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CONTENT

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SUPPLY CHAIN PERFORMANCE: MEASURING THE IMPACT OF SUPPLY CHAIN ORIENTATION AND BRAND EQUITY

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ABSTRACT
Purpose- Aim of this study is twofold. First, there is a gap about how brand related factors affects supply chain performance, this study aims to fulfill this gap by extending existing brand theory with a new setting. Second, this study also aims to reveal the perspectives of manufacturing companies regarding their most important suppliers in terms of supply orientation, suppliers' brand equity and supply chain performance.
Methodology- For this purpose, an online questionnaire is prepared and sent to supply chain managers of manufacturing companies in Aegean region.
Findings- Study results showed that (1) when a supplier has corporate norms and credibility and commitment values, it positively affects supplier's brand image and brand trust; (2) suppliers' brand trust has a positive impact on suppliers' brand equity; (3) suppliers' brand equity impacts whole supply chain's cost & service-based performance; (4) both suppliers' brand image and brand trust impact whole supply chain's both cost- & service-based and time- & operation-based performance.
Conclusion- This research examines how suppliers' supply chain orientation and brand equity affects overall supply chain performance in the context of manufacturing companies; while, contributing our understanding of brand in B2B service settings. For this purpose, a scale has been developed considering supply chain orientation, brand equity, and supply chain performance.

Keywords: Brand equity, brand image, brand trust, supply chain orientation, supply chain performance
JEL Codes: L10, L60, M31

1. INTRODUCTION

In the globally networked business environment, effective supply chain management is essential to the survival and success of the enterprise; but acquiring and maintaining the performance is becoming increasingly difficult (Davis, 2003). Brands are important market-based (intangible) assets that help firms to create external relationships in the marketplace (Glynn, 2015). The brand is *"name, term, sign, symbol, or design, or a combination of them, which is intended to identify the goods and services of one seller or a group of sellers and to differentiate them from those competitors"* (Kotler, 1997). Marketing scholars have offered that firms, which can successfully manage their brand, can only achieve a satisfying level of supply chain performance. This new level of supply chain competition brings completely new challenges. Today's business-to-business markets, brands, and their power is critically important and linked to the concept of firm performance (Kim and Cavusgil, 2009; Sheth and Parvatiyar, 2000). Brand equity is an important consideration for service marketers (Davis, 2000; Keller, 1993; Keller and Lehmann, 2003) and should be managed like an asset (Aaker, 2003; Davis, 2000; Kim and Cavusgil, 2009). For the modern business environment, intangible firm assets like brand and brand related factors, which is sustainable added value to brand name, has been a major focus area since the early 1990s (Kim and Cavusgil, 2009; Zaichkowsky et al., 2010). These factors are brand equity, brand awareness, brand image and brand trust (Kimpakorn and Tocquer, 2010).

Although there is considerable research on consumer brands an increasing body of literature on industrial and service brands, there are few studies of how a supplier's brand affects overall supply chain performance. Thus, as an exploratory study, this study examines the relationships between specific characteristics of a supplier's brand equity factor within supply chain orientation and supply chain performance of manufacturing companies. This study is unique since it investigates the relationship between a supply chain orientation, supplier's brand equity, and supply chain performance. The study offers the brand literature with empirical evidence that the supply chain orientation improves supplier's brand equity. In this manner, brand equity is considered to include three dimensions as; brand awareness, brand image, and brand trust. For the supply chain performance literature, this study relates a firm's supply chain performance to a key marketing tool, the supplier's brand. The next section describes the constructs contained in the model and outlines the overall conceptual model. Then research methodology is described which is followed by the study findings. Following the discussion, limitations and suggestions for the future research are provided.

2. LITERATURE REVIEW

2.1. Supply Chain Orientation

Supply chain orientation (SCO) is defined as *"the recognition by a company of the systemic, strategic implications of the activities and processes involved in managing the various flows in a supply chain"* (Mentzer, 2001). SCO affects directly firm performance, whilst developing and building sustained relationships with supply chain partners (Mentzer et al., 2001). So, if a firm wants to maintain a positive relationship with their supply chain partners, it should have supply chain orientation. Firm's characteristics of trust, commitment, the sharing of common relationship-building foundations, compatibility between organizations and the support of executive-level management, help to develop firm's SCO (Tinney, 2012). SCO enables creating value for the firm while maintaining the desired level of customer service (Min et al., 2007). SCO elements, which are credibility, benevolence, commitment, corporative norms, organizational compatibility, and top management support, are the main behavior elements that help firms to create supply chain management philosophy (Mentzer et al., 2001). Credibility is defined as "*the belief that a trading partner is an expert and reliable in conducting transactions effectively*" (Siguaw et al., 1998). Within the supply chain members, a firm must be trusted and credible. Firms that want to trust their supply chain partners must demonstrate an expertise in their field and be a reliable source of knowledge to their upstream and downstream partners (Ganesan, 1994). Benevolence is described as a firm's belief that its partner is interested in the firm's welfare, is willing to accept short-term dislocations, and will not take unexpected actions that would have a negative impact on the firm (Anderson and Narus, 1990; Kumar et al., 1995; Tucker, 2011). When trust achieved between two firms, it will lead to positive working relationships that also leads to generate profitable results for both firms. Commitment, which is the third behavioral element, is "*a multi-dimensional construct reflected by the belief in and acceptance of the organization's goal and values, a willingness to exert effort on behalf of the organization, and a strong desire to maintain membership in an organization*" (Porter et al., 1974). This relationship creates such a satisfaction that firm does not receive additional benefits by switching supply chain partners (Dwyer et al., 1987). Corporative norms are defined as "*the perception of the joint efforts of both the supplier and distributor to achieve mutual and individual goals successfully while refraining from opportunistic actions"* (Cannon and Perreault, 1999; Siguaw et al., 1998; Tucker, 2011). Cooperative norms help to establish working procedures for how firms will manage problems and share rewards (Tinney, 2012). Organizational compatibility is defined as *"complementary goals and objectives, as well as the similarity in operating philosophies and corporate cultures"* (Bucklin and Sengupta, 1993). Firms that want to be compatible organizationally, must operate with similar operating principles, employ a similar cultural environment, and utilize comparable management techniques (Tinney, 2012). Top management support, which includes leadership and commitment to change, is an important antecedent to supply chain management, and the absence of it is a barrier to supply chain management (Jaworski and Kohli, 1993; Lambert et al., 1998; Loforte, 1993; Tucker, 2011). Without the support of executive-level managers, it is possible that the buy-in needed by a firm's employees to support changes in procedures or processes may not occur (Tinney, 2012). In the light of the critical importance of suppliers' brand factors for suppliers' supply chain orientation, the following hypotheses and sub-hypotheses are generated in the study.

Hypothesis 1: Suppliers' supply chain orientation affects suppliers' brand factors positively.

> Hypothesis 1.1: Suppliers' supply chain orientation affects suppliers' brand awareness positively.
>
> Hypothesis 1.2: Suppliers' supply chain orientation affects suppliers' brand image positively.
>
> Hypothesis 1.3: Suppliers' supply chain orientation affects suppliers' brand trust positively
>
> Hypothesis 1.4: Suppliers' supply chain orientation affects suppliers' brand equity positively.

2.2. Brand Awareness

One of the components of brand equity is brand awareness (BA), which is defined by Aaker (1991) *"the ability of a potential buyer to recognize or recall that a brand is a member of a certain product category".* Keller (1993) defined brand awareness as *"the customers' ability to recognize the brand as reflected by their ability to identify the brand under different conditions and to link the brand name, logo, symbol and so forth to certain associations in memory".* The most fundamental element of brand awareness is the brand name (Davis et al., 2008) and most of the time B2B firms only focus on their brand name familiarity without developing a more comprehensive brand identity (Homburg et al., 2010). This is why, for many B2B firms creating brand awareness –ability to recognize or recall a brand- is the key branding strategy (Celi and Eagle, 2008; Munoz and Kumar, 2004). Building brand awareness allows the formation of brand associations, which consist of attributes and benefits of a brand, which are relevant to the industrial buyer (Glynn, 2015). In B2B context, knowledge about the brand can be enhanced by brand awareness (Keller, 2008). Since brand awareness can be used as a heuristic purchasing decision (Hoyer and Brown, 1990; MacDonald and Sharp, 2000), it can increase supply chain performance which brand is included. Brand awareness acts as a strong signal of product quality and supplier commitment (Hoyer and Brown, 1990; Laroche et al., 1996; MacDonald and Sharp, 2000) because high levels of supplier investment (exhibitions, advertising or packaging) are usually necessary to build high brand awareness (Homburg et al., 2010). Thus, high-quality firms can only meet the high amount of investments for having brand awareness (Erdem et al., 2006; Milgrom and Roberts, 1986). Moreover, brand awareness can be the reflection of presence and substance since high levels of awareness means that firm has been in business for a long time and firm's products have been widely distributed (Aaker, 1991; Hoyer and Brown, 1990).

Since brand awareness is one of the components of brand equity, it is expected that changes in brand awareness affect brand equity (Pouromid and Iranzadeh, 2012). Moreover, supplier's brand with higher levels of awareness within the supply chain is expected to affect supply chain performance overall compared with unknown supplier's brand. Researchers argue that relationship between supplier's brand awareness and supplier's brand equity in consumer context will be in the same vein as it is in B2B service context (Aaker, 1991; Davis et al., 2008; Gordon et al., 1993). Moreover, it is argued in this study that supplier's brand awareness affects overall supply chain performance as well. Based on the relevant literature, the hypotheses for brand awareness are proposed as below:

Hypothesis 2.1: Suppliers' brand awareness affects suppliers' brand equity positively.

Hypothesis 2.2: Suppliers' brand awareness affects supply chain performance positively.

2.3. Brand Image

Marketing researchers suggested that brand image is a vital element of brand equity (Keller, 1993). Brand image (BI) is defined as a subjective and perceptual phenomenon formed through consumer interpretation; including certain characteristics of the product or service's symbolic meanings (Dobni and Zinkham, 1990; Padgett and Allen, 1997). The brand image describes the consumer's thoughts and feelings towards the brand (Roy and Banerjee, 2007). Brand image can be seen as the overall mental image that consumers have a brand, and its uniqueness in comparison to the other brands (Faircloth, 2005). Moreover, brand image plays an important role in B2B markets where tangible quality features are harder to distinguish (Mudambi et al., 1997). In B2B market relations, such as supply chain relationships, the brand image becomes really important because every interaction between a company and its stakeholders becomes an input for the brand image (Davis et al., 2009). Aaker (1996) stated that, firm attributes like experience and reputation are centered in B2B brand image are generally a company's most valuable but underused assets (Aaker, 1996). Some of the researchers mention that brand image is an important industrial marketing tool (Lorge, 1998; Shaw et al., 1989; Sinclair and Seward, 1988; Mudambi, 2002). However, there is little evidence about that B2B customers are influenced by emotional associations they make with their supplier (Roper et al., 2002).

It is hard to imitate and it becomes costly to compete with other firms when a firm has positive and strong brand image in customers' mind (Carpenter and Nakamoto, 1989). Focal firms with strong brand images can also have this favorable position. Moreover, supplier's brand with higher levels of the image within the supply chain is expected to affect supply chain performance overall compared with unknown supplier's brand. It is argued that supplier's brand image affects overall supply chain performance. The hypotheses for the brand image are proposed as below:

Hypothesis 3.1: Suppliers' brand image affects suppliers' brand equity positively.

Hypothesis 3.2: Suppliers' brand image affects supply chain performance positively.

2.4. Brand Trust

Brand trust (BT) is a component of brand equity (Kimpakorn and Tocquer, 2010) and *"perhaps the single most powerful relationship marketing tool available to a company"* (Berry, 1995). BT consists of past experience and previous interactions (Ravald and Grönross, 1996; Rempel et al., 1985). BT is defined as *"the willingness of the average consumer to rely on the* *ability of the brand to perform its stated function"* (Chaudhuri and Holbrook, 2001), and comprised of after consumers' evaluation of firms' offerings. If firms are able to give belief of safety, honesty, and reliability about their brands to consumers, brand trust can be achieved (Doney and Cannon, 1997). Brand trust has two dimensions; viability and intentionality (Delgado-Ballester, 2011). The first dimension is related to the satisfying consumers' needs and demands; while creating an idea in consumers' mind that brand accomplishes its value promising (Deighton, 1992). Moreover, this dimension focuses on satisfying consumers' needs in consistently positive ways. The second dimension, intentionality is covered with the belief that the brand will not take advantage of the consumer's vulnerability (Delgado- Ballester, 2011). Trust is an important variable in building strong supply chain networks (Sahay, 2003) and it is related to brand equity (Kimpakorn and Tocquer, 2010). In the supply chain, partners develop trust in a brand based on positive beliefs considering their expectations and future performances of the firm (Ashley and Leonard, 2009). The domain of trust in this study is how it affects suppliers' brand equity and how suppliers' brand trust affects supply chain performance overall. Since brand trust one of the components of brand equity, it is expected that changes in brand trust affect brand equity. Moreover, supplier's brand with higher levels of trust within the supply chain is expected to affect supply chain performance overall compared with unknown supplier's brand. Moreover, we argue that supplier's brand image affects overall supply chain performance as well. Based on the literature, the hypotheses for this research is proposed as below:

Hypothesis 4.1: Suppliers' brand trust affects suppliers' brand equity positively.

Hypothesis 4.2: Suppliers' brand trust affects firms' supply chain performance positively.

2.5. Brand Equity

Brand equity (BE) has been viewed from a variety of perspectives, which are marketing and finance (Motameni and Shahrokhi, 1998). Brand equity is the "added value" with which a brand endows a product, whilst imparts the competitive advantage to the firm (Farquhar, 1989). For the financial perspective, brand equity is defined as "*the incremental cash flow that accrues to branded products over unbranded products*" (Simon and Sullivan, 1993). Most widely cited brand equity conceptualizations are those of Aaker (1991) and Keller (1993). Aaker (1991) defined brand equity as *"a set of brand assets and liabilities linked to a brand, its name, and symbol that add to or subtract from the value provided by a product or service to a firm and/or to that firm's customers"*. According to Aaker (1996), brand awareness, brand association, brand loyalty, and perceived quality are the sources of brand equity knowledge structure. Keller (1993) defined as *"the differential effect of brand knowledge on consumer response to the marketing of a brand"* and developed the behavioral concept of consumer-based brand equity (CBBE), which consists of the two dimensions of brand awareness and brand image and is defined as the differential effect of brand knowledge on customer response to the marketing of the brand. According to Keller (1993), brand equity consists of brand awareness, brand image, and brand loyalty. Both scholars offered that the strength of a brand can be measured by examining consumers' associations with a brand and their positive responses to the brand (Celi and Eagle, 2008). In the literature, measurement of consumer-based brand equity has been studied with five dimensions – brand awareness, perceived quality, brand association, brand image and brand loyalty (Cho, 2011). Those five dimensions have been used partially or wholly in studies (Buil et al., 2008; Carroll and Ahuvia, 2006; Keller, 1993; Keller, 2001; Kim et al., 2003; Kim et al., 2009; Kimpakorn and Tocquer, 2010; Low and Lam, 2000; Yoo et al., 2000; Yoo and Donthu, 2001; Yoo and Donthu, 2002). In this study, brand awareness, brand image, and brand trust are used as dimensions of brand equity. In B2B marketing, brand equity is a critical competitive driver, as it is in consumer marketing (Kotler and Proertsch, 2007; Mudambi, 2002; Webster et al., 2004). When a brand's strength increases, B2B market buyers become more likely to repurchase and pay a price premium (Bendixen et al., 2004; Hutton, 1997; Kim and Hyun, 2011; Roberts and Merrilees, 2007; Taylor et al., 2007). Supplier's brand with higher levels of equity within the supply chain is expected to affect supply chain performance overall compared with unknown supplier's brand. Thus, it is argued that supplier's brand equity affects overall supply chain performance of the company. The hypotheses are proposed as below:

Hypothesis 5: Suppliers' brand equity affects supply chain performance positively.

