Measurement of Perceived Service Quality in the Food Retail Industry of Turkey

Ali Ilhtiyar and Fauziah Sh. Ahmad
International Business School, Universiti Teknologi Malaysia, Malaysia

Abstract: The purpose of this study determines the key factors that might be considered in the sector-specific measurement scales that is highly related with DTR scale model of service quality (other than SERVQUAL or SERVPERF). A total 342 responds obtained by the online survey method. These respond were listed as highlighted in the literature and theoretical background of the key conceptual and empirical aspects to be considered in the service quality measurement instruments. The study defines deficiencies in the food retail industry of Turkey and the study makes effective suggestions for the future strategies of the sector industry.

Key words: Perceived service quality, food retail, Turkey retail industry, consumer satisfaction, DTR, retail service quality

INTRODUCTION

Service quality has become an essential research topic in the framework of marketing in the past decades, and its relationship with consumer satisfaction (Bolton and Drew, 1991; Boulding et al., 1993; Cameran et al., 2010; Juga et al., 2010), consumer loyalty (Carpenter, 2008), buying behaviour (Perez et al., 2007; Taylor and Cronin Jr., 1994), repurchase intention (Olaru et al., 2008), marketing segmentation, branding (Hairson et al., 2011), cultural aspects (Chebat and Morrin, 2007; Ladhari et al., 2011) and implication strategies of those subjects have been researched by many researcher. One of the considerable difficulties facing service providers is a significant increase of competition and consumer expectation (Hossain and Leo, 2009) and both of them have been forcing companies to change from their traditional consumer satisfaction approach to adopt aggressive strategies which will drive them to gain the lead in the market (Kandampully, 1998). In this respect, consumer satisfaction has been played an essential role for measuring level of service quality in retail settings and evaluating the impact of service quality across customer retention will help companies to quantify the financial impact of service quality (Zeithaml and Bitner, 1996, 2003). Therefore, excellent service quality has become a key factor for domestic and international companies and it is identified as a powerful competitive weapon by many leading services (Zeithaml and Bitner, 1996). Accordingly, the goods or service marketers are progressively improving their quality of service level (Anderson and Sullivan, 1993) and the surveys for measuring consumer satisfaction have been using for evaluating business performance and behavioural aspects of employees (Hauser et al., 1994; Hurley and Estelami, 1998). The disconfirmation-of-expectation paradigm (Oliver, 1980) discusses there is a relationship between the consumer satisfaction and consumer loyalty. Consumer satisfaction or dissatisfaction is influenced by the perceived service quality and the value of the service (Cameran et al., 2010; Juga et al., 2010; Anderson and Sullivan, 1993). Identification of perceived service level has been explained by many scholars. The perceived service quality is defined as the consumer’s judgment about a product’s overall excellence or superiority in the study of Zeithaml et al. (1988). Another study that is researched by Svetlana (2011), superiority service quality means that the consumers’ perception of service performance meets their expectations of what the service organization could provide. Anderson and Sullivan (1993) identified the service quality as a gap between expected and perceived performance of service providers.

According to Zeithaml (1998), perceived value is the consumer’s overall evaluation of the utility of a product based on perceptions of what is perceived and what is contribution. Eventually, consumers’ perception of value is influenced by dissimilarities in monetary costs, non-monetary costs, consumer tastes and consumer characteristics (Bolton and Drew, 1991; Bao et al., 2011). As highlighted before, level of service quality might be explained or described as the difference between expectation and perception of consumers. In terms of the measuring service quality, expectations and perceptions might be identified as key deterministic indicators of the existed and validated scales.

Measuring service quality and retail industry

Service quality: A well-known measure scale of service quality is SERVQUAL that is developed by Parasuraman et al. (1988). The scale composed of 22 items that are listed in five dimensions of tangibles, reliability, responsiveness, assurance, and empathy.

Corresponding Author: Ali Ilhtiyar, International Business School, Universiti Teknologi Malaysia, Malaysia
SERVQUAL scale has been widely utilized and referred in numerous service settings in the past decades such as professional services (Cameran et al., 2010; Bouman and Van der Wiele, 1992; Freeman and Dart, 1993), tourism (Jani and Han, 2011), higher education (Ahmad, 2011; Carman, 1993), Trivellas and Dargenidou, 2009; Sultan and Wong, 2010), information systems (Kettinger and Lee, 1994), pest control, dry cleaning, fast-food (Cronin Jr. and Taylor, 1992), banking (Horn and Rudolf, 2011), discount and department stores (Dabholkar et al., 1996; Finn and Charles, 1991), retail stores (Khare et al., 2010) and healthcare (Butt and de Run, 2010; Padma et al., 2010).

