An analysis of the pro-social behaviors of customers in response to the firms’ service quality

Habibollah Ranaei Kordshouli1*, Younes Jafarpour2, Ahmad Allahyari Bouzanjani3

1. Faculty of Economics, Management & Social Sciences, Shiraz University, Shiraz, Iran
2. Faculty of Literature and Humanities, Persian Gulf University, Boshehr, Iran
3. Faculty of Economic & Administrative Sciences, Ferdowsi University of Mashhad, Mashhad, Iran

(Received: 15 September, 2014; Revised: 7 April, 2015; Accepted: 15 April, 2015)

Abstract

Nowadays, the awareness of service firms’ managers about the crucial role of customers in the success or failure of their business has increased. This has led them to this fact that the best strategy for surviving in the marketplace is encouraging customers’ prosocial behaviors in service delivery process. Reasonably, one of the best strategies to encourage customers toward these behaviors is service delivering quality. Despite the importance of this issue, marketing researchers have not investigated the effect of customers’ perceived service quality on their prosocial behaviors yet. The current study aims to bridge this research gap. Hence, a sample consisting of 381 customers of passenger transportation agencies (ground transportation), in the city of Shiraz, by convenient method were selected and surveyed. In addition, based on the theoretical framework of the research variables, the conceptual model was proposed. Finally, structural equation modeling (SEM) was used to test the hypotheses and it was found that the customers' perception of service quality, through affecting their satisfaction, can be reflected in their prosocial responses toward the agency. Furthermore, the customers' perception of setting and staff's dimension of service quality respectively have more positive effect on their satisfaction.

Keywords

Customer satisfaction, Passenger transportation agencies, Prosocial behaviors, Service quality.

* Corresponding Author, Email: ranaei@Shirazu.ac.ir
Introduction

In the last few decades, due to the significant impact of the customer behaviors and their attitudes on the success or failure of businesses, many researchers have focused on studying the factors that affect these variables. In the meantime, some researchers have also tried to investigate the outcomes reached in the long term as the results of customers' positive attitudes. One of the most important subjects in the research is the behaviors that are not required for the successful production or delivery of the service but that, in the aggregate, help the service organization overall (Garma & Bove, 2011).

Although this is a vital issue for every firm, its importance in the service firms is much more evident, because in the service firms, unlike the manufacturers of goods, the nature of work processes is in such a way that production and consumption of services occur simultaneously (Yi, Youjae, Gong and Taeshik, 2006) and also, the customer can see the production process of the service. These cases form the fundamental distinction between service firms and other firms; consequently, they highlight the sensitivity of the service delivery process. Thus, it seems that the best strategy to increase and improve the service quality is encouraging customers' cooperation in the service delivery process and providing supports for encouraging them toward prosocial behaviors (Garma & Bove, 2011).

These behaviors, especially, are more important for those firms whose process of service delivery, from the beginning to the end, takes a long period of time. Among them are passenger transportation agencies; where the passenger waits for a long period of time before leaving the origin until reaching the destination. In fact, the reason of the importance of this issue in these firms is that governmental policies which strive to decrease the use of private vehicles, on the one hand, and encouraging people to use public transportation, on the other, have led to an increase in the number of these firms’ customers and, consequently, an increase in their concerns about the quality of the services that they deliver.

Since the quality of customers' behaviors towards the firms is
mainly the reflection of the quality of treatments and services they have received from them (Yi et al., 2006; Yi et al., 2008), it seems that the main causes of the customers’ prosocial behaviors should also be found in the quality of firms' behavior, i.e., their services’ quality.

By reviewing the prior research on service quality in this industry, it can be seen that most of their focus is on the attitudinal issues (Chen, 2008; Han, Hamb, Yang & Baek, 2012; Lai & Chen, 2011; Chang & Yang, 2008; Eboli & Mazzulla, 2007; Park, Robertson & Wu, 2004; Gilbert & Wong, 2003; Yang, Hsieh, Li & Yang, 2012), a very few of them have investigated passengers’ unfavorable behaviors (Rhoden, Ralston & Ineson, 2008; Cheng-Huac & Hsin-Li, 2012) and despite the apparent importance of this issue, none of them have studied passengers’ prosocial behaviors. Arguably, this neglect can be due to their inadequate understanding of its nature, the reasons why it occurs, and its potential impact on firms (Fowler, 2013). Thus, understanding how the customers’ perceived service quality is related to their prosocial behaviors would help the managers of passenger transportation agencies to implement the actions that increase these behaviors in their customers. Hence, the current study tries to attain this goal by designing and testing a comprehensive framework to analyze the customers' prosocial behavior in response to the passenger transportation agencies' services.

