

EXPLORING THE PASSENGERS' OVERALL PERCEPTIONS OF TURKISH AIRLINE COMPANIES: A REPERTORY GRID ANALYSIS



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ABSTRACT

Although airline services are not complex as high-tech products, they are made up of a diverse mix of intangibles. Therefore, it is a challenging matter for airlines management to identify correctly what passengers really want and expect. Using help of a repertory grid analysis which is capable of generating robust results with even small samples, this paper attempts to explore passengers' overall perceptions of airline companies. The study offers a list of variables and key attributes that customers use in evaluating competing airliners. Price, reliability, food and beverage (F&B) services, flight time availability and reputation were found to be key constructs.

Key Words: Airline Services, Service Attributes, Customer Perceptions, Repertory Grid Analysis, Service Marketing.

YOLCULARIN TÜRKİYE'DEKİ HAVAYOLU FİRMALARINA İLİŞKİN ALGILARININ REPERTUVAR ÇİZELGESİ TEKNİĞİ KULLANILARAK ARAŞTIRILMASI

OZ

Havayolu hizmetleri teknoloji ürünleri gibi karmaşık yapıda olmasa da birçok soyut özellik barındırır. Dolayısıyla, havayolu firmaları için yolcuların ne istediklerini ve beklentilerini bilmek çaba gerektiren bir konudur. Bu çalışma, küçük örneklerde güçlü sonuçlar üretebilen Repertuar Çizelgesi Tekniği kullanarak, yolcuların havayolu firmaları hakkındaki genel algılarını ölçümlemeyi amaçlamaktadır. Bu ölçümün sonucu, yolcuların havayolu firmalarını değerlendirirken kullandıkları kıstasların ve kilit değişkenlerin bir listesi olma özelliğindedir. Fiyat, güvenilirlik, yiyecek-içecek hizmetleri, uçuş zamanlarının uygunluğu ve firma itibarı kilit değişkenler olarak bulunmuştur.

Anahtar Kelimeler: Havayolu Hizmetleri, Hizmet Özellikleri, Müşteri Algıları, Repertuar Çizelgesi Tekniği, Hizmet Pazarlaması

INTRODUCTION

In service industries such as the airline industry, the distinctive features of services require that managers understand customer needs and expectations, and that they keep promises (Gilbert and Wong, 2003; Aksoy et al., 2003). In practice, most airlines measure passenger perceptions of their service offerings in order to understand the company's performance levels, but without clear knowledge of passenger expectations for service. Lack of understanding or misunderstanding of such expectations could pose serious problems in resource allocations. Therefore, it is imperative for airline management to determine what their customers do and do not want (Chen and Chang, 2005).

Several studies have suggested that airline service quality is one of the most critical factors likely to influence travelers' airline selections (Ostrowski et al., 1993; Park et al., 2004; Pakdil and Aydin, 2007; Park, 2007), and there are significant relationships among reputation, service, and retained preference (Gürsoy et al., 2005). Service quality dimensions and quality measures can also affect several other performance measures, such as customer satisfaction (Alotaibi, 1992), customer loyalty and retention (Ostrowski et al., 1993; Young et al., 1994), competitive advantage (Liou and Tzeng, 2007), profitability (Wong and Chung, 2007), and productivity (Ozment and Morash, 1998).

The results from a study of Korean travelers suggest a need for airlines to develop passenger-focused services that require a detailed understanding of passengers' expectations. (Park et al., 2007) In fact, survey studies have revealed many attributes related to airline service quality. Most of these attributes are evaluated by customers as important but, because customers may not process multiple attributes concurrently, some of these attributes may not be used during buying decisions. Instead, perceptions about airline companies and customers' buying behaviors might be the result of a relatively small number of attributes.

Several techniques have been used to uncover the underlying dimensions of airline service attributes, e.g., Critical Incident Technique (Chang and Yang, 2008a; Chang and Yang, 2008b; Bejou

et al., 1996), Fuzzy Multi Criteria Decision Modeling (Chang and Yeh, 2002; Tsaur et al., 2002) and Importance Performance Analysis Technique (Chen and Chang, 2005). The repertory grid is a research tool that elicits the underlying constructs people use to interpret what is going on around them and that inform their decision-making (Rogers and Ryals, 2007). The use of the repertory grid is particularly appropriate in studies where interviewees find it difficult to articulate their opinions with clarity (Goffin et al., 2006).