2.6. Supply Chain Orientation

While measuring performance in the supply chain, the measurement system may reflect a system of measuring the immeasurable. In supply chain performance measurement, control is no longer based on ownership only, but rather on networking across interfaces. Activities that are not under the control of an individual company (manufacturer) have to be measured and controlled (by the manufacturer and its supply chain partners), making the supply chain transparent, to a level not experienced before and leading the way for performance improvements (Gawankar et al., 2016; Hoek, 1998). Researchers and practitioners have developed and improved measures that can be used to establish supply chain performance, since the importance of management of supply chain has been increased. The measurement of supply chain performance requires the creation of inter- and intra-organization assessment system. These systems can be used to identify opportunities for improved supply chain efficiency and competitiveness, to help understand how companies operating in supply chains affect each other's performance, to support the supply chain in satisfying consumer requirements and to assess the results of an implemented initiative (Lyons et al., 2012). In the literature, there are many different types of measurement for supply chain performance (Gunesakaran et al., 2001; Lee and Billington, 1992). A framework can include three major categories of metrics: service measures, cost measures and return on assets measures. Considering service, firms can use systems to measure specific elements like order cycle time, order fill rates, damage rates, error rates in picking orders, achievement of the “perfect order” and so on (Brewer and Speh, 2000; Stewart, 1995). For cost measures, firms can use cost per order, logistics cost per unit and cost per unit for each functional area of logistics (storage cost per unit, per square foot). For return on asset measure, firms generally determine the extent to which their investment in logistics assets is earning the desired financial returns (Brewer and Speh, 2000).

Supply chain performance measurement can be done in strategic, tactical, and operational levels (Gunesakaran, 2004). Also, different types of supply chain performances are used in literature (Christopher, 1992; Cohen and Lee, 1990; Davis, 2003; Lambert and Sharman, 1990; Lee and Billington, 1992; Loforte, 1993). As a performance measures; average finished goods inventory, demand fulfillment (Levy, 1995); order cycle time, order completeness (Christopher, 1992); delivery performance, lead time, level of defects and responsiveness (Lambert and Sharman, 1990); material inventory, work in process inventory, fill rates, stock out frequencies and lead time (Cohen and Lee, 1990); inventory levels, inventory investment, order fill rate, line item fill rate and the average number of days late (Davis, 2003); inventory turns, line item fill rate, order item fill rate, total order cycle time, total response time to an order, average backorder levels and average variability in delivery (Lee and Billington, 1992) are employed by the researchers. However, it is clear that researchers haven't reached a consensus about a stable set of measures that are used for measuring the performance of the supply chain for all types of studies (Bhatnagar and Sohal, 2005).

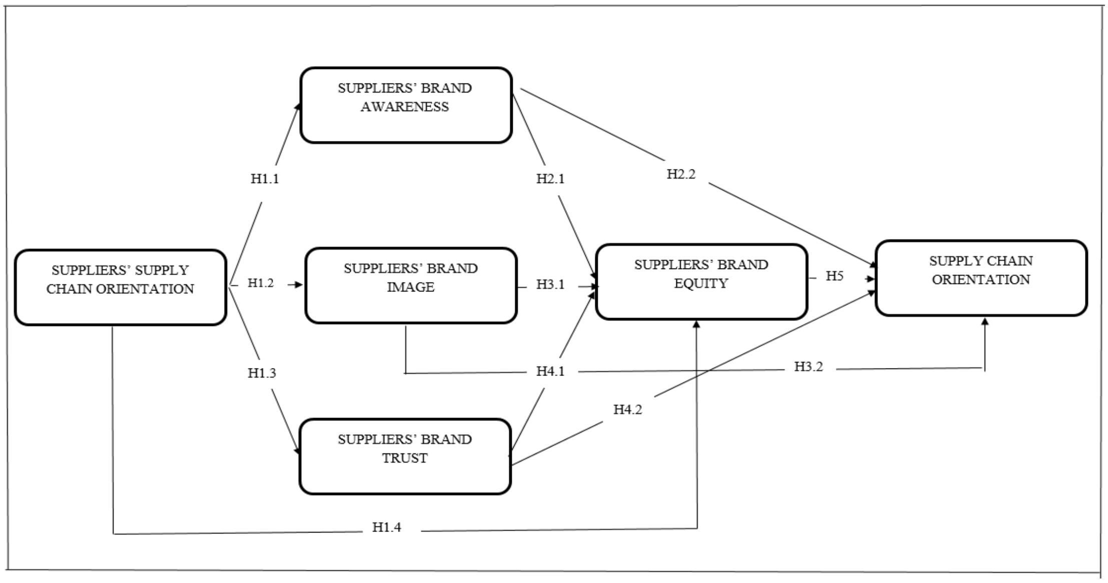
3. DATA AND METHODOLOGY

A survey method is employed to test measures of supply chain orientation, brand factors- brand awareness, brand image, brand trust and brand equity-, in the context of supply chain performance. Measurement items were drawn from existing scales as reported in the following section.

3.1. Scale Development

Measurement items for each construct are borrowed from the relevant literature. Moreover, interviews have been made with logistics industry experts to identify the appropriate language for adopting measurement items to the supply chain management context. The questionnaire included five parts. First two parts included basic demographic information about firm and respondents. Third, fourth and fifth parts were used to gather information about assessing market orientation, brand related factors, and supply chain performance, respectively. All items except demographic information were measured on a 5-point Likert-type scale from "strongly disagree" (1) to "strongly agree" (5). The informants were asked to answer questions according to their perception of brand-related factors. Third part measures SCO with the help of credibility, commitment, and corporative norms elements. The items for credibility and commitment were adopted from (Siguaw et al., 1998), and cooperative norms from (Cannon and Perreault, 1999). Fourth part measures brand equity factors. Items for brand awareness are adopted from (Davis et al., 2009; Yoo and Donthu, 2001) while the items for the brand image are adopted from (Davis et al., 2009). Measurement items for brand trust are adopted from (Han and Sung, 2008). Lastly, items for brand equity are adopted from (Davis et al., 2009; Kim and Cavusgil, 2009). The last part of the questionnaire measures supply chain performance. For supply chain performance, lead-time, inventory management, time to market, quality, customer service and flexibility (Bhatnagar and Sohal, 2005) and order fill rates, error rates in picking orders (Brewer and Speh, 2000; Stewart, 1995) variables were employed. Also, during the interviews, opinions of logistics industry and supply chain experts about the supply chain performance measurement items were taken, and according to their suggestions, five more variable was added to supply chain performance measurement scale as cost, delivery on time, delivery on the right place, delivery on the right amount of product and high accuracy of order estimation. In accordance with the relevant literature and the items employed in the questionnaire, a conceptual model visualized in Figure 1 is suggested.

Figure 1: Conceptual Model



3.2. Sample and Data Collection

This study examines supply chain performance at the business unit level. The most appropriate informant for this study was considered as the supply chain manager, and in cases where firms did not have a supply chain manager, procurement/purchasing manager, marketing manager, and general/vice managers were added as potential participants. Four-week deadline has been set and within this duration, 35 managers responded to the survey. The online survey was sent to the mailing list of Aegean Exporters' Association, ESBAS Aegean Free Zone, and Manisa Organized Industrial Zone. Although reminding e-mails were sent to these mailing lists, only a total of 35 usable questionnaires were collected. All analyses have made with SPSS 21.0. Table 1 shows the characteristics of the participant firms.

Table 1: Characteristics of Sample

Company Characteristics	Number of Respondents (percent)
Industry:	
Mining	2 (5.7)
Textile	3 (8.6)
Chemistry, petrol, plastic	3 (8.6)
Energy	3 (8.6)
Metal	3 (8.6)
Machine & equipment	1 (2.9)
Automotive	11 (31.4)
Food	4 (11.4)
Others	3 (8.6)
Total	35 (100)
Annual Sales:	
≤ 100 million TL	15 (42,9)
100,000,001 TL – 500 million TL	8 (22,9)
500,000,001 TL – 1 billion TL	1 (2,9)
1,000,000,001 TL – 5 billion TL	4(11,4)
Not Reported	7 (20)
Total:	35 (100)
Number of Employees:	
≤500	27 (77.1)
501 – 1,000	3 (8.6)
1,001-5,000	4 (11.4)
>10,001	1 (2.9)
Total	35 (100)

4. FINDINGS AND DISCUSSIONS

4.1. Reliability and Validity

Cronbach's Alpha value was 0.822 for SCO variables, 0.893 for suppliers' brand factors and 0.944 for SCP factors. Since Cronbach's Alpha values are greater than 0.7, all items were considered reliable in the study.

Table 2: Reliability Statistics

	Cronbach's Alpha	N of Items
Supply Chain Orientation	.822	5
Suppliers' Brand Factors	.893	18
Supply Chain Performance	.944	13

4.2. Factor Analysis Results

SPSS 21.0 software is used to analyze the data. Data is examined in the SPSS output for Kaiser-Meyer-Olkin (KMO) on 35 samples for SCO, suppliers' brand factors and SCP. As a result, which is shown in Table 3, the KMO measure indicated a very high sampling adequacy and good preconditions for factor analyses. In addition, results of Bartlett's Test for Sphericity had significant differences. According to the below test results, the samples were suitable for factor analyses.

Table 3: KMO and Bartlett's Test of SCO, Suppliers' Brand Factors & SCP

	SCO	Suppliers' Brand Factors	SCP
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.788	.650	.847
Bartlett's Test of Sphericity			
Approx. Chi-Square	59,304	416,067	342,829
Df	10	153	78
Sig.	,000	,000	,000

An exploratory factor analysis PCA (Principal Component Analysis) and varimax rotation were conducted. Factors are listed in Table 4.

Table 4: Factors for SCO

Factors		Alpha	Mean *	Std.	I**	II
Factor 1: Corporate Norms-Related Orientation		**.763**				
SCO4	Our most important supplier is willing to make cooperative changes in our supply chain.		3.80	.759	.910	
SCO5	Our most important supplier views its business as a value-added piece of work to the whole supply chain.		3.86	.974	.793	
Factor 2: Credibility & Commitment Related Orientation		**.757**				
SCO2	Our most important supplier is knowledgeable regarding our products and/or services when they are doing business with our supply chain members.		4.11	.583		.830
SCO1	Promises made to our supply chain members by our most important supplier is reliable.		3.94	.802		.777
SCO3	Our most important supplier is patient with supply chain members when they make mistakes that cause trouble to suppliers but are not repeated.		3.71	.860		.768

*Five-point scale 1: poor 5: excellent

**The Roman numerals refer to the number of factors

Factor 1 measures whether the suppliers try to achieve mutual and individual goals while avoiding opportunistic actions and the factor is named as "corporate-norms related orientation". According to factor analysis results, this factor contains two variables. The highest factor loading is 0.910, which measures corporative norms. SCO5 is the second variable that has the 0.793-factor loading and it measures corporative norms. Cronbach's Alpha value is 0.763 for the Factor 1. **Factor 2** measures whether the supply chain partner is a reliable and sees the supply chain as an organization and behaves on behalf of organization's favor. The factor is named as "credibility and commitment-related orientation". According to factor analysis results, this factor contains three variables. SCO2 has the highest factor loading is with 0.830 point, which measures credibility. SCO1 is the second variable that has the 0.777-factor loading measures credibility and lastly, SCO3, which measures commitment, has 0.768-factor loading. Moreover, Cronbach's Alpha value is 0.757 for the Factor 2. Factors for suppliers' brand factors are shown in Table 5.

Table 5: Factors for suppliers' brand factors

Factors		Alpha	Mean *	Std.	I**	II	III	IV	V
Factor 1: Suppliers' brand image		**.892**							
BI2	We can reliably predict how the most important supplier in our supply chain will perform.		3.77	.910	.864				
BI1	The most important supplier in our supply chain is known as a firm that takes good care of its trade partners.		3.83	.822	.851				
BI5	The most important supplier in our supply chain is a prestigious firm.		4.11	.718	.829				
BT1	The most important supplier in our supply chain meets its obligations to us.		4.00	.767	.801				
BI3	In comparison to other suppliers, the most important supplier in our supply chain is known to consistently deliver very high quality.		3.86	.845	.614				
Factor 2: Suppliers' brand equity		**.823**							
BE5	We feel a strong emotional connection to our most important supplier's brand.		2.71	1.017		.873			
BE1	We are willing to pay more in order to do business with our most important supplier.		2.80	.964		.648			
BE3	The most important supplier' brand gives us an advantage over our competitors.		3.17	1.175		.625			
BE2	The most important supplier's brand is different from other suppliers.		3.74	.741		.488			
BE4	We perceive our most important supplier's brand as prestigious.		3.57	1.092		.482			
Factor 3: Suppliers' brand awareness		**.744**							
BA4	Compared to other suppliers, our most important supplier is a leading brand in the industry.		4.09	.742			.869		
BA1	The name of our most important supplier is well-known in our industry.		4.34	.873			.772		
BA2	The most important supplier in our supply chain is the industry leader in brand awareness.		3.73	1.017			.631		
Factor 4: Suppliers' brand trust		**.654**							
BT2	The most important supplier in our supply chain is trustworthy.		3.89	.900				.732	
BA3	Our most important supplier is recognized by other members of our supply chain as a strong trade partner.		3.66	.906				.668	
BI4	The most important supplier in our supply chain has a rich brand history.		3.71	.710				.605	
Factor 5: Suppliers' brand communication		**.847**							
BE7	We pay attention advertising and the information that comes from our most important supplier.		3.37	.973					.954
BE6	We remember adverting and information that comes from our most important supplier.		3.23	1.140					.855

*Five-point scale 1: poor 5: excellent
**The Roman numerals refer to the number of factors

Factor 1 measures whether supplier takes good care of its partners (BI1), produce high-quality products constantly (BI3), fulfill its responsibilities (BT1), is a respected firm (BI5) and manufacturer's trust about its future performance (BI2). Factor 1 named as "suppliers' brand image". **Factor 2** measures whether a manufacturer feels an emotional attachment to the supplier (BE5), ready to pay more to continue doing business with that supplier (BE1), gets an edge over competitors by working with that supplier (BE3), feels prestigious by working with that supplier (BE4) and the brand of the supplier is different than competitors' brand (BE2) and the factor is named as "suppliers' brand equity". **Factor 3** measures whether the supplier is a leading brand in the industry (BA4), supplier's name is a well-known (BA1) and supplier's brand is a well-recognized (BA2). For these reasons, the factor is named as" suppliers' brand awareness". **Factor 4** measures whether the supplier has a rich brand history (BI4), has a trustworthy brand (BT2) and is a powerful partner (BA3) from the perspective of the manufacturer and it is named as "suppliers' brand trust". **Factor 5** measures whether manufacturer gives attention (BE6) and remembers (BE7) the information and advertisements sent by the supplier. Even though these variables were considered as brand equity variables at the beginning stage of the study, factor analysis results showed that they are grouped under different factor and it is named as "suppliers' brand communication".

In the paper, an exploratory factor analysis PCA (Principal Component Analysis) and varimax rotation conducted on responses from 35 individuals for each item. The Kaiser rule is to drop all components with eigenvalues under 1.0. However, according to anti-image matrix results, it is seen that SCP6, SCP9, SCP12 and SCP13 MSA value smaller than 0.5 (Field, 2005). Thus, those variables are expelled from the analysis. Factors for SCP is shown in Table 6.