Theoretical Foundation

Customers' Prosocial Behaviors

The emergence of customers' prosocial behavior as a topic in today’s studies can be found in the early '80s, when Bateman and Organ began to introduce the concept of the citizenship behavior of employees in organizations (Bove, Simon, Sharon & Edward, 2009). In fact, like employees, customers also may exhibit behaviors that are not required, but nonetheless, help the organization (Yi et al., 2008). These behaviors, also referred to as customer citizenship behavior (Gruen, 1995), extra role behavior (Keh & Teo, 2001) or customer voluntary performance (Bailey, Gremler & McCollough, 2001), offer
a meaning in which service firms can gain a competitive edge at no charge.

According to Garma and Bove (2011), this type of behavior is defined as discretionary behaviors of customers that is not directly or explicitly expected or rewarded but it generally leads to higher quality service and promotes the effective functioning of service organizations (Garma & Bove, 2011). Theoretically, the formation of this behavior is rooted in the social exchange theory. According to this theory, people seek to reciprocate those who benefit them. Prosocial behavior is also a behavior which may be exhibited in order to reward those who benefit from them (Yi et al., 2006).

At the first glance, the main beneficiaries of such behaviors may only be considered organizations or companies, while in addition to the company or organization, customers are also beneficiaries of such behaviors (Romana & Liliana L., 2011). Indeed, the targets of these behaviors can be the service worker, the firm, or other customers (Bove et al., 2009). For instance, Yi et al. (2008) identified three dimensions of these behaviors that are useful not only for the company, but also for other customers. These dimensions are (1) providing feedback to the company, which means providing solicited information to organizations that helps them improve their service delivery process, (2) helping other customers and (3) recommendations, which refers to the recommendation of the business to friends or family members (Yi et al., 2008).

Such behaviors increasingly appear conductive to effective organizational functioning and thus seem especially relevant to service firms, which cannot achieve significant productivity gains through capital substitution (Bartikowski & Walsh, 2011). These behaviors may also help to reduce a firm’s costs and maintain or improve its service quality (Fowler, 2013).

By reviewing the definitions of the previous researchers of this concept, it can be inferred that the customer's prosocial behavior includes behaviors such as: providing suggestions to improve the service quality (Yi et al., 2008; Bove et al., 2009; Patterson, Razzaque & Terry, 2003), encouraging friends and family to use the firm's
An analysis of the pro-social behaviors of customers in response to the ...  

services (Yi et al., 2008; Bove et al., 2009; Bettencourt, 1997; Patterson, Razzaque & Terry, 2003), informing the firm of the existing weaknesses in the services’ performance (Yi et al., 2008; Bove et al., 2009; Bettencourt, 1997) and flexibility against the unwanted failures in services delivery (Bove et al., 2009; Bettencourt, 1997; Yi et al., 2008). Therefore, it is reasonable that in measuring and analyzing this concept, these behaviors should be considered.

**Service Quality**

Service quality has been conceptualized as “the difference between customer expectations regarding a service to be received and perceptions of the service being received” (Akbar & Parvez, 2009). Furthermore, it is defined as “the degree of discrepancy between customers’ normative expectation of the service and their perceptions of service performance” (Kheng, Mahamad, Ramayah & Mosahab, 2010). Therefore, the degree of customers’ satisfaction is influenced by the extent which service quality matches customer expectations (Lai & Chen, 2011).