This exploratory study uses repertory grid analysis to reveal passengers' overall perceptions of airline companies and the underlying latent factors that influence their buying behaviors. Based on the review of literature, this is the first attempt to use RGA in the airline industry. The paper arrives at a list of variables and key attributes that customers use in evaluating competing airlines. The findings of the study are discussed and sound implications for airline managers are proposed.

1. LITERATURE REVIEW

Several studies have addressed dimensions of service expectations, buying behaviors, perceptions and service quality, including many tangible and intangible/subjective variables in the airline industry (e.g. Gourdin, 1988; Ostrowski et al., 1993; Elliott and Roach, 1993; Hynes and Percy, 1994, Truitt and Haynes, 1994; Gilbert and Wong, 2003; Park, 2007). Park used 11 factors that affect passengers' buying behaviors: in-flight service, reservation-related service, airport service, reliability, employee service, flight availability, perceived price, passenger satisfaction, perceived value, airline image, and overall service quality. Bowen and Headley (2001) developed an airline quality rating based on multiple performance criteria: on-time arrivals, involuntary denied boarding, mishandled baggage, and a combination of 12 customer complaint categories (Gursoy et al., 2005).

Ostrowski et al. (1993) evaluated 15 elements associated with the service encounter (i.e., the flight itself) while Gilbert and Wong (2003) developed a 26-item questionnaire incorporating assurance, reliability, facilities, employees, flight patterns, customization, and responsiveness dimensions in order to measure and compare the differences in passengers' expectations for airline service quality. Park et al. (2004) measured airline service quality using 22 items primarily based on the Servqual scale, and Chang and Yeh (2002)

proposed five factors for service quality- airline employees, reliability of service, on-board comfort, convenience of service, and handling of abnormal conditions- that included fifteen service attributes.

Prior works on service quality, buying behavior and performance criteria in the airline industry have generated a number of service attributes. Considering the results of these studies, Chang and Yeh (2002) suggested that the definitions and perceptions of airline service quality are diverse, and do not appear to fit any single existing quality model. While the services provided by airlines are not as complex as, for example, those inherent in high-tech products, they are made up of a diverse mix of intangibles (Liou and Tzeng, 2007). Since service industry is characterized by intangibility, perishability, inseparability and heterogeneity, it is difficult to measure quality and to precisely assess customers' perceptions (Chang and Yeh, 2002; Pakdil and Aydin, 2007). Thus a wide range of sensitivities they have toward airline attributes (Liou and Tzeng, 2007).

Evaluations of passenger expectations and perceptions towards airline service quality, service attributes or service performance have examined more than 50 variables but not all service dimensions are equally important to all passengers, because no two passengers are precisely alike, especially when demographics, purpose for travel and ethnic background are considered (Gilbert and Wong, 2003). Therefore, it may be that only a handful of key attributes and latent features play a central role in purchasing behaviors or general perceptions towards competing airlines. Since companies cannot always be good at everything, managers should define a set of key criteria in keeping with positioning strategies that will raise the level of customer satisfaction, value perception and long term business success. Gaining such insights on passengers' perceptions of what is valuable in airline services, may reveal a more succinct combination of key service features that will lead to better decisions related to resource allocation.

2. REPERTORY GRID TECHNIQUE (RGT)

The Repertory Grid Technique (RGT), which is based on Personal Construct Psychology, was introduced by Kelly (1955) to explain how people conceptualize their worlds. It is based on the notion that humans actively generate and test their own hypotheses

by constructing a personal system of constructs which they continuously form and revise (Ashleigh and Nandhakumar, 2007).