Table 6: Factors for Supply Chain Performance

Factors		**Alpha**	**Mean ***	**Std.**	**I****	**II**
Factor 1: Cost and Service-Based Performance		**.897**				
SCP11	Working with the most important supplier in our supply chain enhances supply chain performance with regard to flexibility.		3.83	.785	.882	
SCP10	Working with the most important supplier in our supply chain enhances supply chain performance with regard to customer service.		3.69	.932	.851	
SCP5	Working with the most important supplier in our supply chain enhances supply chain performance with regard to requested amount delivery.		3.97	.857	.774	
SCP1	Working with the most important supplier in our supply chain enhances supply chain performance with regard to cost.		3.89	.900	.747	
SCP8	Working with the most important supplier in our supply chain enhances supply chain performance with regard to time to market.		3.77	.910	.632	
Factor 2: Time and Operation-Based Performance		**.870**				
SCP2	Working with the most important supplier in our supply chain enhances supply chain performance with regard to on-time delivery.		3.97	.747		.841
SCP4	Working with the most important supplier in our supply chain enhances supply chain performance with regard to delivery on right place.		3.80	.833		.807
SCP7	Working with the most important supplier in our supply chain enhances supply chain performance with regard to smallest error rates in picking order.		4.00	.728		.786
SCP3	Working with the most important supplier in our supply chain enhances supply chain performance with regard to lead-time.		3.89	.832		.771

*Five-point scale 1: poor 5: excellent
**The Roman numerals refer to the number of factors

Factor 1 measures supply chain performance with flexibility (SCP11), customer service (10), requested amount delivery (SCP5), cost (SCP1) and time to market (SCP8) and this factor is named as “cost and service-based performance”. **Factor 2** measures supply chain performance with on-time delivery (SCP2), delivery on the right place (SCP4), smallest error rates in picking order (SCP7) and lead-time (SCP3).

Although a preliminary conceptual model is given in the previous section, there was a need for modification in the conceptual model since SCO factor was divided into two as *"corporate norms-related and credibility"* and *"commitment-related orientation"*; while supplier's brand factors were divided into 5 factors as *"supplier's brand image", "supplier's brand equity", "supplier's brand awareness", "supplier's brand trust"* and a new factor of *"supplier's brand communication"* was added. Moreover, in the SCP part, two new factors, which are *"cost and service-based performance" and "time and operation-based performance"* were added. Thus, modified conceptual model and hypotheses are shown below.

H1. Suppliers' supply chain orientation affects suppliers' brand factors positively.

H.1.1. *Suppliers' corporate norms affect brand factors positively.*

H1.1.a *Suppliers' corporate norms affect brand image positively.*

H1.1.b *Suppliers' corporate norms affect brand awareness positively.*

H1.1.c *Suppliers' corporate norms affect brand trust positively.*

H1.1.d *Suppliers' corporate norms affect brand communication positively.*

H1.2. Suppliers' credibility & commitment affects brand factors positively.

H1.2.a *Suppliers' credibility & commitment affects brand image positively.*

H1.2.b *Suppliers' credibility & commitment affects brand awareness positively.*

H1.2.c *Suppliers' credibility & commitment affects brand trust positively.*

H1.2.d *Suppliers' credibility & commitment affects brand communication positively.*

H2. Suppliers' supply chain orientation affects suppliers' brand equity positively.

H2.1 *Suppliers' credibility & commitment affects brand equity positively.*

H2.2 *Suppliers' corporate norms affect brand equity positively.*

H3. Suppliers' brand factors affect suppliers' brand equity positively.

H3.1 *Suppliers' brand awareness affects suppliers' brand equity positively.*

H3.2 *Suppliers' brand image affects suppliers' brand equity positively.*

H3.3 *Suppliers' brand trust affects suppliers' equity positively.*

H3.4 *Suppliers' brand communication affects suppliers' brand equity positively.*

H4. *Suppliers' brand equity affects supply chain performance positively.*

H4.1 *Suppliers' brand equity affects supply chain's cost & service-based performance.*

H4.2 *Suppliers' brand equity affects supply chain's time & operation-based performance.*

H5. *Suppliers' brand factors affect supply chain performance positively.*

H5.1 *Suppliers' brand awareness affects supply chain performance positively.*

H5.1.a *Suppliers' brand awareness affects supply chain's cost & service-based performance.*

H5.1.b *Suppliers' brand awareness affects supply chain's time & operation-based performance.*

H5.2 *Suppliers' brand image affects supply chain performance positively.*

H5.2.a *Suppliers' brand image affects supply chain's cost & service-based performance.*

H5.2.b *Suppliers' brand image affects supply chain's time & operation-based performance.*

H5.3 *Suppliers' brand trust affects supply chain performance positively.*

H5.3.a *Suppliers' brand trust affects supply chain's cost & service-based performance.*

H5.3.b *Suppliers' brand trust affects supply chain's time & operation-based performance.*

H5.4 *Suppliers' brand communication affects supply chain performance positively.*

H5.4.a *Suppliers' brand communication affects supply chain's cost & service-based performance.*

H5.4.b *Suppliers' brand communication affects supply chain's time & operation-based performance.*

4.3. Correlation Analysis Results (Hypothesis Testing)

In the study, parametric tests are implemented to see whether there is a relationship between demographic variables (industry, firm size and ownership structure) and supply chain performance. To see whether there is a difference between industry type and supply chain performance, first Levene test is applied which controls homogeneity. After Levene test is applied, SPSS cannot able to perform tests because of low variable size.

To see whether there is a difference between firm size and supply chain performance, again Levene test is applied and results showed that it is applicable for one-way ANOVA. After seeing Levene test result is proper, then one-way ANOVA is applied, however, it is found that there is no difference according to firm size for supply chain orientation. Moreover, to see whether there is a difference between ownership structure and supply chain performance, again Levene test is applied and results showed that it is applicable for one-way ANOVA. After seeing Levene test result is proper, then one-way ANOVA is applied, however, it is found that there is no difference according to ownership structure for supply chain orientation.

In this study, suppliers' orientation and suppliers' brand equity factors affect supply chain orientation hypotheses tested with regression analysis. Before starting to form regression model, assumptions are tested. For this purpose, the assumption of normality for dependent and independent variables checked and it is observed that normal distribution has not degenerated. After that, by controlling homoscedasticity matrix, it is seen that the assumption of constant variance is proper.

After verifying assumptions, recommended hypotheses tested with regression analysis and results are shown in Table 7, Table 8, Table 9, Table 10 and Table 11. According to regression analysis results, H1.1.a, H1.1.c, H1.2.a, H1.2.c, H2.1, H3.3, H4.1, H5.2.a, H5.2.b, H5.3.a and H5.3.b found validated respectively. Suppliers' corporate norms affects suppliers' brand image (R^2 = 0.528, $p = 0.001 < 0.05$), suppliers' brand trust (R^2 = 0.439, $p = 0.008 < 0.05$) and suppliers' brand equity positively (R^2 = 0.343, $p = 0.044 < 0.05$); while suppliers' credibility & commitment affects suppliers' brand image (R^2 = 0.439, $p = 0.008 < 0.05$) and suppliers' brand trust positively (R^2 = 0.586, $p = 0.000 < 0.05$). According to results, suppliers' brand trust affects suppliers' equity positively (R^2 = 0.349, $p = 0.040 < 0.05$). Moreover, it is seen that suppliers' brand equity affects supply chains' cost & service-based performance positively (R^2 = 0.526, $p = 0.001 < 0.05$). Thus, it is seen that suppliers' brand image affects supply chain's cost & service-based performance (R^2 = 0.396, $p = 0.018 < 0.05$) and supply chains' time & operation-based performance positively (R^2 = 0.059, $p = 0.000 < 0.05$). Lastly, it is found that suppliers' brand trust affects supply chain's cost & service-based performance (R^2 = 0.512, $p = 0.002 < 0.05$) and supply chains' time & operation-based performance positively (R^2 = 0.607, $p = 0.000 < 0.05$).

Table 7: Results of Hypothesis Tests (H1)

Hypothesis		**Pearson Correlation**	**Sig. (2-tailed)**	**Result**
H1.	**Suppliers' supply chain orientation affects suppliers' brand factors positively.**			
H.1.1.	***Suppliers' corporate norms affect brand factors positively.***			
H1.1a	*Suppliers' corporate norms affect brand image positively.*	**.528****	.001	**Accepted**
H1.1.b	*Suppliers' corporate norms affect brand awareness positively.*	.188	.280	**Rejected**
H1.1.c	*Suppliers' corporate norms affect brand trust positively.*	**.439****	.008	**Accepted**
H1.1.d	*Suppliers' corporate norms affect brand communication positively.*	.064	.716	**Rejected**
H1.2.	**Suppliers' credibility & commitment affects brand factors positively.**			
H1.2.a	*Suppliers' credibility & commitment affects brand image positively.*	**.439****	.008	**Accepted**
H1.2.b	*Suppliers' credibility & commitment affects brand awareness positively.*	.249	.150	**Rejected**
H1.2.c	*Suppliers' credibility & commitment affects brand trust positively.*	**.586****	.000	**Accepted**
H1.2.d	*Suppliers' credibility & commitment affects brand communication positively.*	-.077	.660	**Rejected**

*Correlation is significant at the 0.05 level (2-tailed)
** Correlation is significant at the 0.01 level (2-tailed)

Table 8: Results of Hypothesis Tests (H2)

Hypothesis		Pearson Correlation	Sig. (2-tailed)	Result
H2.	**Suppliers' supply chain orientation affects suppliers' brand equity positively.**			
H2.1	*Suppliers' corporate norms affect brand equity positively.*	**.343***	.044	**Accepted**
H2.2	*Suppliers' credibility & commitment affects brand equity positively.*	.305	.075	**Rejected**

*Correlation is significant at the 0.05 level (2-tailed)
** Correlation is significant at the 0.01 level (2-tailed)

Table 9: Results of Hypothesis Tests (H3)

Hypothesis		Pearson Correlation	Sig. (2-tailed)	Result
H3	**Suppliers' brand factors affect suppliers' brand equity positively.**			
H3.1	*Suppliers' brand awareness affects suppliers' brand equity positively.*	0.72	.680	**Rejected**
H3.2	*Suppliers' brand image affects suppliers' brand equity positively.*	.309	.071	**Rejected**
H3.3	*Suppliers' brand trust affects suppliers' equity positively.*	**.349***	.040	**Accepted**
H3.4	*Suppliers' brand communication affects suppliers' brand equity positively.*	-.068	,698	**Rejected**

*Correlation is significant at the 0.05 level (2-tailed)
** Correlation is significant at the 0.01 level (2-tailed)

Table 10: Results of Hypothesis Tests (H4)

Hypothesis		Pearson Correlation	Sig. (2-tailed)	Result
H4	***Suppliers' brand equity affects supply chain performance positively.***			
H4.1	*Suppliers' brand equity affects supply chain's cost & service-based performance.*	**.526****	.001	**Accepted**
H4.2	*Suppliers' brand equity affects supply chain's time & operation-based performance.*	.260	.131	**Rejected**

*Correlation is significant at the 0.05 level (2-tailed)
** Correlation is significant at the 0.01 level (2-tailed)

Table 11: Results of Hypothesis Tests (H5)

Hypothesis		Pearson Correlation	Sig. (2-tailed)	Result
H5	***Suppliers' brand factors affect supply chain performance positively.***			
H5.1	***Suppliers' brand awareness affects supply chain performance positively.***			
H5.1.a	*Suppliers' brand awareness affects supply chain's cost & service-based performance.*	-.024	.889	**Rejected**
H5.1.b	*Suppliers' brand awareness affects supply chain's time & operation-based performance.*	.270	.117	**Rejected**
H5.2	***Suppliers' brand image affects supply chain performance positively.***			
H5.2.a	*Suppliers' brand image affects supply chain's cost & service-based performance.*	**.396***	.018	**Accepted**
H5.2.b	*Suppliers' brand image affects supply chain's time & operation-based performance.*	**.059****	.000	**Accepted**
H5.3	***Suppliers' brand trust affects supply chain performance positively.***			
H5.3.a	*Suppliers' brand trust affects supply chain's cost & service-based performance.*	**.512****	.002	**Accepted**
H5.3.b	*Suppliers' brand trust affects supply chain's time & operation-based performance.*	**.607****	.000	**Accepted**
H5.4	***Suppliers' brand communication affects supply chain performance positively.***			
H5.4.a	*Suppliers' brand communication affects supply chain's cost & service-based performance.*	-.261	.130	**Rejected**
H5.4.b	*Suppliers' brand communication affects supply chain's time & operation-based performance.*	-.400	.400	**Rejected**

*Correlation is significant at the 0.05 level (2-tailed)
** Correlation is significant at the 0.01 level (2-tailed)

5. CONCLUSION

This research examines how suppliers' supply chain orientation and brand equity affects overall supply chain performance in the context of manufacturing companies; while contributing our understanding of brand in B2B service settings. For this purpose, a scale has been developed considering supply chain orientation, brand equity, and supply chain performance. The online survey sent to Aegean Exporters' Association, ESBAS Aegean Free Zone and Manisa Organized Industrial Zone, and with 35 responses analysis has been made with using SPSS21.0. The findings provide evidence that when a supplier has corporate norms and credibility and commitment values, it positively affects supplier's brand image and brand trust. Moreover, it is seen that supplier's corporate norms affect supplier's overall brand equity as well. Second, it is validated that suppliers' brand trust has a positive impact on suppliers' brand equity. Third, it is seen that suppliers' brand equity impacts whole supply chain's cost & service-based performance. Finally, it is found that both suppliers' brand image and brand trust impact whole supply chain's both cost- & service-based and time- & operation-based performance.

5.1. Managerial Implications

This study provides a number of important implications for management. First, the study results reveal the importance of supplier's supply chain orientation within a supply chain if partners want to develop a high-performing supply chain. In addition, the study was able to show the importance of supplier's brand trust in band equity. Managers generally think that the only relationship between is the brand and customer. However, this study shows that brand trust is also affected firm's brand equity.

The study results further show that supplier’s brand image and brand trust have distinctive roles in inducing better supply chain performance; meaning that if supply chain managers consider their supplier’s brand image and brand trust during supplier selection process, supply chain as a whole can achieve higher supply chain performance.

5.2. Limitations and Suggestions for Future Research

There are some limitations of the study with regards to the time limit and the low return rate. Although great effort was spent to increase the number of questionnaires answered by the participants, only 35 managers answered the questionnaire. This can be considered as the main limitation of the study since a low response rate limits the generalizability of the results of the survey. When related studies concentrated on manufacturing companies and specifically supply chain managers are considered (Davis et al., 2008; Davis et al., 2009; Kim and Cavusgil, 2009), it was observed that there is a similar pattern in such studies.

This study employed brand awareness, brand image and brand trust for brand equity dimensions. Future studies may be conducted for exploring for different brand equity characteristics. Investigating the antecedents of brand awareness, brand image, and brand trust can also be suggested for providing an overview especially for logistics managers who want to improve their firms' brand. In the study, one participant is used, however; collecting data from multiple participants within a company can be another future research idea. There are numerous exogenous or moderating variables that affect brand equity. In a future study, those variables can also be examined. By using different conceptualizations and dimensions of SCO, a different perspective can also be used. Thus, conducting a study with these dimensions would be informative to see if additional dimensions improve the exploratory power of the model. Also, the same study can be applied again to the different sample with high return rate. Moreover, this scale can be used for the manufacturing firm and its suppliers simultaneously to see how partners in the same supply chain see each other and how firms' brand positioned partners' mind.