However, in passenger transportation industry, one of the most important problems is whether management can perceive correctly what passengers want and expect (Gilbert & Wong, 2003). Moreover, in evaluating service quality in this industry, passengers compare how they perceive the service with their expectations. Thus, assessing passenger expectations in this industry is not a static exercise, because passengers are becoming increasingly sensitive to quality (Gilbert & Wong, 2003). For this reason, so far, different models have been suggested to evaluate and measure the factors determining service quality. For instance, Parasuraman et al. (1988) refers to 10 service qualities which are reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding/knowing the customer and tangibles (Parasuraman, Zeithaml & Berry, 1988). Moreover, Aldlaigan and Buttle (2002), based on the technical and functional service quality schema proposed by Gronroos, developed a scale to measure service quality perceptions of bank customers. Their study resulted in SYSTRA-SQ, which consists of service system
quality, behavioral service quality, service transactional accuracy, and machine service quality (Aldlaigan & Buttle, 2002). Especially, for assessing service quality in passenger transportation agencies, many scholars have measured the service quality through various quality dimensions. According to Chang and Yang (2008) the three components of setting, service staff, and performance determine the quality of service in this industry. The setting dimension includes items related to the space and facilities for the delivery of service. The service staff dimension includes items related to those who interact with passengers and contribute to service delivery and finally, the performance dimension includes those items which are related to the quality of service, including the price of airline transport, timeliness, on-time reliability, and service processes and system design (Chang & Yang, 2008). Furthermore, Gourdin (1988) categorized transportation service quality in terms of three items, including the price, safety and timeliness (Gourdin, 1988). Moreover, Elliott and Roach (1993) proposed timeliness, luggage transport, food and beverage service quality, seat comfort, the check-in process and in-flight service dimensions (Elliott & Roach, 1993). Also, Eboli and Mazzulla (2007) measured customer satisfaction in the context of bus service based on various factors, including availability of shelter and benches at bus stops, cleanliness, overcrowding, information system, safety, personnel security, helpfulness of personnel, and physical conditions of bus (Eboli & Mazzulla, 2007).

Regardless of the various service quality dimensions that have already been presented to measure customer satisfaction, prior research shows that customers' satisfaction of service quality affects their attitudes and behaviors positively (Akbaba, 2006). According to previous studies, customers' satisfaction of services that are provided by passenger transportation agencies leads to their behavioral intention (Lai & Chen, 2011; Chen, 2008; Park, Robertson & Wu, 2004), favorable image about the firm (Park, Robertson & Wu, 2004), revisit intention (Han, Hamb, Yang & Baek, 2012), positive word of mouth, and their loyalty intention (Anand & Selvaraj, 2012).
An analysis of the pro-social behaviors of customers in response to the...

Conceptual model and research hypotheses

This research’s model is primarily rooted in the social exchange theory. The researches on social exchange have identified conditions under which people feel obligated to reciprocate behavior or actions when they benefit from others (Patterson, Razzaque & Terry, 2003). According to Bateman and Organ (1983) social exchange theory predicts that people attempt to reciprocate those who benefit them. To the extent that a person's affective state results from the efforts of firm and such efforts are interpreted as volitional, the person will seek to reciprocate those efforts. In fact, according to this theory, the satisfaction of a firm’s efforts will be positively related to customers' prosocial behavior, since individual customers will desire to reciprocate favorable treatment with helpful behaviors that benefit the firm (Bettencourt, 1997). Considering this theory, Graham and Organ (1993) also state that customers who are treated very well by service firms would be expected to be quite willing to contribute in ways that go beyond their prescribed role, because social exchange agreements adopt the notion of reciprocity, that is, they diffuse obligations to ‘return the favor’.

When a customer interacts with a firm during the service delivery process, the exchange can similarly be considered as a social exchange (Bowen, 1990). Therefore, when customers are satisfied with the service or feel that they have received exceptional treatment beyond their level of expectation, they are more likely to be reciprocated by engaging in voluntary behaviors that may benefit the firm (Patterson, Razzaque & Terry, 2003).

Service quality and customer satisfaction are two core concepts at the crux of the marketing theory and practice (Saeed, Niazi, Arif & Jehan, 2011). Satisfaction is, generally, an overall customer attitude towards a service provider, or an emotional reaction to the difference between what customers expect and what they receive regarding the fulfillment of some needs, goals or desires (Angelova & Zekiri, 2011). In other words, satisfaction is the customers’ evaluation of a product or service in terms of whether the product or service has met their...
needs and expectations (Akbar & Parvez, 2009). Thus, according to what was mentioned above and based on social exchange theory, it can be assumed that to the extent which transportation agencies are able to fulfill the customers’ expectations of the service delivery, i.e., the setting, staff and performance dimensions of their services (Chang & Yang, 2008), the same rate will also be able to satisfy them (Lai & Chen, 2011; Chen, 2008; Park, Robertson & Wu, 2004) and increase their prosocial behaviors (Wu, 2011; Yi, Youjae, Gong, Taeshik, 2006). Therefore, the research hypotheses are stated as follows:

\[ \text{H}_1: \] Setting of space and facilities for the delivery of services positively affects the customer satisfaction.

\[ \text{H}_2: \] The staff that provide the services positively affect the customer satisfaction.

\[ \text{H}_3: \] The service performance positively affects the customer satisfaction.

\[ \text{H}_4: \] Customer satisfaction of the service quality positively affects their prosocial behavior.

\[ \text{H}_5: \] Setting of space and facilities has a positive indirect effect on customer prosocial behavior.

\[ \text{H}_6: \] The staff that provide the services have a positive indirect effect on customer prosocial behavior.

\[ \text{H}_7: \] The performance of services has a positive indirect effect on customer prosocial behavior.