Although, the feasibility of SERVQUAL dimensions through the various service industries has been criticized (Chaman, 1990; Babakus and Boller, 1992; Brown et al., 1993; Caro and Garcia, 2007). Babakus and Boller (1992) used the SERVQUAL scale to measure service quality in their study and they have found that quality of service level as quantified in the SERVQUAL scale, score of relies in the perception more considerably than on the expectation. As confirmed in the study of Wall and Payne (1973), desired level (expectations) of service can be rated higher than existing level (perceptions) of the service by people. Another challenges in the model, respondents occur to be bored and confused by the realization of E and P version of SERVQUAL scale. Unquestionably, data quality can be affected by confusion and apathy (Parasuraman, 1988). Therefore, this study examined only perceptions and it can be more feasible and reasonable. In addition, SERVPERF scale (Cronin Jr. and Taylor, 1992) that is not weighted perceptions factors of SERVQUAL scale has been represented empirically to exceed SERVQUAL in predicting behavioural intentions. Many researchers have encouraged the SERVPERF scale is the more suitable model than SERVQUAL scale (Cameran et al., 2010; Sultan and Wong, 2010; Babakus and Boller, 1992; Brady et al., 2002; Brown et al., 1993; Mehta et al., 2000; Zhou, 2004); meanwhile, SERVQUAL scale has been utilizing as a well-known and validated model for measuring service quality (Zeithaml and Bitner, 2003; Trivellas and Dargenidou, 2009; Khare et al., 2010; Butt and de Run, 2010; Furrier et al., 2000). As highlighted before, the SERVQUAL scale has been applied in many service providers; however, there are some objections to measure quality of service level in retail industry (Dabholkar et al., 1996). Finn and Charles (1991) used SERVQUAL scale in four different types of retail stores in various sizes. According to their findings, the scale could not be used as an appropriate to measure service quality in retail setting without any adaptation. In addition, Zhao et al. (2002) used SERVQUAL scale to measure service quality in the department stores in China and the result of study is that SERVQUAL scale did not favourably harmonize in the retail sector of Mainland China. For these reasons, industry-adapted measures of service quality might be more applicable than a single generic scale (Dabholkar et al., 1996; Babakus and Boller, 1992; Caro and Garcia, 2007). Dabholkar et al. (1996) have developed and empirically validated a scale that is entitled DTR and dimensions of scale are namely: physical aspects, reliability, personal interaction, problem solving and policy. DTR's suggested the measuring of retail service quality consists of 28 item and 17 of them have been adopted from SERVQUAL scale and 11 items have been developed by their literature review and qualitative research. In this respect, a study conducted by Mehta et al. (2000) have found that DTR scale is more applicable than SERVPERF scale to measure the service quality in supermarkets or hypermarkets.

**Food retail industry of Turkey**: According to the last census in 2010 (TSI), Turkey’s population was 73,722,988 and Turkey was the 17th crowded country throughout the world and the 2nd most crowded country in the Europe. In addition, 76.26% of population lives in cities. These figures might be a deductive and explicable reason for investing in the food retail industry of Turkey by global service leading. However, the market has not been identified as easy in or easy out. Turkey's food retail industry has highly dynamic and competitive market structure. Furthermore, well-known global players (Carrefour, Tesco, Metro, Real, etc.) have been challenging domestic brands (Bim, Migros, Sok, A-101, etc.) and creating new strategies for increasing their market share against the domestics companies in the market. As in the world, the sectorial growth rate of retail industry in Turkey has been represented a remarkable increase in the past decade. According to Deloitte, the turnover of the sector was $150 billion dollars at 2007 and $187 billion dollars at 2010. From 2007-2010, the growth rate was accrued approximately 19%. Furthermore, the expected growth rate between 2010 and 2014 is 25% and the volume of retail industry will reach $250 billion dollars at 2014. In other word, retail industry will be listed as the third biggest sector in the general industry list of Turkey at 2014. At the same report, Deloitte, Turkey's retail market was the 7th biggest market in the Europe and 10th in the worldwide. Moreover, as represented at the Global Powers of the Retailing, the report consists of two rankings which are the fastest growth companies and biggest retailers in the world, according to those rankings BIM was 220th and 8th was and Migros 206th and 19th, respectively.