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THE IMPACT OF SUPPLY CHAIN INTEGRATION ON FIRMS' BUSINESS AND OPERATIONAL PERFORMANCE AT THE FOOD RETAIL SECTOR/INDUSTRY

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ABSTRACT

Purpose-This study researched into the impact of supply chain integration and firm performance of food retailers in Turkey. The main purpose of this study was to identify the impact of internal and external supply chain integration on firms' business and operational performance in the food retail sector in Turkey.

Methodology-Two big cities in Turkey, namely, Istanbul and Eskişehir were selected for this study due to the availability of major food retailers in these cities. Stratified sampling method was used to select respondents. In total, 216 firms were selected out of which only 208 firms responded to the questionnaire distributed. Structural Equation Model specifically Amos was used to analyse the data.

Findings-The study found a positive and significant relationship between internal and external integration, and the study also found a significant and a positive relationship between internal integration and firms' operational and business performance. On the other hand, the study also found a significant and a positive relationship between external integration and firms' operational and business performance.

Conclusion- Consequently, retailers in Turkey were admonished to practice and uphold supply chain collaboration with their suppliers and customers.

Keywords: Supply chain management, supply chain integration, food retailers, operational performance and business performance
JEL Codes: L81, M16, M11

1. INTRODUCTION

Essentially, supply chain management encompasses companies or business activities needed to design, make or deliver and use a product or service. Currently, supply chain management has been defined to include supply chain integration. Stank, Crum and Arango (1999) and Zailani and Rajagopal (2005) defines SCM as a network that includes vendors of raw materials, plants that transform those materials into useful products and distribution centres to get those products to customers. SCM also known as the value chain, is the sequence, which involves producing and delivering of a product or service. However, Supply Chain Management is not just another name for logistics. SCM is more comprehensive as it includes numerous systems and coordination of activities. The supply chain does not only include the manufacturer and suppliers, but also transporters, warehouses, retailers and customers themselves (Chopra and Mendl, 2001). The above definitions of Supply Chain Management clearly stipulate that SCM involves the effective coordination of all functions and members in the supply chain management. This coordination is what is termed as integration.

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The food retail in Turkey can be categorized into major groups; organized and unorganized retailers. The organized retailers consist of the multi-formats retailers, supermarkets, hypermarkets, discount retailers and gas station stores. On the other hand, the unorganized group of retailers includes; traditional markets, individual convenience stores and open-air bazaars. However, this current research classified retailers in Turkey into organized retailers mainly, supermarkets, hypermarket, wholesalers and all unorganized retailers into mini markets.

Gimenez and Ventura (2005) suggested that future research on SCI and firm performance should concentrate on grocery supply chain relationships. Evidently, this research is appropriate and highly essential to the literature of SCI and firm performance. Clearly this research aims at providing a sounding answer to some of the gaps in the supply chain literature.

Therefore, the main purpose of this study is to explore the impact of integration activities on firm's performance in the food retail industry in Turkey by mainly examining the relationship between internal and external integration and the impact these internal and external integration have on firm's operational and business performance in the industry. The independent variables in this study, are internal and external integration. On the other hand, the dependent variable in this study is firm performance. This research is to contribute to the existing literatures of supply chain integration and performance in three ways; to examine whether food retailers in Turkey practice integration, secondly, whether internal integration has actual effect on external integration and whether both external and internal integration have a positive relationship with firm performance. The findings and conclusion of this research is expected to aid in the decision-making process of retailers to make strategic decisions whether to strengthen or ignore integration activities. These decisions are highly essential since the outcome has a major influence on the performance of the firm. This research, to the best of my knowledge, would be the first to rigidly research into the impact of SCI on firm performance with retailers.

In the next section, several literatures and theories underpinning supply chain integration and firm performance are carefully reviewed. This will include the definition of the technical terms used in this study and subsequently, the hypotheses of the study would be discussed. The subsequent section would contain the methodology used in this study specifically, conceptual model, the data collection instrument, the population of the study and the analyses of the study and its accompanying interpretation. Finally, the last section would present the results of the study and eventually, the conclusion and the suggestions for future research.

2. LITERATURE REVIEW

This section of the study contains the review of several literatures and theories relating to the concept of supply chain integration and firm performance. Most of this section contains the empirical review of the findings of issues related to the fundamentals of supply chain integration and it further presents the findings of the impact of one dimension, thus, external integration on firm performance. Additionally, the empirical review would cover the findings of other literatures relating to the impact of the whole supply chain integration on firm performance.

Fundamentally, many theories and studies relating to the impact of supply chain integration on firm performance are based on the suggestions and theories provided by Stevens. Stevens (1989) provided the main basis for integrating supply chain. The research confirmed that, the effective balancing of the supply chain management involves the concurrent balancing of cost and service. Furthermore, the study confirmed that, for the impediments (obstacles) in the supply chain management to be annihilated, firms need to develop an integrated supply chain which is purposefully driven by the needs of the business. In the view of this study, integration requires the management of material flow and should be viewed from three perspectives, namely; strategic, tactical and operational. In a nutshell, this study confirmed the two types of integration which are mainly; external (supplier and customer) and internal which and suggested external integration can only be triggered if internal integration is solid.

With regards to the impact of external on firm performance; Stank, Crum and Arango (1999), researched into the benefits of interfirm coordination in Food Industry Supply chain. Externally, the research emphasized on communications, information exchange, partnering and performance monitoring as the factors that trigger a firm's source, make and deliver activities of suppliers and customers (El-Ansary, 1992). It was revealed that, interfirm coordination has a positive relationship with performance. Scannell, Vickery and Droge (2000) investigated how upstream supply chain management affect competitive performance of firms in the automotive supply industry in the United States of America. Despite supplier partnering having a positive relationship with flexibility and cost and negative relationship with innovation and quality, it was found that, supplier partnering is significantly related to competitive performance.

Zhao, Huo, Flynn and Yeung (2008) investigated the impact of power and relationship commitment on the integration between manufacturers and customers in a supply chain. The study examines holistically customer integration through the application of transaction cost theory and social exchange theory and simultaneously investigated the impact of power and relationship commitment on customer integration by using power-relationship commitment theory. The study confirmed that significant utilization of power in a firm can exert and improve relationship commitment which would further improve customer integration. Prajogo and Olhager (2012) investigated into the effects of supply chain integration on firm performance. The study examined specifically how long-term effects relationships, information technology and sharing and logistics integration have an impact on firm performance. Contrary to SCI literature, the most commonly used integration dimensions were three; internal, customer and supplier where both customer and supplier were classified as external integration. Performance in this study was measured by only operational performance variables and not financial performance. The study revealed that, both information and material flow are positively related to supply chain integration which implies that integration is significantly related performance and has a positive effect on performance.

Other studies also focused on the impact both internal and external integration have on firm performance. Stank, Keller and Daugherty (2001) is considered as one of the contemporary bedrock study on the impact of integration and firm performance. The study researched into the impact of the whole dimensions of supply chain collaboration on logistical service performance (firm performance). Impliedly, this research sought to investigate the whole impact of both internal and external integration on logistical service performance (firm performance). The study discovered that internal integration significantly influences logistical service performance. However, contrary to other studies, this research discovered that external integration has no influence on logistical service performance (firm performance). Similarly, Germain and Iyer (2006) investigated the impact of internal and external integration on logistics performance and financial performance. The study also examined the moderating role that internal integration plays on the relationship between external integration and logistics performance. The research found that internal and external integration have a positive relationship with logistics performance (operational performance). Moreover, the internal integration was found to be highly moderating the relationship between external integration and logistical performance. However, both internal and external integration were found to have no positive relationship with financial performance but the relationship was mediated through logistical performance.

In order to confirm and criticize the findings of Stank et al., (2001), Gimenez and Ventura (2003) investigated the issue of supply chain management as a source of competitive advantage in the Spanish grocery sector. This research extensively criticized the findings and methodology used by Stank et al., (2001). The study discovered that internal integration is a precedent to external integration and both internal and external integration have a positive influence on performance, contrary to the findings of Stank et al., (2001). Flynn, Huo and Zhao (2010) further contributed to the literature of SCI by investigating the impact of supply chain integration on performance, through the use of the contingency and configuration approach. The performance was categorized into business and operational. The business performance was represented by financial performance metrics which included Return on Assets (ROA), Return on Investment (ROI) and return on sales. After a careful analysis, the research suggested that SCI has a significant relationship with firm performance, although supplier integration was found to have an inverse relationship with performance, both supplier and customer integration together had a positive influence on performance.

Droge, Jayaram, and Vickery (2004) examined the effects of internal and external integration on time-based performance and overall firm performance in the automotive industry in the United States of America. To measure external integration, the study selected supplier partnerships, supplier development and closer customer relationships and internal integration was measured by concurrent engineering, design for manufacturability, standardization and computer-aided design/computer-aided manufacturing metrics. Performance in this study was categorized into both operational and financial performance. The study discovered that integration enhances product innovation (time-to-product) and product introduction (time-to-market) and these exert a positive influence on firm performance which is market share and financial performance.

Groves and Valsamakis (1998) also studied the impact supplier-customer relationship has on company performance (firm performance). The study investigated the different types of relationships firms engage in. Although, the study recognised the dominance partnerships (integration) as the dominating and beneficial relationship, two other different types of relationships between supplier and customers were found. The performance metrics used in this study were made up of only financial performance metrics rather than the holistic firm performance measuring metrics. Base on the findings, it was revealed that there is a potential for better performance for manufacturers who engage in closer relationship with suppliers and customers (external integration). However, the research identified various gaps in the integration process of firms and could not wholly adjudge the relationship which should be practiced most by firms.

Vickery, Jayaram, Droge and Calantone (2003) examined the effects of an integrative supply chain strategy on customer service and financial performance through an analysis of direct and indirect relationships. The result indicated a positive relationship between information technologies and supply chain integration which directly affects customer service and financial performance. However, only customer service and financial performance constructs (ROA, ROI, market shares, stock prices) were used to measure the firm performance. Vargas, Cardenas and Mataranz (2008) further researched into the internal and external integration of assembly manufacturing activities in the Spanish manufacturing industry. The research focused on analysing the various integration choices by manufacturing firms in the Spanish Economy. The study revealed that integration programs have no relationship with quality. Furthermore, the research discovered that firms still place greater importance on internal integration than external integration for the achievement of their strategic goals and priorities and finally, both dimensions of integration had a positive influence on competitiveness and profitability.

It can be concluded the previous researchers used different metrics and variables to measure performance and supply chain integration. Nonetheless, most of the research although were conducted in different countries and industries yielded similar results with few of them obtaining results to the contrary.

3. DATA AND METHODOLOGY

This section describes the method, data collection procedure, the instrument and the tools used in analyzing the data used in conducting this research. The next section describes the conceptual model from the literature of this study, the subsequent sections would describe the tools used in collecting data, data collection techniques and the analysis of the data.

3.1 Hypothesis

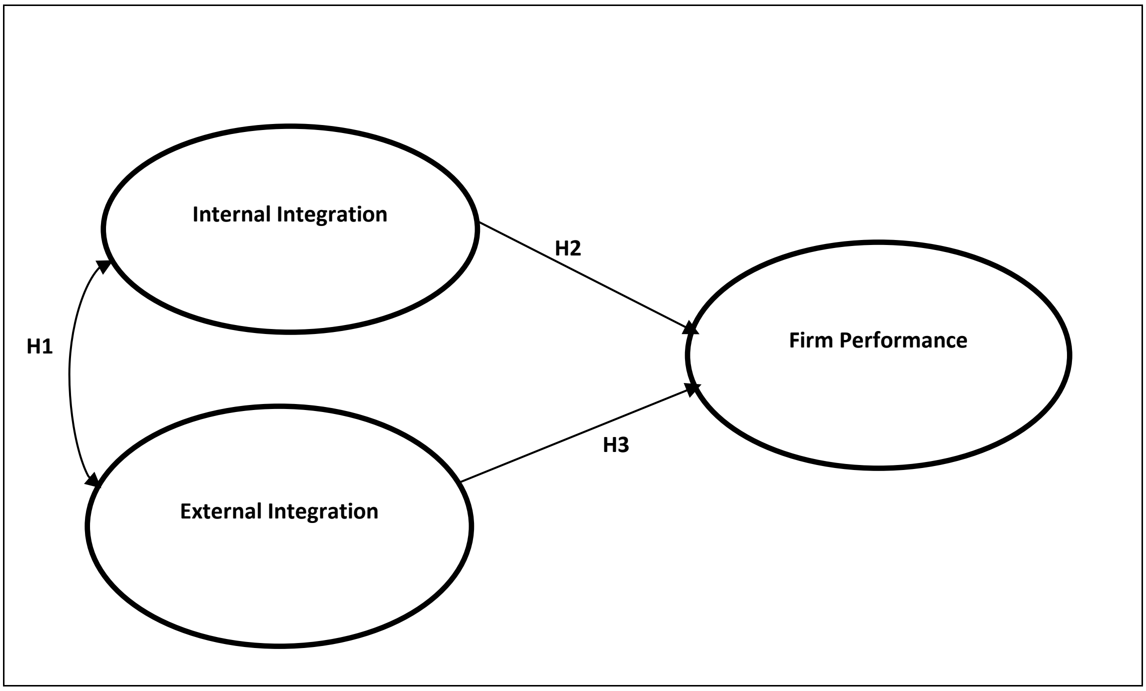
From the literature reviewed above, the research hypothesizes that;

H_1: Internal Integration has a positive relationship with External Integration.

H_2: Internal Integration has a positive relationship with Firm Performance.

H_3: External Integration has a positive relationship with Firm Performance.

Figure 1: Conceptual Model



The figure above represents the conceptual model fully illustrating the hypothes Es of the study. In H1, it is hypothesized that internal integration will have a positive relationship with external integration. Similarly, in H2, it is hypothesized that Internal integration will have a positive relationship with firm performance and lastly, H3 stipulates that the external integration of firms will have a positive relationship with firm performance. The oval shaped figures demonstrated in the model was chosen to represent the latent variables in the study. In Structural Equation Modelling (SEM), the unobserved variables are represented in oval shapes and the manifested or observed variables are represented in rectangles. Since the variables in this current study are unobserved variables, it is worthwhile they are represented in oval shapes.

3.2. Development of Data Collection Instrument

The questionnaire designed purposefully for this study was adopted from the survey instrument developed by (Stank, Keller & Daugherty, 2001). The instrument was developed from the survey instrument designed by the World Class Logistics Research at Michigan State University. This current study also conducted a pilot study with small retailers in order to broaden the measures for all the variables used in the study. Furthermore, the performance measures were widened by adding more metrics to measure the financial aspect of firms' performance since one of the aims of this study was to measure the business (financial) and operational performance of the firms. Therefore, a questionnaire with four parts/departments was developed.

The first part of the questionnaire focused on the demographic information of the respondents. Firms were asked to respond to four questions which basically solicits information about the firms. Firms were asked if they had a supply chain manager. The main aim of this question was to investigate whether firms were practicing supply chain activities since the presence of a supply chain manager would signify the presence of supply chain practices in the firms. Secondly, to substantially cover the definition provided by the Small and Medium Scale Enterprises Association in Turkey, firms were also asked to select their annual sales from four options; i. 0-1,000,000 ii. 1,000,000-8,000,000 iii. 8,000,000-40,000,000 and iv. 40,000,000 and above with all the amount denominated in Turkish currency, Turkish Lira (TL). Respondents were also asked to state their positions or title in the firm. This question was inserted and targeted at generating the authenticity of the research and the response from supply chain managers or someone at the upper management would indicate the genuineness of the information. Lastly, respondents were provided with four options which is made up of the various category of retailers defined in this study. Specifically, respondents were asked to state whether their firm was a supermarket, hypermarket, mini market or a wholesale firm.