Considering the above hypotheses, the conceptual framework of this research can be displayed in the figure below:

Fig. 1. Conceptual framework of the research
Research Methodology

This study used the questionnaire survey to evaluate the hypotheses and research framework. The questionnaire items are designed based on a seven-point Likert scale. Also, this research referred to the previous studies to measure the variables; in other words, to measure the service quality in passenger transportation agencies according to Chang and Yang (2008), the three dimensions of setting, staff and performance were used. Although there are several models such as SERVQUAL that have been widely used to measure service quality across industries, it should be noted that no two providers of service are exactly alike (Gilbert & Wong, 2003). That is why, in this research, it was decided that a measurement tool be used that is designed exclusively for passenger transportation industry. Therefore, by reviewing the various models designed to measure service quality in this industry, it was concluded that in comparison with other models, the model of Chang and Yang (2008) is more appropriate, because, firstly, according to their methodology, their model and measurement's items were designed by their interviews with passengers; therefore, their measurement has more adaptation with the realities of this industry. Secondly, it seemed that their model is more innovative. Hence, in the present research, the model and questionnaire of Chang and Yang (2008) were chosen.

Furthermore, to measure customer satisfaction and their prosocial behaviors, the questionnaires of Bove et al. (2009) and Yi and Gong (2008) were used.

Table 1 shows the research variables, numbers, and source of questions.

The subjects were customers of passenger transportation agencies

<table>
<thead>
<tr>
<th>Questionnaire</th>
<th>No. of items</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Service Quality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff</td>
<td>5</td>
<td>Chang and Yang (2008)</td>
</tr>
<tr>
<td>Performance</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>3</td>
<td>Bove et al. (2009)</td>
</tr>
<tr>
<td>Customer Prosocial Behaviors</td>
<td>4</td>
<td>Yi and Gong (2008)</td>
</tr>
</tbody>
</table>
(Road Transportation) in the city of Shiraz. Due to the unlimited nature of the statistical population, using Cochran sampling formula for unlimited population, 384 samples were considered as the minimum required sample. In addition, the convenience sampling technique was employed, because the population of road transportation passengers was not available. To do so, by going to the passengers' transportation terminal, they were asked about their willingness to take part in the survey, and if they answered in the affirmative, then they were asked to complete a paper questionnaire under the guidance of the data collectors. Using this sampling method, 405 questionnaires were distributed and finally, after deleting those with incomplete responses, 381 usable ones were obtained, i.e., an effective response rate of 94%.

Furthermore, this research used structural equation modeling to verify the hypotheses by using the Amos software. This method, in fact, is a combination of regression and factor analysis that simultaneously validates measurement model and structural relations in the model (Hair, Ringle & Marko, 2011). When researchers in the humanities and social sciences deal with concepts that are not directly measurable, they inevitably try to measure them indirectly. In this measuring method, the most important issue is the validity of the measurement tool that the researcher has chosen to measure the concept. Validation of the measurement tool on the one hand, and the need for analyzing the structural relations on the other, lead the researcher toward using methods providing both of the mentioned tests. Although the use of other methods, such as regression, to test the hypothesis is possible, the weakness of this method will be exposed when the researcher intends to consider one or more mediator variables in his/her own conceptual model and simultaneously wants to analyze the effects between the model’s variables (Hair, Hult, Ringle & Sastedt, 2013). When the need for validating measurement tool and simultaneously, analyses of structural relations (considering the existence of mediator variables in the research model) are taken into account, in this research the best method for analyzing the data would logically be structural equation modeling.
In structural equation modeling (SEM), there are two approaches for analyzing the data: the covariance-based and partial least squares (Hair, Ringle & Marko, 2011). The decision between these approaches is whether to use SEM for theory testing and development or for predictive applications. In situations where prior theory is strong and further testing and development are the goal, covariance-based methods are more appropriate. However, for application and prediction, a PLS approach is often more suitable (Barroso, Carrión & Roldán, 2010). Given that in this research, the theoretical basis is strong and further testing and development of these theories is needed, the covariance-based approach was used to analyze the data. As mentioned earlier, the Amos software was used for this purpose.