RGT enables respondents to articulate their views on complex issues and pushes them beyond the use of jargon (Goffin et al., 2006). Researchers can capture interviewees' perceptions of nebulous concepts and probe below the surface into areas of "unawareness" (Rogers and Ryals, 2007), gaining the opportunity to understand the issue through the eyes of their subjects by helping them identify the constructs they hold about the world and those that are most important to them. The repertory grid has become a successful research tool for using consumers' own terminology to identify how consumers view categories, features and attributes related to products and services (Rogers and Ryals, 2007).

RGT has been applied in many diverse fields, including educational research (Zuber-Skerritt, 1987), stress (Walter et al., 2004), supplier-manufacturer relationships (Goffin et al., 2006) and tourism (Pike, 2007) (Table 1).

3. METHODOLOGY

The primary objective of the paper is to explore passengers' overall perceptions of airline companies' from the customer's point of view, thereby to create a basis for better service management. The RGT is an appropriate research methodology for the objectives of this study.

In qualitative research, there is no guidance regarding sample size, but a small sample is acceptable and practical in many cases (McGivern, 2006; Naoi et al., 2007). In fact, in the current study, first two participants provided approximately 50% of all statement themes generated by the sample, which result supports the proposition that a small RGT sample is sufficient to reach redundancy (Pike, 2007). Many RGT studies (Table 1) have used small sample size in their research. For the current study, 15 respondents were interviewed using the convenient sampling method. All participants were flyers who have used all Turkish domestic airlines at least once. The ages of the respondents ranged from 24 to 53. Among the participants, 6 were male and 9 were female. Each subject was interviewed individually.

Table. 1 Selected studies that employed Repertory Grid Analysis

Author(s)	Year	Issue	Sample	Elements	Constructs
Zuber-Skerritt, O.	1987	Educational Research	6 students and 5 staffs	6 researchers	9 construct
Mireaux, M., Cox, D. N., Cotton, A. and Evans, G	2007	Perceptions of Food Products	72 consumers	12 products	32 construct
Goffin, K., Lemke, F. And Szwejczewski, M.	2006	Supplier-Manufacturer Relationship	39 managers	9 relationships	26 (>5) 14 (>10)
Walter, O.B., Schmidt, M., Fliege, H. and Rose, M.	2004	Assessment of Individual Stress Concept	50 patients	10 situations	17 categories
Pike, S. D.	2004	Higher Education	30 students	9 universities	8 attribute
Tan, T.	2007	Skill Requirements for IT Project Manager	19 IT managers	8 IT Project managers	9 skills
Calisir, F and Gumussoy, C. A.	2008	Banking Channels	20 students	6 banking channels	18 construct
Song, S. and Gale, A.	2008	Project Manager Work Values	18 project managers	4 manager typologies	17 theme
Pike, S. D.	2007	Destination Attributes	13 PhD students, 11 professionals	9 destinations	14 attribute
Naoi, T., Airey, D., Iijima, S. and Niininen, O.	2006	Visitors' Evaluation of An Historical District	20 students	44 photographs	
Mitchell, V.W. and Kiral, R.H.	1998	Perceptions of Grocery Retailers	30 shoppers	3 retailers	23 attribute

The three aspects of the repertory grid analysis are elements of comparison, constructs, and elicitation. Elements to be compared may be products, companies, brands and destinations and are either

supplied by the researcher (e.g. Mitchell and Kiral, 1998; Mireaux et al., 2007) or elicited from the participants (e.g. Goffin et al., 2006; Rogers and Ryals, 2007). The number of elements used by RGT researchers in the studies in Table 1 generally ranged from 4 to 10; in this study, 6 domestic airlines were provided by researchers as elements.

Constructs are bipolar attributes related to the elements being compared. Constructs are generated through the elicitation process by asking the interviewee to compare elements. The triad method was used in this study to elicit constructs (attributes) in conjunction with the overall perceptions for competing airlines. With this approach the participant in a process called triading, is presented with three elements and asked to specify some important way in which two of them are alike and are different from the third (Fransella et al., 2004). Each triad of elements is repeated until all combinations of elements are exhausted, or the participant stops revealing new constructs. Respondents are then asked to rate each element out of five for the constructs revealed. Among a variety of methods for eliciting constructs, the triad method was used the most often in previous studies.