The second part of the questionnaire measured the internal integration of the firm. Eight (8) metrics were selected to represent internal integration of the firm. Table 1 below clearly illustrates the eight (8) metrics used in measuring the internal integration practices of the firms. Firms were asked to measure their internal integration activities on a five-point Likert scale where 1=strongly disagree, 2=disagree, 3=neutral, 4=agree and 5=strong agree.

The third section of the questionnaire measured external integration. Firms were asked to respond to nine (9) items representing external integration activities that the firms were likely to practice. The items are clearly listed in Table 1 below. Similarly, firms were asked to measure their internal integration activities on a five-point Likert scale where 1=strongly disagree, 2=disagree, 3=neutral, 4=agree and 5=strong agree. The design of the questionnaire is illustrated by Appendix 1.

Since the official language in Turkey is Turkish, the survey instrument was officially translated from English to Turkish language by linguistic experts and was assessed by faculty members and research assistants at Anadolu University whether the translated instrument had the exact meaning as the English version of the questionnaire. The Turkish version was again translated back into English by another linguistic expert and the English version was checked on sentence by sentence basis to check against the original English Version. Furthermore, this process was conducted to check the discrepancy level. After its clarity was ascertained, the Turkish version was then administered to respondents.

3.3. Data Collection and Sampling

The research targeted supermarkets, hypermarkets, mini markets and wholesale markets and it was conducted in Turkey specifically Istanbul and Eskisehir. Moreover, this study will concentrate on two cities in Turkey, namely, Eskişehir and Istanbul. These two cities were selected because of the availability, proximity and easy accessibility of the target population in this area. The total number of the population relevant to the study was approximately 8,545. The list of food retailers was obtained from the Chamber of Commerce in both cities. This number comprises the supermarkets, hypermarkets, mini markets and wholesalers in both Istanbul and Eskişehir in Turkey. However, the research adopted stratified random sampling technique where the following features were used in selecting the required retailers for the study; firms with food consisting of about half of the products offered for sale in store, firms with more than one internal department and more than two branches in more than one city in Turkey, and firms which have direct relationship with manufacturer (supplier) were selected for the study. With the firms in Eskişehir, those with more than two branches in other geographical areas in the city were selected for the study. After considering the characteristics, the study selected 216 firms from the population since these firms met all the criteria of the stratified sampling technique used. 216 firms fairly represent the major retailers in both cities selected for the study and Turkey. Categorically, 100 firms were selected from Eskisehir and 116 firms from Istanbul.

Given the strategic focus of the research and the distance of the respondents, the questionnaire was sent to the selected targeted population in both Eskisehir and Istanbul. The questionnaire was distributed to respondents in Eskişehir by hand because of the easy accessibility of the respondents. However, the same questionnaire in Turkish Language was further developed on google forms and despatched to the firms in Istanbul via electronic mail (e-mail). The selected firms were first contacted on the telephone to make them aware of such kind of research and to ask of the official e-mail address(es) of either the supply chain manager or the CEO. After the e-mail addresses were acquired, the questionnaire was despatched to the various firms. Follow-up e-mail and phone calls were made to the firms, however, after a certain period of not receiving a positive response from the respondents, data collection agents were employed to administer the questionnaire to the same firms in Istanbul.

3.4. Basic Analyses

Out of 216 questionnaires issued to the respondents. 208 were filled accurately and returned. This represents 96.30% response rate. out of 208 respondents, 132 responded Yes when asked whether there is a supply chain manager in the firm. On the other hand, 76 responded No to this question. 69 firms have annual sales of between 0-1.000.000TL, 49 of the firms have their annual sales between 1.000.000 and 8.000.000TL, 41 have annual sales between 8.000.000 and 40.000.000TL and 49 of the firms have annual sales above 40.000.000 TL. Moreover, in other to further ascertain the size of the firm as it is relevant to the results of this section, part of the questionnaire included questions where firms were asked about the number of employees in the firm. 95 of the firms have employees between the range of 0-9, 44 have employees between the range of 10-49, 27 have employees in the range of 50-249 and 42 of the firms have 250 and above employees. Also, 20 CEO's, 1 supply chain manager, 23 general managers, 2 marketing and customer relation managers, 4 general directors, 4 finance directors, 21 accountants, 11 sales directors, 42 branch managers, 35 cashiers, 1 strategic director, 3 information system managers, 17 secretaries, 12 owners, 6 employees and 6 shop assistants filled out the questionnaires. Furthermore, only 68 supermarkets, 18 hypermarkets, 95 mini markets and 27 wholesale enterprises participated in the study.

This study was a quantitative research and therefore, it was imperative that the measurement scales or the variables were subjected to validity and reliability tests. Principal and confirmatory factor analyses were conducted on the variables to ascertain their reliability and validity and precisely unidimensional characteristics for all the measurement scales/variables (Stank et al., 2001). To test the validity and reliability of the variables, Cronbach Alpha, principal component and factor analysis were used. Additionally, factor analysis was conducted to test the hypotheses and the model fit. Table 1 below summarizes Cronbach Alpha Test, principal component and factor scores.

Table 1: Principal Component, Confirmatory Factory Analysis And Cronbach Alpha

ITEMS	PC SCORES	FACTOR SCORES	ITEM-TO-TOTAL CORRELATION	ALPHA IF ITEM IS DELETED	CRONBACH ALPHA FOR SCALE
Internal Integration					**.908**
INT IG 1	.636	.681	.693	.897	
INT IG 2	.563	.617	.654	.901	
INT IG 3	.713	.759	.738	.894	
INT IG 4	.604	.689	.690	.897	
INT IG 5	.650	.703	.669	.899	
INT IG 6	.660	.710	.674	.898	
INT IG 7	.744	.800	.761	.891	
INT IG 8	.759	.824	.766	.890	
External Integration					**.903**
EXT IG 1	.607	.595	.540	.902	
EXT IG 2	.718	.745	.716	.889	
EXT IG 3	.680	.717	.679	.892	
EXT IG 4	.679	.715	.713	.889	
EXT IG 5	.661	.679	.688	.891	

EXT IG 6	.729	.735	.680	.891	
EXT IG 7	.666	.700	.702	.890	
EXT IG 8	.729	.770	.754	.886	
EXT IG 9	.653	.659	.612	.897	
Firm Performance					**.886**
PERF 1	.506	.543	.556	.878	
PERF 2	.599	.622	.629	.874	
PERF 3	.655	.679	.640	.873	
PERF 4	.534	.600	.642	.874	
PERF 5	.535	.645	.631	.875	
PERF 6	.578	.692	.671	.872	
PERF 7	.651	.740	.713	.869	
PERF 8	.586	.669	.573	.877	
PERF 9	.719	.733	.615	.875	
PERF 10	.523	.658	.658	.872	
PERF 11	.661	.704	.665	.872	

Statistically, all principal component and factor scores that meet or exceed .60 are normally considered as viable for further analysis. In Table 1 above, all the variables except few of them meet or exceed these criteria of validity. Moreover, internal consistency of the variables was tested using the Cronbach Alpha (Cronbach, 1951; Jayram and Tan, 2010). Statistically, Cronbach Alpha values exceeding 0.60 are considered highly reliable for analysis (Jayram and Tan, 2010). In Table 4.2 above, the Cronbach Alpha values for all the factors including the values if Alpha is deleted are outstanding as they are between the range of .80 and .90.

3.3. Empirical Results

The main aim of this study was to explore the effect of supply chain integration on firm operational and business performance at the food retail sector. Also, since the independent variables were more than one, it was recommended that the data be analysed with a structural equation modelling software, specifically AMOS. This section contains the detailed analyses of the test of the hypothesis and the model fit.

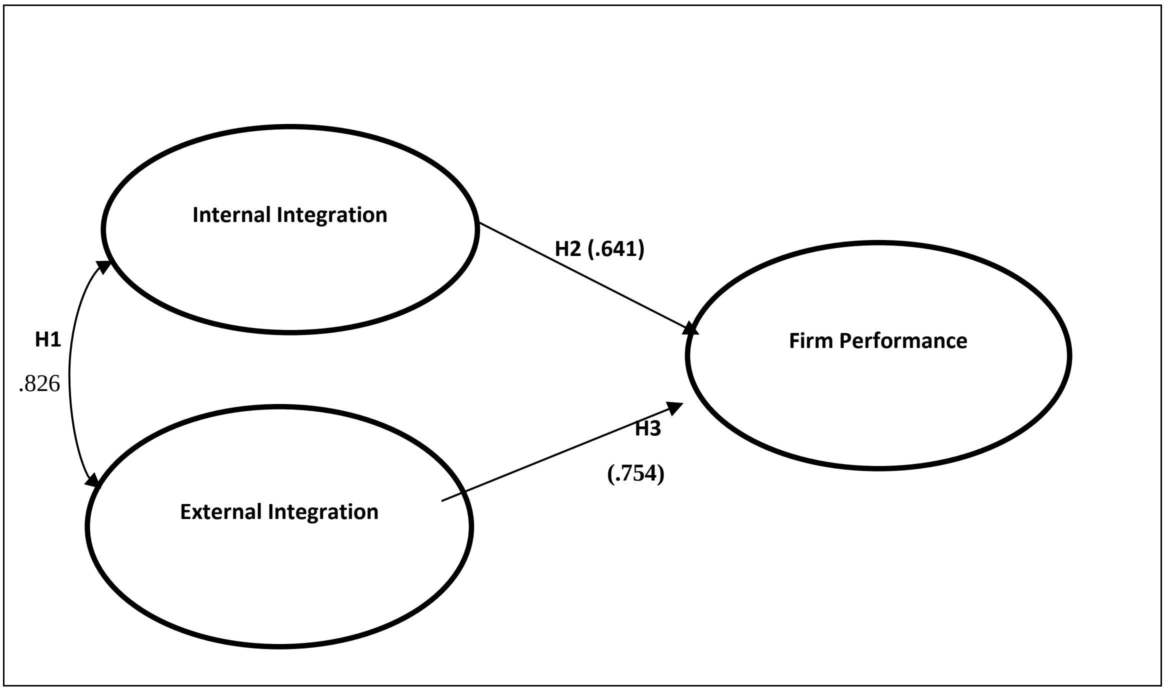
In structural equation modelling, determining the fit of the model is a major determinant factor of the accuracy of the model and the gateway for accurate regression analysis (Stank et al.,2001). Although, some of the model fit indices indicate weak measures, they are however, eligible for further analysis. The Chi-square was significant based on the number of data available for analysis and because chi-squares are highly responsive to number of data. Chi-square (897.99, df=317, p=0.00). These results were obtained after series of adjustments were made to the model. The indices obtained after the adjustments were (GFI=.777; CFI=.846; RMR=.097; RMSEA=.0052; NNFI=.783; PCLOSE=.000; IFI=.848; TLI=.816). The analysis would further be presented on the table below.

Table 2: Model Fit Indices

χ^2	DF	P VALUE	GFI	CFI	RMR	RMSEA	NNFI	PCLOSE	IFI	TLI
897.997	317	.000	.777	.846	.097	.0052	.783	.000	.848	.816

Table 2 above summarizes the model fit indices extracted from Amos. In Table 2 above, The Goodness of fit index (GFI), Comparative Fit Index (CFI) and others such as Incremental Fit Index (IFI) were conducted. The normal and recommended fit level is .90 but the values in-between zero and one are also considered. Statistically, RMSEA value of 0.05 or less is considered to indicate a good fit of the model (Arbuckle, 2005). However, Hu and Bentler (1999) recommend RMSEA of 0.06 or less to indicate a perfect fit. CFI and TFI values of .95 or higher are considered to indicate a perfect model fit. GFI should be approximately 1 or sometimes .95 is accepted for a good fit. Some of the indices, although, do not meet the standard criteria are still be eligible for further analysis.

Figure 2: Results of The Hypothesis Testing



The figure above presents the results of the hypotheses testing. It summarises the correlation coefficient between the variables of the study. In figure 1 above, the correlation coefficient for each of the hypothesis is represented in a bracket. The significant values of each of the hypothesis is .00

0. The correlation coefficients and their related significant values clearly pave way for the results of the analyses to be firmly discussed. The presumption that internal integration has a positive relationship with external integration implies that, the effective collaboration of the internal affairs of the food retailers has a positive relationship with their external partnership with their partners. The correlation coefficient of 0.826 clearly represents the highest correlation and the significant value of .000 indicates internal integration is highly and significantly related to external integration of food retailers and such relationship is positive. Hypothesis 1 is highly supported. This research posited that internal integration of food retailers has a positive relationship with firm performance; financial and operational performance. Meaning, the effective collaboration of internal activities of firms has a strong influence on the outcome of the firms' financial and operational activities. This was confirmed as the research found that effective inter and intra departmental communication, sharing of rewards and risk and other internal activities improve delivery, quality, return on assets, cost effectiveness, market share and other performance indicators of the firms. With the correlation coefficient of .641, there is a clear indication that internal integration is strongly and significantly related to firm performance and the relationship is positive. Meaning, hypothesis 2 is also supported.

Lastly, the presumption that external integration has a relationship with firm performance was supported. Correlation coefficient of .754 represents a stronger relationship. Firms' collaboration with external partners, thus, suppliers and customers strongly influences its' performance and hence a strong and highly significant relationship between external integration and firm performance. Therefore, hypothesis 3 is massively supported.

4. FINDINGS AND DISCUSSIONS

This study was aimed at contributing to the debate on the real impact of supply chain integration on firms' performance by exploiting the supply chain integration activities of retailers in Turkey. The demographic information from the research indicated that retailers in Turkey practice supply chain integration and that majority of the firms have supply chain managers. However, the Turkish retail industry is dominated by mini markets with small number of employees. The main findings are clearly explained below.

All the hypotheses in this study were strongly supported. The relationship between internal and external integration is the strongest as the correlation coefficient was very high. Firstly, it was hypothesized that internal integration has a positive impact on external integration. The research found that the internal integration of retailers is strongly related to the external integration of food retailers in Turkey. This implies that food retailers maintain an integrated database and access method to facilitate information sharing, effectively shares operational information between departments, have adequate ability to share both standardized and customized information internally and provide feedback to employees on business performance. Moreover, food retailers make use of compensation, incentive and reward systems to encourage internal integration, firms extensively utilize cross-functional work teams for managing day-to-day operations, clearly define specific roles and responsibilities jointly with their partners and firms have clearly defined legal framework to guide the systematic and sequential involvement in supply chain collaboration or integration. These internal practices enlisted above can stimulate firms' willingness to maintain strategic and highly confidential information with their selected suppliers and customers and develop performance measures that extend across their supply chain relationship. Furthermore, internal integration of the firms enables firms to develop supply chain arrangements with suppliers and customers that operate under principles of shared reward and risks. Similarly, firms share technical resources with key suppliers to facilitate operations, actively pursue and share a common set of expectations with supply chain partners and are willing to enter a long-term agreement with suppliers. Essentially, it was found that the internal integration of the food retailing firms triggered their decision to relate and share strategic and vital information with their suppliers and customers. Clearly, this implies that firms should improve and continue to achieve cohesion internally since they could positively impact their ability to establish continuous extensive collaboration with supply chain partners which enable firms to develop operational flexibility and help them benchmark best practices/processes and communicate the emerging results with suppliers and customers. The strong and positive relationship between internal integration and external integration suggest that firms should develop some more collaborative systems internally as they would have a massive positive effect on their relationship with suppliers and customers.