Structural equation modeling of this study examined the two levels of analysis, the measurement model and the structural model.

In analyzing the measurement model, there are several measures to confirm the reliability of the constructs. One measure of the reliability is to examine the loadings of each of the constructs’ individual items. As Table 2 shows, the loadings ($\lambda$) of items of the constructs are acceptable. Also, Cronbach’s $\alpha$ is the other measure of reliability. Table 2 lists Cronbach’s $\alpha$ for the constructs. It can be observed that Cronbach’s $\alpha$ coefficients of all constructs (except of service performance) are more than 0.7. Therefore, the reliability of the measurements of this study is acceptable, too.

In addition, it is also important to verify whether the validity of the measurement in this study is acceptable. In this research, according to Gotz et al. (2010) procedure, the principal component analysis method was used to assess the validity of the measurement models. It is a more appropriate method than other methods examining the measurement model (Gotz, Liehr-Gobbers & Krafft, 2010), not only due to smaller absolute biases, but also because of smaller estimator variances (Vilares, Almeida & Coelho, 2010). Moreover, this method produces more accurate estimates for the measurement model when sample sizes are less than 500 (Hulland, Ryan & Rayner, 2010).

This research applied measure of average variance extracted (AVE) to access the convergent validity of the measurement. The AVE
measures the amount of variance captured by the construct through its items, relative to the amount of variance because of the measurement error. As shows, the AVE of all constructs, except for performance and prosocial behavior is acceptable. Thus, with a little approximation, it can be said that there is adequate convergent validity in this study.

Furthermore, Fornell and Larcker’s (1981) procedure was used to access the discriminant validity. According to them, discriminant validity is proven if a latent variable’s AVE is larger than the squared correlations of this latent variable with any other of the model’s constructs. Generally, presenting AVE with squared correlations has two advantages: it provides a more intuitive interpretation since it represents the percentage overlap among constructs and constructs to indicators and it tends to be easier for distinguishing the differences (Chin, 2010). As Table 3 shows, the difference between AVE and squared correlations among the variables is positive. Therefore, it can be said that the AVE of all constructs is greater than the squared correlations among them. Based on this, there is adequate discriminant validity in this research.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Items</th>
<th>Factor Loadings</th>
<th>Cronbach’s alpha</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting</td>
<td>Providing the entertainment facility</td>
<td>0.54</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Space disposition of service environment</td>
<td>0.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environmental cleanliness of the service place</td>
<td>0.53</td>
<td></td>
<td>0.75</td>
</tr>
<tr>
<td></td>
<td>Providing the welfare facility for passengers</td>
<td>0.73</td>
<td></td>
<td>0.53</td>
</tr>
<tr>
<td></td>
<td>Friendly intonation and presence of staff</td>
<td>0.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sympathizing with the passengers and meeting their needs</td>
<td>0.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Outfit and appearance of service staff</td>
<td>0.58</td>
<td>0.82</td>
<td>0.56</td>
</tr>
<tr>
<td></td>
<td>Service staff’s problem-shooting profession</td>
<td>0.76</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Service staff’s commitment to customers</td>
<td>0.61</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
An analysis of the pro-social behaviors of customers in response to the ...

Table 2. Measurement model fit

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Items</th>
<th>Factor Loadings</th>
<th>Cronbach's alpha</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance</td>
<td>Agency safety image</td>
<td>0.54</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low ticket prices</td>
<td>0.45</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Providing frequent transit time to different cities</td>
<td>0.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Properly dealing with unusual events (such as delay or cancellation of ticket)</td>
<td>0.52</td>
<td>0.65</td>
<td>0.47</td>
</tr>
<tr>
<td></td>
<td>The reliability of service operation time</td>
<td>0.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The speed of service processes</td>
<td>0.59</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>My choice to use this agency was a wise one</td>
<td>0.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>General satisfaction of service quality</td>
<td>0.80</td>
<td>0.81</td>
<td>0.74</td>
</tr>
<tr>
<td></td>
<td>I think that I did the right thing when I decided to use this agency</td>
<td>0.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Encouraging friends and family to use the firm's services</td>
<td>0.59</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Providing suggestions to improve the service quality</td>
<td>0.53</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Informing the firm of the existing weaknesses</td>
<td>0.55</td>
<td>0.70</td>
<td>0.49</td>
</tr>
<tr>
<td></td>
<td>Flexibility against the unwanted failures in services delivery</td>
<td>0.53</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: * Loading is acceptable when it is above 0.50, b scale reliability is considered satisfactory when Cronbach’s alpha is above 0.70, c AVE is acceptable when it is above 0.50, ' These items are removed due to low factor loading.

