. The questionnaire used a convenience sampling method, thus the sample could not be treated as representative of all customers/passengers. The impacts of culture and multiculturalism on CCI and decision-making process needs more study.

REFERENCES

Aaker DA, Day GS (1986). *Marketing Research*, 3rd ed., John Wiley &

- Sons, New York, NY, pp. 443-53.
- Adelman MB, Ahuvia A, Goodwin C (1994). Beyond smiling: social support and service quality, in Rust, R.T. and Oliver, R.L. (Eds), *Service Quality: New Directions in Theory and Practice*, Sage Publications, Thousand Oaks, CA.
- Anderson K, Zemke R (1990). Customers from hell, *Training*, 26 (February) pp. 25-31.
- Baker J, Levy M, Grewal D (1992). "An experimental approach to making retail store environmental decisions". *J. Retail.* 68(4):445-60.
- Baker J, Parasuraman A, Grewal D, Voss GB (2002). The influence of multiple store environment cues on perceived merchandise value and patronage intentions. *J. Market.* 66(2):120-41.
- Beatty SE, Mayer ML, Coleman JE, Reynolds KE, Lee J (1996). "Customer-sales associate retail relationships". *J. Retailing* 72(Fall):223-247.
- Bellizzi JA, Crowley AE, Hasty RW (1983). The effects of color in store design. *J. Retailing* 59(1):21-45.
- Bentler PM (1990). "Comparative fit indexes in structural models". *Psychol. Bulletin.* 107(2):238-46.
- Bitner MJ (1990). "Evaluating service encounters: the effects of physical surroundings and employee responses". *J. Market.* 54:69-82.
- Bitner MJ (1992). "Service scapes: the impact of physical surroundings on customers and employees". *J. Market.* 56:57-71.
- Bitner MJ, Booms BH, Mohr LA (1994). "Critical service encounters: the employee's viewpoint", *J. Market.* 58:95-106.
- Byrne BM (1998). *Structural Equation Modeling with LISREL, PRELIS, and SIMPLIS: Basic Concepts, Applications, and Programming*, Lawrence Erlbaum Associates, Mahwah, NJ.
- Chebat J, Morrin M (2007). Colors and cultures: exploring the effects of mall decor on consumer perceptions. *J. Bus. Res.* 6(3):59-74.
- Czepiel JA (1990). "Service encounters and service relationships: implications for research". *J. Bus. Res.* 20:13-21.
- Fowler K, Bridges E (2012). Service environment, provider mood, and provider-customer interaction. *Manage. Serv. Qual.* 22(2):165-183.
- Grove SJ, Fisk RP (1997). The impact of other customers on services exchanges: a critical incident examination of getting along. *J. Retail.* 73(1):63-85.
- Hair JF, Anderson RE, Tatham RL, Black WC (1998). *Multivariate Data Analysis with Reading*, 5th ed., Prentice-Hall, Englewood Cliffs, NJ.
- Harris K, Baron S (2004). "Consumer-to-consumer conversations in service settings". *J. Serv. Res.* 6(3):287-303.
- Harris K, Baron S, Davies BJ (1999). What sort of soil do rhododendrons like? Comparing customer and employee responses to requests for product-related information. *J. Serv. Market.* 1(1).
- Harris K, Baron S, Ratcliffe J (1994). Oral participants of customers in a retail setting: an empirical study. *Proceedings of the 3rd Int. Res. Semin. Serv. Manage. La-Londe-les-Maures, France*, pp. 24-27.
- Harris K, Davies BJ, Baron S (1997). Conversations during purchase consideration: sales assistants and customers. *Int. Rev. Retail. Distrib. Consum. Res.* 7(3):173-90.
- Hoffman KD, Bateson JEG (1997). *Essentials of Services Marketing*, The Dryden Press, Orlando, FL.
- Hu LT, Bentler PM (1999). "Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives". *Struct. Equat. Model.* 6(1):1-55.
- Huang J, Hsu CHC (2009). "Interaction among fellow cruise passengers: diverse experiences and impacts". *J. Travel Tourism Market.* 26:547-567.
- Kassim N, Abdullah NA (2010). "The effect of perceived service quality dimensions on customer satisfaction, trust, and loyalty in e-commerce settings: A cross cultural analysis", *Asia Pacific J. Market. Logist.* 22(3):351-371.
- Kotler P (1973). Atmospherics as a marketing tool. *J. Retail.* 49(4):48-64.
- Lin CJS, Lin CY (2011a). What makes service employees and customers smile: Antecedents and consequences of the employees' affective delivery in the service encounter. *J. Serv. Manage.* 22(2):183-201.
- Lin JC, Lin CU (2011b). What makes service employees and customers smile: Antecedents and consequences of the employees' affective delivery in the service encounter. *J. Serv. Manage.* 22(2):183-201.