**MATERIALS AND METHODS**

The approved Retail Service Quality Scale, it is known as DTR Scale, developed by Dabholkar et al. (1996). The respondents, whom should be aimed of this
study were current consumers of the listed retail service providers in the food retail industry of Turkey. The sample of 342 respondents was gained. A pre-test with a sample of 32 was conducted; however, 7 items were canceled. The reason of cancellation is the items were not appropriate in terms of meaning in this research.

Eventually, a total of 357 questionnaires were collected by online questionnaire, however 342 of these were appropriated and 15 discarded due to incomplete responses, thus leading to a response rate of 95.79%. The questionnaire included 25 expressions on the food retail service quality. All the expressions conducted on a 7-point Likert scale that is more referred and appropriated measurement scale by many researcher (Juga et al., 2010; Sultan and Wong, 2010; Padma et al., 2010; Butt and de Run, 2010). The information of marital status, age, gender, education level, income level, shopping value per month and shopping frequency collected as demographic information in the questionnaire. The factor scores were analysed by the component factor analysis with varimax rotation for data reduction (Afifi and Clark, 1984; Hair et al., 1992). Next step, factor scores were gained from the defined dimensions that were used as independent variables for further analysis.

**RESULTS AND DISCUSSION**

The fundamental component factor analysis with varimax rotation was performed on the 25 items for measuring perceived service quality of food retail stores. The factor analysis method was appropriated for this study (KMO = 0.843, Bartlett’s Test of Sphericity = 4784.487 and its significance = 0.000). Thus, the 25 sub-factors were reduced to six main factors with eigenvalues >1.0.

The determined factors explained 66.38% of the item variance. The six main factors and the loadings of them are shown in Table 1. The overall reliability of this study