4. FINDINGS

From the 15 repertory grid interviews, a total of 116 constructs were elicited; many of these were common, yet others can be included into suitable categories, since respondents may use different terms in referring to the same issue. In order to minimize researcher bias, two researchers performed the task of grouping constructs into categories. As a result of grouping the constructs, we reached 22 constructs, listed in Table 2, along with their frequency and variability. The frequency count, which is necessary for identifying important constructs, has been left open for interpretation in the repertory grid literature, so we determined that a construct mentioned by at least 25% of the respondents (i.e. by 3,75 or more respondents) carries more importance than constructs less frequently mentioned (Goffin et al., 2006).

Another sign of importance is the variability of constructs, which depends on the number of constructs in an individual grid. If there are five constructs in a grid, the average variability is $100/5$, or 20%. Constructs with higher than average variability are strongly supported

(Rogers and Ryals, 2007). Since the variability depends on the number of constructs in the individual grid, the variability of constructs was normalized by multiplying the variability of each construct by the number of constructs in its grid, divided by the average number of constructs across all of the respondents. The average number of constructs across the grids was 7.7. The normalized variability per construct was then averaged across all the constructs to arrive at the Average Normalized Variability (ANV). Since there were 7.7 constructs elicited per individual grid on average, the average variability per construct was found as 12,93 (i.e. $100/7,7$). These figures reveal whether a construct has major importance as perceived by respondents. A construct with an ANV greater than 12,93 signals that the construct is differentiated more strongly among competing airlines, while a construct with an ANV less than 12,93 indicates that the construct differentiated less strongly.

Table 2. Results from Frequency/Variability Test: Key Factors

No.	Construct Category	No. of Respondents	ANV (%)	Key Construct?
C16	Reputation	11	13,48	YES
C4	Price	11	16,67	YES
C2	Flight attendants	10	10,38	NO
C14	Aircraft comfort	8	9,55	NO
C6	Timeliness	8	8,37	NO
C8	F&B services	8	15,49	YES
C11	Online ticketing services	7	11,37	NO
C5	Reliability	6	14,27	YES
C10	Ground services	6	9,89	NO
C13	Flight time availability	6	17,47	YES
C22	Attractive promotions	5	12,22	NO
C7	Destination assortment	5	12,45	NO
C20	Local company	3	21,13	NO
C21	Having an upper-class customer portfolio	3	15,35	NO

C1	Alliance membership	2	13,82	NO
C12	Luggage limits	2	8,31	NO
C18	City transfers availability	2	17,53	NO
C15	On-board hygiene	1	5,69	NO
C17	Money-back warranties	1	8,87	NO
C19	Frequent flier program	1	22,76	NO
C3	Complaint handling	1	5,53	NO
C9	On-board supplementary services	1	12,80	NO

In this level, the frequencies and their ANV figures were both taken into account in order to reach key constructs. If a construct with a frequency above 3,75 also has an ANV figure above 12,93, it is considered a key construct. We found price, reliability, F&B services, flight time availability and reputation to be key constructs.