Table 3. Discriminant validity

<table>
<thead>
<tr>
<th></th>
<th>AVE</th>
<th>CPB</th>
<th>Performance</th>
<th>Satisfaction</th>
<th>Setting</th>
<th>Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.49</td>
<td>1</td>
<td>0.09</td>
<td>0.26</td>
<td>0.13</td>
<td>0.32</td>
<td>0.20</td>
</tr>
<tr>
<td>0.47</td>
<td>0.09</td>
<td>1</td>
<td>0.13</td>
<td>0.16</td>
<td>0.16</td>
<td>0.11</td>
</tr>
<tr>
<td>0.74</td>
<td>0.26</td>
<td>0.13</td>
<td>0.16</td>
<td>1</td>
<td>1</td>
<td>0.22</td>
</tr>
<tr>
<td>0.53</td>
<td>0.13</td>
<td>0.32</td>
<td>0.11</td>
<td>0.22</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>0.56</td>
<td>0.20</td>
<td>0.30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: The AVE should be larger than the squared correlations of latent variable with any other of the model’s constructs.

Furthermore, the overall model fit measures were used to evaluate the fit of the structural model (Table 4). The goodness-of fit statistics show that the structural model fits the data reasonably well. The model produced a chi-square of 369.7 (D.F= 159, P= 0.000), the goodness fit index (GFI= 0.88, with 1 indicating maximum fitness),
Comparative Fit Index (CFI = 0.91, 1 = maximum fitness), the normed fit index (NFI = 0.89, with 1 indicating maximum fit), and the incremental fit index (IFI = 0.94) met the proposed criterion of 0.90 or higher. Finally, the root mean square error of approximation (RMSEA = 0.07, with values <0.08 indicating mediocre fit), one of the indices best suited to our model with a large sample, indicated that the structural model was a reasonable fit.

<table>
<thead>
<tr>
<th>Index</th>
<th>RMSEA</th>
<th>IFI</th>
<th>NFI</th>
<th>CFI</th>
<th>GFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>0.07</td>
<td>0.94</td>
<td>0.89</td>
<td>0.91</td>
<td>0.88</td>
</tr>
<tr>
<td>Standard value</td>
<td>Good</td>
<td>X &lt; 0.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mediocre</td>
<td>0.05 &lt; X &lt; 0.08</td>
<td>X &gt; 0.9</td>
<td>X &gt; 0.9</td>
<td>At best, is close to 1.</td>
</tr>
<tr>
<td></td>
<td>Bad</td>
<td>X &gt; 0.08</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to the above table, the overall fit measures of the structural equation modeling in this study indicate that the fit of the model is reasonably well. Considering this fitness, now the structural relations and their path coefficients can be analysed and interpreted. Figure 2 shows the structural model of the research.
Findings

Table 5 shows the path coefficients and T-statistics (or C.R.) that are generally used for accepting or rejecting the research hypothesis.

<table>
<thead>
<tr>
<th>Number</th>
<th>Hypotheses</th>
<th>Estimate</th>
<th>C.R.</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Setting of space and facilities for the delivery of services positively affects the customer satisfaction.</td>
<td>0.35</td>
<td>2.56</td>
<td>Accepted</td>
</tr>
<tr>
<td>2</td>
<td>The staff that provide the services positively affect the customer satisfaction.</td>
<td>0.18</td>
<td>1.99</td>
<td>Accepted</td>
</tr>
<tr>
<td>3</td>
<td>The performance of services that are delivered positively affects the customer satisfaction.</td>
<td>0.15</td>
<td>0.38</td>
<td>Rejected</td>
</tr>
<tr>
<td>4</td>
<td>Customer satisfaction of service quality positively affects their prosocial behavior.</td>
<td>0.77</td>
<td>9.42</td>
<td>Accepted</td>
</tr>
<tr>
<td>5</td>
<td>Setting of space and facilities has a positive indirect effect on customer prosocial behavior.</td>
<td>0.17</td>
<td>1.98</td>
<td>Accepted</td>
</tr>
<tr>
<td>6</td>
<td>The staff that provide the services have a positive indirect effect on customer prosocial behavior.</td>
<td>0.07</td>
<td>2.05</td>
<td>Accepted</td>
</tr>
<tr>
<td>7</td>
<td>The performance of services has a positive indirect effect on customer prosocial behavior.</td>
<td>0.07</td>
<td>0.13</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