<table>
<thead>
<tr>
<th>Parameters</th>
<th>The factor analysis</th>
<th>Values</th>
<th>α</th>
<th>Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q4</td>
<td>Personnel interaction</td>
<td>0.913</td>
<td>0.74</td>
<td></td>
</tr>
<tr>
<td>Q3</td>
<td>Giving immediately service by employee</td>
<td>0.752</td>
<td></td>
<td></td>
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<tr>
<td>Q5</td>
<td>Consistently polite with customer</td>
<td>0.728</td>
<td></td>
<td></td>
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<tr>
<td>Q6</td>
<td>Never too busy to respond to customers’ request</td>
<td>0.546</td>
<td></td>
<td></td>
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<tr>
<td>Q7</td>
<td>Individual attention</td>
<td>0.531</td>
<td></td>
<td></td>
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<tr>
<td>Q8</td>
<td>Behaviour of employee instills confidence in customer</td>
<td>0.596</td>
<td></td>
<td></td>
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<tr>
<td>Q9</td>
<td>Knowledge of the employee</td>
<td>0.329</td>
<td></td>
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<tr>
<td>Q10</td>
<td>Accounted of variance</td>
<td>8.240</td>
<td></td>
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<tr>
<td>Q11</td>
<td>Policy</td>
<td>0.72</td>
<td></td>
<td></td>
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<tr>
<td>Q12</td>
<td>Safety in transaction</td>
<td>0.990</td>
<td></td>
<td></td>
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<tr>
<td>Q13</td>
<td>Error-free sales transaction and record</td>
<td>0.896</td>
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<tr>
<td>Q14</td>
<td>Accept most of major credit cards</td>
<td>0.863</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q15</td>
<td>Tell customer exactly what will be performed</td>
<td>0.734</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q16</td>
<td>High quality products</td>
<td>0.694</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q17</td>
<td>Accounted of variance</td>
<td>0.081</td>
<td>2.277</td>
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<tr>
<td>Q18</td>
<td>Visual appearance</td>
<td>0.774</td>
<td></td>
<td></td>
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<tr>
<td>Q19</td>
<td>Visually appealing service material</td>
<td>0.808</td>
<td></td>
<td></td>
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<tr>
<td>Q20</td>
<td>Visually appealing physical facilities</td>
<td>0.734</td>
<td></td>
<td></td>
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<tr>
<td>Q21</td>
<td>Suitable operating hours</td>
<td>0.603</td>
<td></td>
<td></td>
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<tr>
<td>Q22</td>
<td>Modern-looking equipment and fixtures</td>
<td>0.563</td>
<td></td>
<td></td>
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<tr>
<td>Q23</td>
<td>Accounted of variance</td>
<td>0.0784</td>
<td>1.9600</td>
<td></td>
</tr>
<tr>
<td>Q24</td>
<td>Promises</td>
<td>0.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q25</td>
<td>Performs the service right at the 1st time</td>
<td>0.734</td>
<td></td>
<td></td>
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<tr>
<td>Q26</td>
<td>Providing service at the time if promising to do so</td>
<td>0.729</td>
<td></td>
<td></td>
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<tr>
<td>Q27</td>
<td>Willingly handle returns and exchange</td>
<td>0.597</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q28</td>
<td>Accounted of variance</td>
<td>0.0671</td>
<td>1.6800</td>
<td></td>
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<tr>
<td>Q29</td>
<td>Problem solving</td>
<td>0.789</td>
<td></td>
<td></td>
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<tr>
<td>Q30</td>
<td>Sincere interest to solve problem</td>
<td>0.740</td>
<td></td>
<td></td>
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<tr>
<td>Q31</td>
<td>Clean, attractive and convenient public areas</td>
<td>0.603</td>
<td></td>
<td></td>
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<tr>
<td>Q32</td>
<td>Handling customers’ complaint directly and immediately</td>
<td>0.584</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q33</td>
<td>Accounted of variance</td>
<td>0.0510</td>
<td>1.2750</td>
<td></td>
</tr>
<tr>
<td>Q34</td>
<td>Convenience</td>
<td>0.769</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q35</td>
<td>Store layout makes it easy for customer to move around</td>
<td>0.847</td>
<td></td>
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<tr>
<td>Q36</td>
<td>Store layout makes it easy for customer to find what they need</td>
<td>0.797</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q37</td>
<td>Availability of merchandise</td>
<td>0.565</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q38</td>
<td>Accounted of variance</td>
<td>0.0473</td>
<td>1.1830</td>
<td></td>
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</table>
was acceptable (Cronbach’s coefficient alpha = 0.916) and the reliability of those factors is ranked from 0.72-0.789.

Demographic background: According to the Table 2, 95.91% of respondents graduated from bachelor or post-graduate education (university: 32.94%, master and doctoral: 62.97%) in this respect, educational standard of participants might be identified as a significant indicator for reliability of the study. On the one side, 85.14% of total responds are ≥30 years old and 80.18% of the contributors have a regular income that is at least 2000 TL. On the other side, the frequencies of shopping and their purchasing amount in once a time among the respondents could play an essential role for identifying the service quality of food retail. Thus, 60.06% of them go to a food retail store for shopping at least 6 times in a month. Furthermore, 79.3% of respondents pay at least 50 TL per shopping. Eventually, the most purchased retailer was chosen Migros and second was Bim. However, the stores are identified themselves different each other. Their store design, store location, store size, personnel skills, product categories or amounts, store atmosphere, promotions, managerial approaches etc. are not quite similar. Both companies have different strategies for the market (Table 3).

Factor 1: The factor which was labeled as personal interaction was consisted of six sub-factors and accounted for 32.9% of the variance. The sub-factors under this broad category were similar to the five dimensions out of 8 which were listed by Dabholkar et al. (1996) but a new item giving immediately service by employee was added. It should be explained by the fact that the life in Turkey is commonly dynamic and consumers expect correct and polite services and behaviour of employee is recognized as a key factor for consumer satisfaction by consumers (Bitner et al., 1994; Chung-Herrera et al., 2004). According to Bitner (1990), Cronin Jr. and Taylor (1992) and Boulding et al. (1993), service personnel’s behaviour has played an essential and critical role in satisfaction or dissatisfaction and the dissatisfied consumer who does not directly complain to company, communicate negative word of mouth to friends or associates and this reaction could be a tangible reason for switching retail service providers (Singh, 1996). In other words, the consumer satisfaction is recognized in terms of what consumers perceive from retail service providers and this interaction could increase the satisfaction level or number of dissatisfied consumers (Khare et al., 2010). However, companies are generally
more focused on the consumer satisfaction than their employees and this conflict causes many misunderstandings between consumers and firms. In addition as highlighted by many researchers, consumer satisfaction is directly related to profitability of retail settings because of that many firms have replaced from their conventional methods to modern approach (Hauser et al., 1994; Hurley and Estelami, 1998).