Secondly, the research discovered a strong and positive relationship between internal integration and firm performance. This suggests that firms' internal collaboration really influences return on assets (ROA), enables firms to achieve a low cost of production, improves delivery speed and dependability, makes firm to be highly responsive to key customers, helps firms to provide desired quantities on a consistent basis and improves their ability to accommodate delivery times for specific customers. Equally, the effective collaboration of firms internally improves the ability to notify customers in advance of delivery, improves the profitability of firms through their return on investment, enables a complete satisfaction and enables firms possess an enormous portion of total sales in relation to the market it operates within (market share). The relationship between internal integration and firm performance which is simply business and operational performance indicated a strong relationship meaning, effective collaboration within firms can improve the financial and non-financial performance of the firms. The strong correlation implies that firms should continue improving their internal collaboration activities and strive to achieve high and resilient business and operational performance measures. Impliedly, a positive relationship between internal integration and firm performance means firms should be keen on collaborating effectively internally as it would have a strong positive impact on both operational and financial performance of the firms.

The third hypothesis posited that external integration has a positive influence on firm performance and this research confirmed this hypothesis by finding a positive and significant relationship between external integration and firm performance. Firms' willingness to share strategic information with selected suppliers and customers, firms' exchange of technical resources and results, firms' pursuance of principles of shared reward and risk with suppliers and customers and firms' willingness to enter long-term agreement with suppliers have a significant and strong relationship with both operational and business performance of firms. From a different point of view, firms' internal integration triggers external integration with their external partners, thus, suppliers and customers and this collaboration influences positively the business and operational performance of firms. This wholly implies that food retailers and therefore firms in general should pursue and enforce integration activities in their supply chain relationships and activities since effective and efficient supply chain collaboration would impact a positively on the business and operational performance of firms. Similarly, firms would increase operational flexibility, return on assets, reduce cost, improve delivery speed and dependability, high responsibility to customers, improve the ability to provide desirable quantities of goods and service offered for sale, accommodate delivery times and improve the ability to notify customers in advance of delivery when the products arrive. Furthermore, effective and efficient internal and external integration would exert a positive influence on the return on investment, customer satisfaction and market share. The section above presented the relationship between the variables of the study and their various implications. The research found and disclosed the relationship between all the individual variables. It was found that internal integration influences external integration which in turn influences the performance of food retail firms in Turkey. Meaning, internal and external integration all influence the business and operational performance of food retail firms. Interestingly, all the relationship proved significant, signifying that, internal integration is significantly related external integration and both are significantly related to firm performance.

5. CONCLUSION

The section above presented the relationship between the variables of the study and their various implications. The research found and disclosed the relationship between all the individual variables. It was found that internal integration influences external integration which in turn influences the performance of food retail firms in Turkey. Meaning, internal and external integration all influence the business and operational performance of food retail firms. Interestingly, all the relationship proved significant, signifying that, internal integration is significantly related external integration and both are significantly related to firm performance.

This current study confirms the theory or suggestions proposed by the Stevens who suggested that firms should concentrate on internal integration and extend it to their customers and suppliers (Stevens, 1989). Furthermore, the study confirms the findings of (Stank, Crum and Arango, 1999; Stank et al., 2001; Scannell, Vickery and Droge, 2000; Prajogo and Olhager, 2012; Droge, Jayaram and Vickery, 2004; Rosenweig, Roth and Dean Jr., 2003; Stank, Daugherty and Autry, 1999; Narasimhan and Kim, 2002; Dyer, Cho and Chu, 1998; Groves and Valsamakis, 1998; Jayaram and Tan, 2010; Afshan, 2013; Marquez, Bianchi and Gupta, 2004; Vaart and Donk, 2008; Vickery et al., 2003; Lee et al., 2007; Schoenrr and Swink, 2011; Fabbe-Costes and Jahre, 2008; Wang et al., 2003; Vargas et al., 2008) who had similar findings as that of this research.

On the other hand, a contemporary research on the impact of integration on logistic performance conducted by Stank, Keller and Daugherty investigated the real impact of both internal and external integration on logistical service performance (operational performance) (Stank, Keller and Daugherty, 2001). Contrary to the findings of this research, the research found that external integration rather influences internal integration however, the research further found a positive relationship between internal integration with firm performance. Similarly, Germain and Iyer found a negative relationship between supply chain integration and financial performance but a positive relationship between integration and operational performance (Germain and Iyer, 2006). Gimenez and Ventura (2000) criticized Stank, Keller and Daugherty's findings above and confirmed that internal and external integration have a positive and a strong relationship with firm performance both operational and business.

Obviously, every research is inevitably surrounded by challenges. There are a handful of challenges this study encountered. Firstly, the sampling technique reduced the number of respondents drastically. In as much as this research aims to contribute to the literature on the impact of SCI and performance, stratified sampling was used to select the number of respondents needed for this research. Only firms with a certain amount of capital and particular number of employees were selected since they are often considered as performing supply chain activities in their firm. This risky type of sampling means generalizing the findings to the whole food retail firms in Turkey would be diffcult and inaccurate. Secondly, this study collected data or used respondents from only two cities (Eskisehir and Istanbul) with the assumption that Istanbul and Eskisehir are one of the biggest cities in Turkey and the major food retail firms would be present in the city. This impediment restrains the research from being generalized to whole food retail firms in Turkey. Thirdly, a small number of financial performance metrics were adopted in this research even though other equally important metrics could have been used in the research. It could be concluded that the financial performance measurement in this study is inadequate. Majority of the respondents were not specifically the target of this research as this study expected supply chain managers to respond to the questions in the data collection instrument. Apparently, these respondents in the lower ranks of the business lack the technical information suitable for this research.

The gaps identified in the research presents opportunity for future researchers. Future research should expand the number of respondents and replicate the principles applied in this research. Future research should also use make use of other appropriate sampling techniques and focus the research on other equally big cities in Turkey and other cities or countries enormous retailers. This research concentrated on only food retailers without concentrating on other partners in the supply chain such as wholesalers. Future research should concentrate more on other partners such as Third Party logistics, manufacturers' suppliers and suppliers of retailers. This further re-affirms the suggestion made by Gimenez and Ventura (2005). Also since external partners such as the suppliers and customers help improve the performance of firms, information is needed to be collected from these partners to assess their viewpoint on the satisfaction of services provided by firms and benefits they derive from integrating with firms. This re-affirms the recommendations made by Gimenez & Ventura (2005) and Stank et al. (2001). Further research is also needed to assess the drivers of supply chain integration since earlier researches have not been able to pinpoint the actual causes or drivers of integration. This gap was also identified by Flynn et al. (2010). Supply chain integration needs to be tested, clarified and researched further (Fabbe-Costes and Jahre, 2008). Due to this, several research into other areas of business and other partners is needed to solidify the real impact of supply chain integration and performance. Future research should be able to adopt more financial performance metrics and research into the real impact of supply chain integration on financial performance. This re-affirms the suggestion made by Afshan (2010).

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Appendix 1: Items in the Questionnaire

Internal Integration

INT IG 1 My firm maintains an integrated database and access method to facilitate information sharing.
INT IG 2 My firm effectively shares operational information between departments.
INT IG 3 My firm has adequate ability to share both standardized and customized information internally.
INT IG 4 My firm provides objective feedback to employees regarding integrated on business and logistics performance
INT IG 5 My firm's compensation, incentive and reward systems encourage integration.
INT IG 6 My firm extensively utilizes cross-functional work teams for managing day-to- day operations.
INT IG 7 My firm clearly defines specific roles and responsibilities jointly with our supply chain partners.
INT IG 8 My firm has clearly defined a legal framework to guide involvement in supply chain collaboration

External Integration

EXT IG 1 My firm is willing to share strategic information with selected suppliers and/or customers.
EXT IG 2 My firm has developed performance measures that extend across supply chain relationships.
EXT IG 3 My firm experiences improved performance by integrating operations with supply chain partners.
EXT IG 4 My firm has increased operational flexibility through supply chain collaboration
EXT IG 5 My firm benchmarks best practices/processes and shares results with suppliers.
EXT IG 6 My firm has supply chain arrangements with suppliers and customers that operate under principles of shared rewards and risks.
EXT IG 7 My firm shares technical resources with key suppliers to facilitate operations
EXT IG 8 My firm actively pursues and shares a common set of expectations with supply chain partners.
EXT IG 9 My firm is willing to enter long-term agreements with suppliers.

Firm's Performance

PERF 1 (ROA) The ratio of income before interest expense divided by average total assets.
PERF 2 The ability to achieve the lowest total cost of through efficient operations, technology and/or scale economies.
PERF 3 The ability to reduce the time between order receipt and customer delivery to as close to zero as possible.
PERF 4 The ability to meet quoted or anticipated delivery dates and quantities on a consistent basis.
PERF 5 The ability to respond to the needs and wants to key customers.
PERF 6 The ability to provide desired quantities on a consistent basis.
PERF 7 The ability to accommodate delivery times for specific customers.
PERF 8 The ability to modify customers in advance of delivery when the product will arrive.
PERF 9 (ROI) A profitability measure that evaluates the performance of a business by dividing net profit by net worth.
PERF 10 The product supplied matches customer's specification and requirement.
PERF 11 The firm's portion of total sales in relation to the market it operates within.

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A COMPARATIVE ANALYSIS OF USER INTERACTION OF TWITTER FOR TURKISH AND FOREIGN NEWS AGENCIES

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ABSTRACT
Purpose - This research examines the user interaction of global and local news agencies' tweets based on three dimensions. The types of agencies, content richness of posts, and categories of shared news content.
Methodology - A mixed research model was used both quantitative and qualitative. Five elements have been evaluated with a special score table. The news categories were examined through eight selected categories. User interactions were analyzed with 4,582 tweets collected from the news agencies. Content analysis, t-test, one-way ANOVA and correlation analysis were conducted.
Findings- It has been seen that user interaction differs regarding news agencies and types of news agencies. So having influenced the audience from the Agency perspective, there should be considerations regarding sharing content to have interactions.
Conclusion- Content marketing is a useful tool for social media marketing, and news agencies are the leading producers of the social media content. By this point of view, this work has implications for both academicians and practitioners.

Keywords: Social media marketing, Twitter user interaction, online consumer behavior, news agencies, content marketing.
JEL Codes: M30, M31, M39

1. INTRODUCTION

Content production and distribution have undergone a rapid transformation due to technological dependence since the development of printing technology. Distribution processes that include written texts, photographs, and videos are digitized by taking new forms as computer technology evolves and are consumed with different methods and dynamics compared to the old ones (Manovich, 2001, p.7). The "media" representing the mass media has become "new media" by evolving the technology in these media.

In traditional media, while content distribution is progressing physically through printed media, distribution and visual elements in the new media can be distributed quickly and without massive constraints. At the same time, this distribution opportunity gives passivity to the content, and a picture on TV can be produced and distributed by mobile medium, an image in the photo can be cut and easily transmitted to another platform. This situation, which is explained by the concept of "convergence," mediates the transformation of societies culturally by the development of communication technologies (Jenkis, 2006, p.3).

The development of new media has made social networks an essential digital communication channel today. Companies such as Facebook, Twitter, Linkedin, Google, and Whatsapp are leading the way of personal interaction and information flow as the largest of these networks. In the context of increased digitalization of communication, these networks have become a vital source of users' ability to create both individual contents and share the total content generated. The material that people created in these new social platforms as consumers at the same time has also entered the field of marketing.

Twitter, one of the most impactful global social networks, was established in 2006 and has reached 328 million active users by the end of 2017 (Statista, 2017). As a social networking platform, Twitter is free to access a wide range of uses that satisfy both entertainment and communication needs of people. Twitter has played an important role in the interaction of brands, non-governmental organizations, public institutions and media organizations (newspapers, websites, agencies, etc.) with consumers/users.

Although there are many studies on Twitter's news flow and content marketing, none of these studies have been handled comparatively by news agencies (Jansen et al., 2009, p.2179; Zafar et al., 2015, p.12; Vis, 2013, p.27; Petrovic et al., 2013, p.1; Heravi and Harrover, 2016, p.1194; Zhao et al., 2011, p.1; Kwak et al., 2010, p.1). On the other hand, while the measurements made on Twitter have been prepared according to the two existing criteria (retweets-likes), the third and new criterion (replies) coming with the last update in this study is included in the scope of the research. Therefore, it can be said that this work is the first work in this sense in the literature.

In this study, Twitter is discussed as an important social network from the news consumption aspect. Within the scope of the research, two global rivals of agency market and two local rivals of Turkish market are chosen. Agency type, content elements, and news categories have been examined. In the examination towards the kinds of agencies, it is revealed whether there is any difference between the agencies, whether the content richness interactively related to the content elements and the news category (politics, economy, sports, etc.) The interaction was analyzed by some replies, retweets, and likes.

The news agencies have the purpose of producing news, as well as the dissemination of this news and the consumption of mass media. Determining what content and category tweets are more likely to spread on Twitter, which is used as a tool of this consumption, will shed light on the work that agencies have done in this area. This study is presented in three chapters, and the first part deals with a theoretical background in the context of social networks and content marketing. In the second part, methodology, sampling and data collection method examined and in the last, some conclusion was made by interpreting the findings obtained from the research.

2. LITERATURE REVIEW

Content Marketing

Content marketing is a marketing strategy consisting of page design, graphics, texts and videos (Karkar, 2016, p.337), which informs the customer, creates value for the product and aims to connect the customer, depending on the outcome that the businesses are planning to market as online or offline. The main point of content marketing is to create valuable content regarding target audience and distribute it to them in a consistent manner (Ahmad et al., 2016, p.333).

The concept of content marketing is now being explored in the context of digital content. Digital products with the widespread use of the Internet is expressed as "digit-like objects distributed via electronic channels". Digital content marketing is a management process that is responsible for determining and implementing digital content delivered via electronic channels to meet customer needs (Rowley, 2008, p. 522).

Digital content marketing activities have begun to be carried out through online social networks nowadays with the development of digital communication. From a content perspective, the effort to socialize over social networks is closely related to the content creation of users. Interaction through social networks has become an immersive experiment for users (Keenan and Shiri, 2009, p.448). Firms that care about this experience have started to measure the level of content sharing with their customers, and as a result, they are trying not to measure the level of influence they leave on their customers. As a measure of content marketing via Twitter, the numbers of retweets and likes are mainly considered (Karkar, 2016, p.342). Therefore, how well a tweet is liked and retweeted is an objective measure of success in content marketing.

Twitter is at the forefront of content marketing tools in social media for companies because they can quickly spread shared content. The fact that Twitter is used extensively in news reporting makes it a critical content marketing tool for news channels (agencies, newspapers, TV, etc.). To ensure the effective use of this tool, news agencies are interested in creating interactive content. In addition to the text of a tweet's content, it is thought that the presence of the URL link and the mention in the context increases the likelihood of retweeting the tweet. This possibility is also directly related to the user's concern concerning their followers, whether or not they are worth sharing (Naveed et al., 2011, p.1).

As a result, the level of content marketing among the news agencies is directly related to the content of their retweet. In a survey conducted, 67,49% of the respondents indicated that they would share it on the social media when they found content that attracted attention online (Ogilvy, 2014). In a study by Boyd et al. (2010, p. 4) of what content users are retweeting for what content users have found that they are highly retweeting in the most time-sensitive issues, focusing on quickly delivering last-minute news to their followers. In the study, Twitter has proved that it allows the users to socialize with replies, likes, and retweets.

Social Networks

Social networking sites are digital platforms in which people communicate and share with each other by creating a profile through a system (Boyd and Ellison, 2007, p.211). One of the most accessible tools to use (especially for social networks) is Twitter. With different interfaces, Twitter offers its users a simple way to socialize with their technology (Keenan and Shiri, 2009, p.447).