5. DISCUSSIONS AND CONCLUSIONS

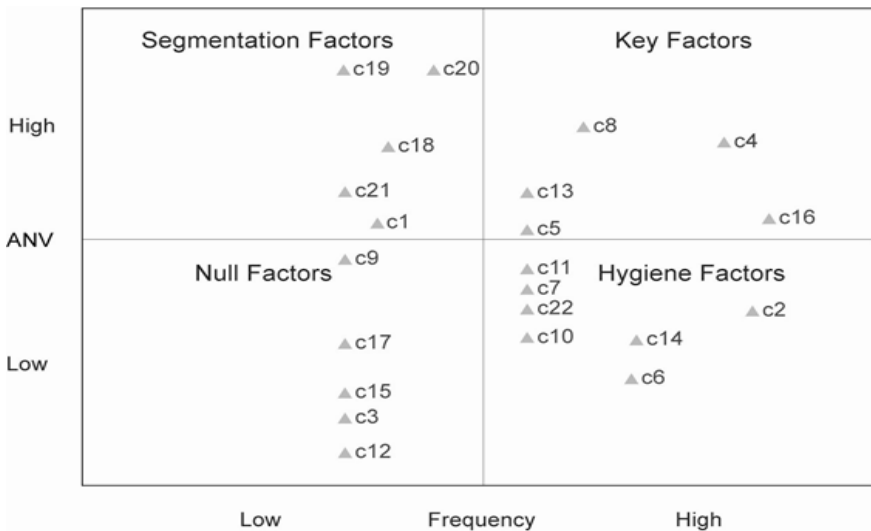
This study explores the criteria for passengers' overall evaluations about competing domestic airline companies by resolving a complex and embedded mental judgment process. In this respect, with the help of a technique borrowed from psychology literature, the study reveals a variable set used by customers to compare competing airline companies, without the restrictions imposed by structural survey questionnaires. Attributes found in this study are generally consistent with the findings of previous studies; however, the study suggests its group of key attributes by using the consumers' own terminology through a relatively small sample. The use of this approach may lead to a direct understanding of customers' perceptions and, throughout that understanding, to efficient resource allocation decisions for airline companies' management.

Price, reliability, F&B services, flight time availabilities and reputation found as key attributes in this study, could be seen as competitive factors that directly affect consumers' perceptions of competing airlines. These key factors were articulated as differentiating attributes of airlines. Companies should try to be competitive in all these factors and should work toward differentiating

their service offerings in these areas from those of their competitors. Since investment in these attributes is likely to pay off markedly, managers should allocate resources toward them.

Flight attendants, timeliness, online ticketing services, destination assortment, ground services, aircraft comfort and attractive promotions were found to hygiene factors so these factors tend to be among those for which consumers do not perceive significant differences among competing airlines. Hygiene factors are expressed as important attributes by a considerable number of consumers however these factors are not the source of significant differences among the airlines. Although customers expect to benefit from the criteria that make their total flight experience comfortable, they may not tend to choose an airline because of these factors. Managers in the companies should maintain existing standards in these criteria and should not be behind their competition but significant expenditures and effort in these areas are probably not required. Industry standards in terms of these attributes should dictate the required level of service.

Figure 1 Frequency-ANV Matrix



Alliance memberships, frequent flier programs, city transfers availability, having an upper-class customer portfolio and local company criteria were articulated as a certain differentiating attributes by just a couple of respondents, but they perceived clear differences

between the airlines. This finding signals that there are some consumers (market segment) in the market who consider such factors as specific appraisal criteria, so companies may employ these types of factors as ingredients for segmentation, positioning and target marketing strategies. Designing frequent flier or similar programs and communicating with consumers on the issues of alliance membership, company origin or other characteristics of the company can help to make the company successful in different market segments. Investments in such attributes may facilitate the company's ability to penetrate the market more broadly aspect and to target diverse consumer groups.

Complaint handling, on-board supplementary services, luggage limits, on-board hygiene, money-back warranties were found as null factors in the study, so consumers may not perceive significant differences in these areas among competing airlines. These factors are articulated as noteworthy attributes by just a small number of respondents who do not see significant differences in terms of these factors among the airlines. Investing in these attributes may lead to additional customer satisfaction, but not doing so may not cause dissatisfaction; in fact they may be considered "acceptable disadvantages". A useful strategy for addressing such factors might be providing service levels at the industry average rather than and allocating extra resources to them.

This study has explored a framework for airlines to provide improved and appropriate levels of service in response to customers' needs. Although the repertory grid is a suitable qualitative method for market research, benefits of the technique have been underestimated in services marketing literature. However, the small sample size involved in the study limits the degree to which results of the study can be generalized. To reach broader conclusions, researchers could follow this method with a quantitative technique, even though generalization is not the major concern of the study. However, in a context involving complex emotional and psychological aspects of service, other qualitative research techniques (e.g., association, completion, construction and expressive techniques) could be used to encourage respondents to project their underlying motivations, beliefs, attitudes or feelings into the situation. One of the screening criteria to choose respondents is that they should have used all domestic airlines at least once, thus, the scope of the study was limited to Turkish domestic airlines.

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