- Lloyd AE, Luk STK (2011). Interaction behaviors leading to comfort in the service encounter. *J. Serv. Market.* 25(3):176-189.
- Martin CL (1996). Consumer-to-consumer relationships: satisfaction with other consumers' public behaviour. *J. Consum. Affairs* 30(1):146-169.
- Martin CL (1997). *Bowling's Team Concept*, ICS Books Inc., Merrillville, IN.
- Martin CL, Pranter CA (1989). "Compatibility management: customer-to-customer relationships in service environments". *J. Serv. Market.* 3(Summer):5-15.
- McGrath MA, Otnes C (1995). Unacquainted influencers: when strangers interact in the retail setting. *J. Bus. Res.* 32:261-72.
- Moore R, Moore ML, Capella M (2005). "The impact of customer-to-customer interactions in a high personal contact service setting". *J. Serv. Market.* 19(7):482-491.
- Nicholls R (2010). New directions for customer-to-customer interaction research. *J. Serv. Market.* 24(1):87-97.
- Nicholls R (2011). Customer-to-customer interaction (CCI): a cross-cultural perspective. *Int. J. Contemp. Hospitality Manage.* 23(2):209-223.
- North AC, Shilcock A, Hargreaves DJ (2003). "The effect of musical style on restaurant customers' spending". *Environ. Behav.* 35(9):712-718.
- Nunnally JC, Bernstein IH (1994). *Psychometric Theory*, 3rd ed., McGraw-Hill, New York, NY.
- Oliver RL (1999). "Whence consumer loyalty?" *J. Market.* 63(10):33-44.
- Parasuraman A, Zeithaml VA, Berry LL (1985). "A conceptual model of service quality and its implications for future research". *J. Market.* 49(Fall):41-50.
- Parker C, Ward P (2000). An analysis of role adoptions and scripts during customer-to-customer encounters. *Eur. J. Market.* 34(3/4):341-358.
- Price LL, Arnould EJ, Tierney P (1995). Going to extremes: managing service encounters and assessing provider performance. *J. Market.* 59(4):83-97.
- Proenca JF, Rodrigues MA (2011). A comparison of users and non-users of banking self-service technology in Portugal. *Manag. Serv. Qual.* 21(2):192-210.
- Ranaweera C, Prabhu J (2003). "The influence of satisfaction, trust and switching barriers on customer retention in a continuous purchasing setting". *Int. J. Serv. Ind. Manage.* 14(4):374-95.
- Reynolds KE, Beatty SE (1999). "Customer benefits and company consequences of customer-salesperson relationships in retailing". *J. Retail.* 75(Spring):11-32.
- Ryu K, Jang S (2008). Influence of restaurants' physical environments on emotion and behavioral intention. *Serv. Ind. J.* 2(8):1151-1165.
- Spangenberg ER, Crowley AE, Henderson PW (1996). "Improving the store environment: do olfactory cues affect evaluations and behaviors?" *J. Market.* 60(4):67-80.
- Surprenant CF, Solomon MR (1987). "Predictability and personalization in the service encounter". *J. Market.* 51(4):86-96.
- Wind J, Rangaswamy A (2001). "Customerization: the next revolution in mass customization". *J. Interact. Market.* 15(Winter):13-32.
- Zeithaml V, Bitner M (2000). *Services Marketing – Integrating Customer Focus across the Firm*, 2nd ed., McGraw-Hill, New York, NY.