Understanding the mechanism of Twitter as an important content platform is also important for information management, advertising, and social media management (Wu and Shen, 2015, p. 711). This mechanism works as follows: A user can send a share containing 140 characters (which has changed during this research into 280) and a photo, URL link and other elements to her followers by to be liked and retweeted.

The Twitter mechanism allows followers to establish a network between themselves and consume a common content over this network. In this view, a tweet shared on the network turns into information that can be transmitted to the followers, and the followers usually share it with their followers if they see this tweet interesting and worth to share (Naveed, 2011, p.6). This behavior, called "retweeting", is an important interaction for all existing brands on Twitter. More retweets of a brand's tweets indicate that its followers are more committed to the brand compared to other brands (Chu et al., 2016, p.13).

Twitter and News Media

Social media users are most likely to share news content that published by a well-established and respected media organization (Ogilvy, 2014). In a survey in the UK, it was determined that 33% of users share Twitter posts (News, 2015). In a user experience where one-third of the tweets is a news tweet, the tweet content is confronted as a field in which the titles are to be examined.

In a survey of nearly 60,000 people in 26 countries on digital news consumption, social media was the first source of news for 12% of respondents; And 51% of them were considered as a routine news source. In Turkey, this ratio is reported to be 73% (Newman et al., 2016, p.8). News organizations get breaking news details in case of emergencies and natural disasters to spread (Jensen et al., 2009 s.2179; Zafar et al. 2015, p.12, Vista, 2013, p.27; Petrovic et al., 2013, p.1). Besides, consumers use Twitter intensively to conduct news research (Heravi and Harrover, 2016, p.1194). In a survey conducted by Naveed (2011, p.6), Twitter users were found to be more likely to retweet "specific topics" (personal observations, emotions, etc.) than "general contents."

Bandari and his colleagues (2012, p.32) conducted a survey of US-based news accounts on 2,000 shares for 50 days, revealing the necessity of retweeting it to popularize a piece of news. In the category-based review of the news retweets, it was determined that the news in the "technology" category could be popularized with a 43% rating.

Media organizations that provide news service via Twitter categorize these shares differently according to the category categories (sports, economy, business world, agenda, etc.) that they define according to their internal definitions. The most shared news via Twiter are sports (30%), disasters and accidents (17%), politics (17%), business and the economy (14%), entertainment (9%), technology (4%) and others (9%) regarding a survey (Petrovic et al., 2013, p.4).

In a comparative study by Zhao et al. (2011, p. 9) on news shares via the New York Times (NYT) and Twitter, the first three of the twitter's most retweeted news are family life (35%), education (29%) and art (28%); The first three of the NYT news were observed in are the world (35%), travel (22%) and science-technology (20%) news.

3. DATA AND METHODOLOGY

The main purpose of this research is to analyze the interactions of news agencies' twitter shares in various aspect. To achieve this aim, Twitter shares of Turkish and Foreign biggest news agencies are examined. The following basic questions are sought in the research:

- Whether the user interaction is differentiating between news Agencies?
- Whether the user interaction increase parallel to content score’s increase?
- Whether the user interaction is differentiating between news topics?

In the literature, the primary criteria for interacting on Twitter was the retweeting and liking of shared content. Apart from these two elements, an innovation from Twitter in 2016 (previously available but not digitally watched on tweeter) has been able to trace the "reply" option.

Reseach Model

In this research, responding as a tool of interaction with Twitter, as well as retweet and liking properties, has been added as an interactive element. The first hypothesis of the study compares the agency differences in user interaction whether they are differentiating.

H1: User interaction differs according to Agencies.

The second hypothesis relates to the content elements. As content elements, it has been studied whether the shares include text, visual (photo/video), link, hashtag, and mention. The richer the content of a given content in a share, the more likely it is that consumer interaction will increase. Each of the five content elements (text, visual, URL link, hashtag, mention) was scored by a special calculation from 1 to 5 (1=poor; 5=rich).

H2: As content elements (score) increase, user interaction increases

The third hypothesis concerns the news categories. Even though there is different usage by an organization in the news media, there are some studies that combined the topics into some labels such as sports, disaster-accident, politics, business-economy, entertainment and technology (Petrovic et al. 2013, p.4). In a study conducted in the USA, the news of the users was divided into four main categories (local politics, international relations, sports) were followed (Pew, 2015a). The category headings are given to the news of the four agencies examined in the research areas in Table 1.

Table 1: News Categories of the Selected News Agencies

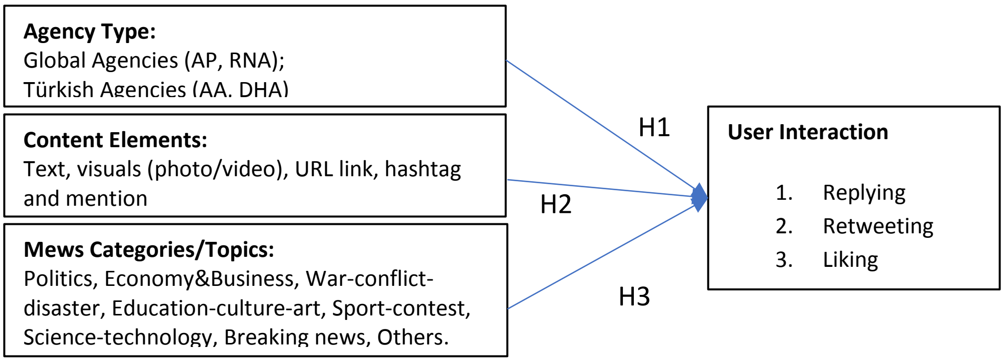
Agency Name	News Categories
Anadolu Ajansı (AA)	Turkey, World, Politics, Economy&Companies, Sports, Art&Culture, Science&Tech, Life,
Doğan Haber Ajansı (DHA)	Local, Istanbul, Politics, Sports, World, Economy, Lifestyle
Reuters News Agency (RNA)	Business, Markets, World, Politics, Tech, Breaking news, Money, and Life
Associated Press (AP)	BreakingNews, Sport, Business & Finance, Entertainment, Lifestyle, Politics

Source: Agencies' websites (ap.org, reuters.com, aa.com.tr, dha.com.tr).

In this study, eight main categories were collected based on the most used news topics in previous studies and the general categories used by agencies as shown in Figure 2. In this context, the third hypothesis of the research relates to the user interactions of the news categories that the agencies share.

H3: User interaction differs according to news categories.

Figure 2: Research Model



Sampling

The news sources of news consumers are varied including agencies, newspapers, TVs, internet sites and individuals. In this study, two biggest news agencies in Turkey and the World in were included in the study as seen in Table 2.

Table 2: News Agencies Basic Information

Agency Name	Twitter account	Operating from.	HeadQuarters	Language
Associated Press (AP)	@ap	1846	New York / USA	English
Reuters News Agency (RNA)	@reuters	1851	London / UK	English
Anadolu Ajansı (AA)	@anadoluajansi	1920	Ankara / Turkey	Turkish
Doğan Haber Ajansı (DHA)	@dhainternet	1999	İstanbul / Turkey	Turkish

Source: Agencies' websites (ap.org, reuters.com, aa.com.tr, dha.com.tr).
The main twitter accounts of the agencies that are used in the research shown in Table 3.

Table 3: Twitter Accounts of The Selected News Agencies

Main Account	Account Operating from…	Followers	Follows	Total Tweets
@ap	June 2009	11,3 Million	7.237	183.000
@reuters	March 2007	18,4 Million	1.053	196.000
@anadoluajansi	January 2012	1,7 Million	25	200.000
@dhainternet	February 2011	1 Million	4	179.000

Source: Agencies' twitter accounts (Last modified: 20.07.2017).

Data Collection

It is collected a 10-day twitter data from all four agencies for the study. These ten days are 21-23-25-27-29-31 May and 2-4-6-8 June 2017. In those days, data collected from the first tweet to last one during 24 hours. Repeated attempts were made to maximize the diversity of the topics by avoiding repetition, so interval days were chosen from 20 days serial. Shares are coded specially encoded and transformed according to three labels: 1- Content Elements Score, 2- News Categories and 3-Interaction Elements.

A custom table has been created for the content encoding, and each tweet table has been processed in source-date-day order. Five extra pillars were opened on the table. In the first column, there are some points (between 1 and 5) in which there are many adjectives from the relevant tweet content elements (for example, if there are only text and photos, 2, and if the link and hashtag are also included, they have 4 points). Each tweet is naturally started with 1 point as it contains at least a "text" and one point is added for each additional item for visual (photo/video), URL link, hashtag, and mention. This rating starts from "1 to 5" which means "1" equals to poor content, and "5" is the rich.

The next column is coded with the category of the shared news. The labeling was made by an expert who has been working for a news agency more than five years as a journalist. In the last three columns of the table, it is coded that the number of likes, retweets, and replies. A coding example of a tweet is given in Table 4. The score was 3 out of 5 since it contains "text, photograph, and link." The news category and number of interactions (replies-retweets and likes) written down in digits.

Table 4: Coding Table

Tweet Code	Content Score	Category Name	Number of Replies	Number of Retweets	Number of likes
AA_XX	3	Politics	42	94	73
…					

The data were integrated into the SPSS 23 statistical program and subjected to analysis. First of all, agency based descriptive statistical tables were made. Then the hypotheses were tested. One-way ANOVA, independent sample t-test and Pearson correlation analysis were used for testing hypotheses.

4. FINDINGS AND DISCUSSIONS

The collected data were first transformed into basic descriptive statistics. Table 5 lists the number and type of name-based tweet sharing of news agencies.

Table 5: Total Tweet Sharings of the Agencies

Agency Type	Number of Tweets	Percentage (%)	Agency Name	Number of Tweets	Percentage (%)
Turkish Agencies	2.469	54%	AA	1.354	30%
			DHA	1.115	24%
Global Agencies	2.113	46%	RNA	1.131	25%
			AP	982	21%
Total	**4.582**	**100%**		**4.582**	**100%**

A total of 54% of the tweets shared by the table belong to Turkish agencies, of which more than half belong to AA.

Table 6: Category Based Twitter Sharings of the Selected Agencies

News Category	AA	DHA	RNA	AP	Total	(%)
Politics	497	228	500	273	1498	33
Economy-Business	165	53	267	61	546	12
War-Conflict-Disaster	142	70	137	78	427	9

Education-Cultıre-Art	194	122	37	112	465	10
Sports-Contest	46	156	20	52	274	6
Science-Tech	48	9	17	16	90	2
BreakingNews	146	165	64	143	518	11
Others	116	312	89	247	764	17
Total	**1354**	**1115**	**1131**	**982**	**4582**	**100**

In Table 7, the general average of the content scores 1 to 5 of the news agencies and the average scores of the interaction items examined in the research are given.

Table 7: Content Scores and User Interaction Means

Kategori / Haber Ajansı	AA	DHA	RNA	AP	Mean
Means of sontent score	3,1	2,8	2,8	2,4	**2,8**
Means of reply number	4,0	2,4	28,3	45,6	**23,6**
Means of retweet number	24,2	3,6	118,8	238,8	**94,2**
Means of like number	60,5	6,3	123,4	305,6	**116,8**

RNA (2.8), DHA (2.8) and AP (2.4) follow the highest content score average among the agencies with AA (3.1) according to Table 7. In the content rating, the overall average of all agencies is 2.8. For each tweet shared by the news agencies, the average of the three items indicating the consumer interaction is again on the table. Thus, for example, AA appears to have received four replies, 24 retweets, and 60 likes. Significant differences exist between native AA and DHA in favor of AA, and in foreign agencies between AP and RNA in favor of AP for favored consumer interactions.

To test whether these differences are statistically significant, one-way ANOVA analysis was conducted that allows four agencies to be analyzed together. T-tests were also conducted for comparative analysis of Turkish agencies and global agencies as a group. Significant differences were found in all tests according to the results found in Table 8, and it is proved that there is a meaningful difference between agencies and agency types regarding user interaction.

Table 8:. Agency Based User Interactions ANOVA and t-test Analysis Table

	Results of Variance Analysis		T-Testi Results	
Interactions	**F Value**	**Sig.**	**t value**	**Sig. (2-tailed)**
Number of Reply	114,637	0,00	-16,95	0,00
Number of Retweet	102,496	0,00	-15,323	0,00
Number of Likes	61,763	0,00	-10,747	0,00
Content Score	197,829	0,00	16,642	0,00

One notable point in the analysis is to determine that foreign agencies have more user interaction than Turkish agencies. It can be argued that the main reason for this is the fact that publishing in English, which is a common language all over the world, and the mass that it reaches in this regard is even more widespread.

On the other hand, the interaction with AA consumers is made by DHA; It was also obtained from the analysis results that the interaction of AP with consumers was better than RNA. According to this result, the H1 hypothesis in the research model was supported, and the agencies were found to be different from each other regarding consumer interactions.

The second hypothesis of work is the relationship of content enrichment to user interaction. To test the hypothesis, linear relationships between content score, replies, retweets, and likes were examined by correlation analysis. The content score is determined by special scoring from 1 to 5 (the ones that are closer to 5), and as the content gets richer, it is assumed that the interaction will increase in the positive direction.

As shown in Table 9, there is a significant relationship between the content score and the user interaction, but it is seen that this relationship is both weak and not in the hypothesis but the opposite direction. In other words, the increase of content scores (text, visual, hashtag, URL link, mention adding) does not increase the interaction of the related sharing, but it seems that this increase of interaction has partly or negatively effect.

Thus the H2 hypothesis is not supported. This situation, which differs from the literature, can be thought to be because the shared content in "news," is still a "text-based" issue. It can be argued that when the subject is news here, the content of the shared text is more important than its enrichment.

Table 9: Correlation Analysis Table

Pearson Correlations	Content Score	Number of Replies	Number of Retweets	Number of Likes
Content Score	1	-,238**	-,254**	-,176**
Sig. (2-tailed)		0	0	0
N	4582	3419	4294	4521
Number of Replies	-,238**	1	,601**	,515**
Sig. (2-tailed)	0		0	0
N	3419	3419	3346	3405
Number of Retweets	-,254**	,601**	1	,918**
Sig. (2-tailed)	0	0		0
N	4294	3346	4294	4258
Number of Likes	-,176**	,515**	,918**	1
Sig. (2-tailed)	0	0	0	
N	4521	3405	4258	4521

**. Correlation is significant at the 0.01 level (2-tailed).

An important finding in the context of the research is that the elements of interaction (reply-retweet-like) show a strong positive relationship among themselves. The high linear relationship (0,918) between the retweets and the likes, which indicates that almost everyone liked retweets or likes each retweet, is particularly striking.

The third hypothesis of the research is that consumer interaction varies between shared news categories. According to this hypothesis, some news categories are highly interacting subjects with more response-retweet-liking than others. To test the hypothesis, eight categories of news with one-way ANOVA were examined in the context of relevant interaction elements.

Table 10: Category Based User Interactions ANOVA Analysis Table

User Interactions	F value	Sig.
Number of replies *(Politics and breaking news)*	18,503	0,00
Number of Retweet *(Breaking news)*	35,4	0,00
Number of Likes *(Breaking news)*	16,486	0,00

As seen in Table 10, it was determined that there are significant differences in the three categories of interaction by news categories. The H3 hypothesis was supported in this context, and the " Politics" and "breaking news" categories in the response element in the post-hoc (Tukey) test of these differences; likes and retweets were also found to differ significantly from those of the "breaking news" category.

5. CONCLUSION

In today's world of digitalization, online social networks provide an open environment in which consumer-based content is both produced and consumed. Twitter has become an increasingly popular medium for news consumption as a medium in which it is very easy to create and spread content across online social networks. Twitter has turned its production content into a marketing tool regarding the manufacturer brand (news agency). Therefore, media companies whose main activity is to produce content (news) should use this channel effectively in the context of content marketing. The effective use of content means that more shares can reach more people on Twitter, and as a measure, it can be retweeted and liked by twitter.