Factor 2: The factor was composed of five sub-factors that related to the policy of retail service providers. The variance of the category was an additional 9.01% and coefficient alpha of broad category was 72%. As showed in Table 1, the first three sub-factors which were listed as safety transaction, error-free sales transaction and record and accept most of major credit cards, remarkable loading scores. Even if those sub-factors were matched with original dimensions of DTR, the loading score of high-quality products was listed end of the category of policy. It might be explained by if the retail service provider described clearly the policies of store or brand, transactions conditions, features of products and their sensitivity on the consumer requirements, the consumer could be purchase or repurchase confidently.

Factor 3: This broad category was labeled as physical appearance that included four items. Its coefficient alpha was accounted as 77.4% and for the additional 7.84% of the variance. The sub-factors of convenient operating hours, visually appealing service material and visually appealing physical facilities could be matched exactly with the dimensions of DTR, although the sub-factor of modern-looking equipment and fixtures in this study was added as a new item for this category. On the other hand, related dimensions with high-quality products and credit cards were listed in policy at this study. Physical aspects are tangible influences for consumer and while they are entering the store, consumers notice those factors such as noise level, temperature, colours, service staff’s appearance and odours. As mentioned the studies of Bitner (1990), Finn and Charles (1991) and Levy and Barton (2007), the factors that are listed under physical aspects may influence perception of service performance.

Factor 4: The promises category was consisted of four sub-factors and its variance was accounted as 6.71%. The coefficient alpha value of this broad category was 74%. Two sub-factors of the category were similar to dimensions of the DTR. Besides this, the sub-factors of, performs the service right at the 1st time and willingly handle returns and exchange were listed in promises. It might be explained that attitudes and expectation of consumers from retailers. The retailers could clarify those factors, otherwise level of disconfirmed expectations might be considered as the main reason of (dis)satisfaction. Especially, those sub-factors directly and highly related to the trustworthiness of the retail service provider and the factors that are recognized as favourable by the consumers should be positive influences on consumer loyalty and repurchasing.

Factor 5: This category was labeled as problem solving. The coefficient of the category was accounted as 78.9% and variance was quantified as 5.1%. According to the original dimensions of DTR were matched of the two sub-factors of this study but unexpectedly the sub-factor clean, attractive and convenient public areas was listed under this broad category. It might be described to related that shopping experiences of consumers in numerous stores and their hygiene conditions. The consumers could identify the conditions as a problem for those stores and it should be an intangible reason for dissatisfaction (Finn and Charles, 1991).

Factor 6: Those sub-factors which were shown in Table 1 were listed under convenience broad category. It composed of three sub-factors and its additional variance was accounted for 4.73%. The reliability value of this category was determined as 76.9%. The first two sub-factors were matched with DTR scale and the third sub-factor of this study was listed surprisingly in this category. Beside these, store layout of the store plays an essential role for evaluating process.

CONCLUSION

Service quality has an essential and the simplest marketing instrument for retail service providers to create ambitious benefits and to improve the satisfaction level of consumers. The food and they have many branches in various sizes throughout the Turkey. In order to be continual in the market, the retailers might determine the demands of target consumers and understanding to how consumers evaluate their service quality or what consumers need exactly in the shopping experience.

This study illustrated the practicality of measuring the perceptions of (food) retail service quality and its the most important sub-factors. In this sense, the survey composed 25 sub-factors have been identified under five groups which are personnel interaction, policy, physical appearance, promises, problem solving and convenience. Among the six service dimensions, the personnel interaction and policy have the greatest impact on the overall service quality. The food retail service providers
in Turkey might be noticing that main factors. According to the results, Turkish consumers prefer to encounter courteous and high-skilled store personnel. In sum, retailers in Turkey should be responsive to the consumer’s needs and demands when creating and implicating the service strategies in food retail industry. Hence, effective and competitive strategies in service quality will enhance the consumer satisfaction and profitability of retail service providers.

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