The first hypothesis was about the effect of setting’s dimension of service quality on customer satisfaction. As the table above shows, this hypothesis is accepted, because it has a positive (β: 0.35) significant effect (C.R.: 2.56) on customer satisfaction. In fact, this finding is a reconfirmation of Esmailpour et al. (2012) studies. Moreover, the second hypothesis was about the effect of service staff’s attributes on the customer satisfaction. Similar to the Esmailpour et al. (2012) findings, this hypothesis is also accepted as the service staff's attributes have a positive significant effect on customer satisfaction (β: 0.18 and C.R: 1.99). Thus, this finding is consistent with Esmailpour et al. (2012) findings.

However, the third hypothesis is rejected (C.R.<1.96). Indeed, as Table 5 shows, although the effect of service performance on customer satisfaction is positive, this effect is not significant (similar to Chen (2008) findings). This finding may be due to this fact that not all service dimensions are equally important to all passengers, because no two passengers are precisely alike, especially when demographics,
purposes of traveling and ethnic backgrounds are considered (Gilbert & Wong, 2003). Regarding this fact, it can be said that these variables moderate the effect of service performance on customer satisfaction.

Furthermore, as it is evident, the fourth hypothesis is accepted ($\beta$: 0.77; C.R: 9.42). Therefore, it can be said that customer satisfaction of service quality positively increases their prosocial behaviors toward the agency.

In addition, according to the findings, the indirect (mediated) effect of setting and staff dimensions of service quality on customers’ prosocial behavior are, respectively, 0.17 and 0.07 (C.R: 1.98 and 2.08). Based on these findings, the fifth and sixth hypotheses are accepted. Therefore, it can be said that customer satisfaction positively mediates the effect of setting and staff dimensions of service quality on customers’ prosocial behavior. However, due to the insignificant direct effect of independent variables on customers’ prosocial behavior (before and after adding the mediator variables), this type of mediation is indirect; neither partial nor full. Contrary to these findings, the indirect effect of service performance on customers’ prosocial behavior is not significant (C.R<1.96). Therefore, the seventh hypothesis is not accepted. This finding may be due to the insignificant effect of this variable on customers’ prosocial behavior.

Conclusions & Suggestions
The aim of this research was to investigate the effect of service quality in the passenger transportation agencies on the customer's prosocial behaviors. As it was shown, the customers' perception of service quality, through affecting their satisfaction, can be reflected in their behavioral responses toward the agency. Furthermore, as it was shown, the customers' perception of setting and staff’s dimension of service quality respectively have more positive effects on their satisfaction. Therefore, as a suggestion, it can be said that the first step in improving the service quality should begin with improving the setting of space and facilities for the delivery of services. In the next step, also, improving the staff’s capability in delivering the services
should be considered. For this purpose, the necessary actions for starting each of the above steps can be presented as follows:

To improve the setting of space and facilities for the delivery of services, at first, agencies should take care to improve the space disposition of service environment. Moreover, providing the welfare and entertainment facilities for passengers is another important action that must be considered in improvement plans. Besides, planning actions to increase the environmental cleanliness of the service place is the final effective priority that needs to be planned.

Furthermore, to improve the staff’s capability in delivering the services, managers’ attention should be paid to designing appropriate training programs. In these programs, the greatest emphases, in the order of importance, should be on developing the employees’ skills in treating with passengers, problem-shooting profession, commitment to the customer, sympathizing with the passengers and meeting their needs, and finally, their outfit and appearance during the provision of services.

In addition, future researches need to replicate this study in order to address some of its limitations. In fact, this research should be extended to other activities and other sectors of the economy for the better understanding of factors that affect prosocial behaviors of customers.
References


An analysis of the pro-social behaviors of customers in response to the ...