This research examines the interaction elements of news agencies with consumers regarding agency types, shared the content richness and shared news categories. This research is the first study to compare the related studies between agencies. In the study, 4,582 tweets from 10 days that shared from AA and DHA which are the two largest agencies operating in Turkey and AP and RNA, which are the two biggest agencies operating in the world. Three hypotheses were tried to be tested in the analyzes, two of them were supported and one not.

Since content marketing applications involve efforts to ensure that companies can consume their content as high as possible, news agencies are expected to produce content that is more effective than their competitors via Twitter and to receive more sharing through this way. In this context, it is observed that 30% of all tweets during the research period were thrown by AA. Regarding the number of shares, the content of the share, and the interactions with the consumers (in all categories), AA was significantly different and better than DHA. Among foreign agencies, AP was found to be better regarding content richness versus RNA, but weaker concerning interactivity.

As for the comparison of domestic and foreign agencies as a group, it is seen that regarding content richness, Turkish agencies are far better than foreign agencies, but they are far behind regarding consumer interaction elements. The main reason for the difference is because of the foreign agencies are publishing in English which allows being following worldwide whereas Turkish agencies publish Turkish. This situation is similar to that of a previous study (Alrawi, 2016, p.5) conducted in the context of Tweeter sharing analysis of news TVs broadcasting in Arabic and English. As a result, differentiation of user interaction, which is the first hypothesis of the research, by agencies and agency types, in general, has been accepted.

The second hypothesis is based on the assumption that an increase in the score of an account statement developed specifically for this research. As the scores increased, the interaction did not increase. For this reason, the basic content that news agencies share is actually "news," and the news still needs a strong "text" or at most a visual within the text. Therefore, there is no formal enrichment priority. Other elements enriching the content (URL link, hashtag, mention.) May not be considered to be a "news enrichment" within the limited text.

The third hypothesis of the research was that the user interaction was divergent according to the news categories. Accordingly, some news categories should have better user interaction. It was mentioned in the literature that news organizations use in order to receive and disseminate "last minute" information on Twitter, emergency situations and natural disasters (Jansen et al., 2009, p.2179; Zafar et al., 2015, p.12; Vis, 2013, p.27; Petrovic et al., 2013, p.1).

In a previous survey (Reuters, 2016) it was stated that those who consume online news are willing to publish the most "politics" news. It was determined that 33% of the total number of tweets surveyed was shared in the "policy-politics" category and at least 2% was shared in the Science-Technology field.

When we look at the share categories, it is seen that all four agencies came first in all of the shares in the Politics-Policy category. As the reason for this category to come to the forefront, news agencies can be regarded as a desire to closely follow the state administration, which is primarily concerned with the broad masses, and spread the developments there to the whole country/region/world.

The last hypothesis test focused on differentiating user interaction according to these categories. For this purpose, eight categories were found to be significantly different according to the user interaction elements. First of all, in the element of the interaction of all three users (response-retweet-liking), "last-minute" news differed significantly and received higher response-retweet and liking than the other categories. The high retweeting of last-minute news is parallel to the study of Boyd et al. (2010, p.6) in the literature. In this sense, it can be considered that the behavior of news consumption in Turkey and the world is similar.

This study confirms that Ahmad and others (2016) have endeavored to create valuable content regarding the target groups of the content that the reviewed institutions have, under the definition of content marketing, and that they are also interacting more with their target groups. On the other hand, it was reiterated that the number of retweets and ratings on tweet shares, which confirms the work of Karkar (2016), is the best way to measure tweeter interaction.

Apart from the "last minute" news, it has been observed that in the responding element of the consumer interaction, the news in the "Politics" category also differentiated and received high levels of interaction. It can be considered that the differentiation in this category is caused by the behavior of people commenting on the published news. In other words, it can be said that the users interacted by commenting on the flood, even if they did not like or do not retweet about politics-politics.

In this study, semantic content analysis of tweets is not done, but if it is not done, politic discussions of opposing views may be encountered in the response parts of policy-policy sharing. Previous work on Twitter focused on examining tweet content more semantically. In this study, for the first time, numerical data of tweet shares were tried to be revealed by relationship and difference analyzes so that online content marketing could be a success criterion.

Correlation analysis made for this purpose stands out as the difference and contribution of the study of previous studies in the literature. This contribution is a numerical review of the relationship between the liking of tweets and their retweeting. It is important that the correlation calculation between liking and retweeting is very high, such as 0.918, to support the literature. This is true to the point that Ogilvy (2014) indicates and it proves it numerically; reveals how high the rates of sharing content (even likes) that people are attracted to. In this study, the rate of retitled content is very high at 92%.

Another contribution of the study is to make numerical measurements and interpretation of the “replies” feature of the twitter, which is revealed as one of the twitter interaction elements. According to the social networks literature, the environments where people interact with each other in an online environment strengthen their brand / institutional links. In this research, it was observed that the people interacting with each other on the twitter account interacted with the institution via an online social network, and this interaction was measured for the first time numerically and there were significant differences between the institutions.

The scope of this study was to examine the Twitter shares of the agencies but just on quantitative aspect. This study can be improved by examining the calculation from plural dimension to singular. In this way, it can be analyzed how much interaction the news text or photograph has received on its own.

On the other hand, it would be beneficial to deepen these analyzes, which were established by the agency's sub twitter accounts that belong to main one. And the last this study should be extendable with the other strong social media platform usage such as Facebook within twitter usage.

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EVALUATION OF THE INTENTION OF USING PRODUCTS WITH INTERNET OF THINGS WITHIN THE CONTEXT OF TECHNOLOGY ACCEPTANCE MODEL

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ABSTRACT

Purpose- Developments in information technology and digital arena have opened the way for many new applications that will facilitate everyday life. It is important for producers to know the reasons behind acceptance, use and rejection of these new applications. The purpose of this study is to examine the basic factors behind the intention of using products with internet of things technology that are new to our life within the technology acceptance model.
Methodology- The Multiple Regression Analysis was employed in this study to test the proposed hypotheses with the questionnaires sampled from 453 individuals living in Düzce/Turkey.
Findings- It is seen that there is a strong correlation between attitude and intention among perceived usefulness, ease of use, attitude and intention variables examined in the study. In addition, perceived ease of use is concluded to have positive and significant effects on perceived usefulness and attitudes while the variable of perceived usefulness has the same effect on attitude and intention.
Conclusion- The findings of this study not only contribute to theoretical aspects, but also arise practical issues for smart durable goods sellers.

Keywords: Internet of things, technology acceptance model, attitude intention of use, regression analysis, mediator effect
JEL Codes: M00, M31, M39

1. INTRODUCTION

With the developments experienced in technology in the 19th and 20th centuries, a step has been taken for a new era in the world. Especially after the Second World War, technological developments have gained a great momentum. After this process, the whole of the world has become an integrated market. Both societies and businesses are committed to investing in science and technology in order to be able to compete and rank first in the competition.

The technological developments that have taken place and the importance given by societies and businesses to science have started the transition from the industrial society to the information society. With the transition from the industrial society to the information society, the information is placed on the center of everything, the basic capital of the societies has become information and the marketing of the information has become important. A linear relationship between information and communication technologies and economic modernization has begun to be observed. "Networks", which allow transferring all kinds of information such as text, sound, pictures, images etc. from one place to another, are accepted as the basic element of the information society (Webster, 1996: 77, as cited in Tonta and Küçük, 2005: 2). The introduction of information technology to the market through the use of networks, the intensive use of computers and the development of the internet have both increased product diversity and changed consumer's view product and expectation from the product.

Today, this change has taken a very different dimension, and as a result, the concept of the internet of things has been revealed. The internet of things refers to the network where physical things can connect with each other or with larger systems (www.bs.org.tr). This technology is completely different from the past, allowing machines and devices to interact with each other and allow them to be remotely controlled by people. For this reason, the Internet of things has the potential to make radical changes in human life. It has changed our way of looking at connected devices, products and devices, and our pattern of behavior. The fact that a product is connected to the internet creates significant value for the consumer.

Marketers also use a variety of tools to answer a lot of questions about customers. The most important data for these tools is provided by the answers given to what and when customers buy. The internet technology of things makes it possible to obtain real-time information about consumers by enabling multi-dimensional and multi-directional communication between thing-customer and brands. Again, due to the internet technology of the things, the product-producer and the customer are brought closer to each other. Thus, producers are able to perceive the changing needs of consumers and realize the necessary changes without losing time.

It is very important that the produced product be accepted by the customer even if the changes that occur have reduced the costs of the producers. What plays role in the customer's acceptance or refusal to use a product produced with technology? Many models have been developed to answer this question. Nowadays, since people have limited time, learning something new without effort, the usefulness of the product to be used, believing that it will make the consumer’s work easier, and the presence of a group of people who thinks in this direction will influence the attitude towards the use of this product and the intention to use it in the positive direction.

Most products used by consumers carry smart product features. This case has also shown itself in durable consumer goods in recent years. Durable consumer goods sector in Turkey and the world is experiencing rapidly growing stages of development. The underlying reason for this development is that they have information technologies in their structures. Through their technological infrastructure, they have added smart products to their product range, giving consumers the opportunity to remotely control ovens, refrigerators, washing machines and dishwashers. Learning consumer intentions about durable consumer goods with Internet technology of things is important for manufacturers to learn consumer trends and determine marketing strategies.

The main purpose of the study is to research the intention to use durable consumer goods having Internet of things technology within the Technology Acceptance Model. As a result of the literature search, the internet of things technology has been studied in many fields such as education field and banking sector, but it has been seen that there is no field study related to durable consumer goods sector. The Technology Acceptance Model, which is the basic model of the study, has also been studied in tourism (Kaş, 2015), banking (Doğan et al., 2015, Ceylan et al., 2013), education (Hu et al., 2003, Ma et al., 2005, Menzi et al., 2012) and accounting (Özer et al., 2010) sectors, and the basic variables underlying the acceptance intentions and behaviors of the users have been revealed. The research of the intention of the use of durable consumer goods having Internet technology of the things within the Technology Acceptance Model has an introductory exploratory research feature as it is new in the body of literature. In addition, the study differs from other studies in the body of literature in terms of the sector in which it is conducted.

2. LITERATURE REVIEW

2.1. The Internet of Things Technology

In industry 1.0 period, water and steam power was used for manufacturing, electric power was used with industry 2.0, and the first steps of mass manufacturing were taken. The process was followed by industry 3.0, and this process was called the digital revolution and the manufacturing became automated by the development of information technology. Industry 4.0 is a collective term that encompasses many modern automation systems, data exchanges and manufacturing technologies (www.endustri40.com/ Access date: 26.03.2017). Within this structure; the internet of the things, the internet of the services and the cyber-physical systems are present. Through the internet technology of things, systems and people can interact in real time. The most important feature of the process is that the machines interact with each other through the Internet in the entire manufacturing process. The smart factories in the industry 4.0 process include a system that can detect work with sensors and connect with remote devices to find the information they need (Alçın, 2016: 20).

The internet of things, as expressed, will provide a connection in a smart way by defining objects (by tagging) and providing them to perceive each other through networks (Yiğitbaşı, 2011: 103). Due to the connection of the tagged objects with the internet, it is possible to collect data from the objects and to move the interaction between the objects further by this data. According to Xia et al. (2012: 1101), the internet of objects refers to a network through which everyday objects communicate with other devices and people through their embedded system. According to Agrawal and Das (2011: 3), the

Internet of objects represents a global network formed by communicable objects by providing unique digital identifier for each object, structured to interact with physical or virtual objects without human intervention.

The basis of the Internet of things technology was first introduced with the camera system that was established in 1991 by 15 academicians at Cambridge University to see the coffee machine. Researchers have designed a system that allows the display of a coffee machine to be sent to computer screens three times per minute. In this way, all researchers in the university have the opportunity to see the coffee machine's status and the amount of coffee in real time (Kutup: 2011: 1).

In 1999, this concept was originally used for the first time by Kevin Ashton. Ashton has included this concept in P & G's meeting on supply chain management. In the supply chain, the use of RFID (Radio Frequency Identification) technology and its association with the internet has been seen as a good method to attract the attention of management (Kutup, 2011: 2). Over the years, it has been seen that the concept of the internet of things has become the title of many things.

Although the beginning of all these developments began in the 1990s, IoT technology has begun to take effect in recent years. The expansion of network communication capacity in the year of 2000s has enabled the introduction of data analysis that will more easily interpret data coming from IOT devices and creating new standards that will facilitate the interaction of IoT software and hardware from different suppliers (www.radore.com/ Access date 03.04.2017). IoT technology is used in many areas such as supply chain management, urban planning, library management, retail tracking, stock control, digital logistics, efficient transportation, home automation, mobile payment, warehouse management, health services and private space (Gao and Bai, 2014: 213).

Through the internet of things technology, all kinds of information related to the product embedded in the products and this information is shared in real time with the relevant people in the supply chain. Thus, products' data will be determined as to when, where, and where the products will be found, these data of product will be able to offer the best storage conditions during the transfer of the products.

This technology provides a reliable warehouse management, enabling stock control to be carried out with minimum error and reducing costs by avoiding overproduction for any product. Through the sensors placed on the shelves in the store or supermarkets, the products are monitored by checking the product status. In addition to providing home security through smart home automation, . In addition to providing home security through smart home automation, it also allows home-related settings by connecting remote automation system even when not at home.

Application and Domain of the Internet of Things Technologies

Technological innovations are made to facilitate people's lives. Along with this development and transformation, consumers are beginning to use many connected devices in their daily lives. The connected devices change the point of view that consumer uses or will use in the future. Because, the fact that a product is connected to the Internet makes both the product and the user much more powerful than non-connected products (Greengard, 2017: 97).

Consumption patterns also change with the internet of things. People are now able to access many things via the internet. It has become possible to control lighting or security systems by connecting them with smartphones. While smart home is to transfer home technology into everyday life which prevents waste of time and allows several works to be done together, home automation refers to the personalization of home technologies to provide home control and protection (Güğül, 2008: 11). Another application area in smart home automation is smart domestic appliance. Existing products currently allow only remote program features to be selected. But in the future; this technology will enable the consumer to connect to the smart refrigerator to control the inside of the refrigerator, to follow the expiry dates of the products or to obtain a list of meals to be prepared from the available materials. In addition, smart products in the future will be able to communicate with each other apart from providing remote control possibility. For example, after selecting the program for the washing machine, the washing machine can suggest the most suitable program for drying the clothes to the drying machine (www.arcelik.com/ Access date: 10.12.2017).

Remote administration of healthcare services through the internet of things technology will reduce the workload of healthcare providers and institutions (Aktaş et al., 2015: 299). Mobile healthcare has emerged to control patients who are difficult to reach a doctor. Therefore, when the internet of things technology and healthcare are integrated with each other, the services provided by this technology will consist of the functions of patient monitoring, identification, verification and collection of patient related data (Atzori et al., 2010: 2795).

The internet of things technology has made feel its effect in many areas since entering everyday life. Transportation and shipping are also within these areas. Many companies that are beginning to explore the benefits of mobile devices are pursuing technological developments and targeting to reduce their costs by optimizing their companies' resource utilization. Technology has become important in the procurement of raw materials, product manufacturing, transportation, distribution and sales through RFID tags. It has become easy to learn about the traffic situation and provided route optimizations to the transport companies to reach the actual data about the vehicle's location, condition and delivery time (Atzori et al., 2010: 2794). The condition of the spoilable products is monitored by the sensor technology and prevents the spoilage of the products, thus increasing the productivity.

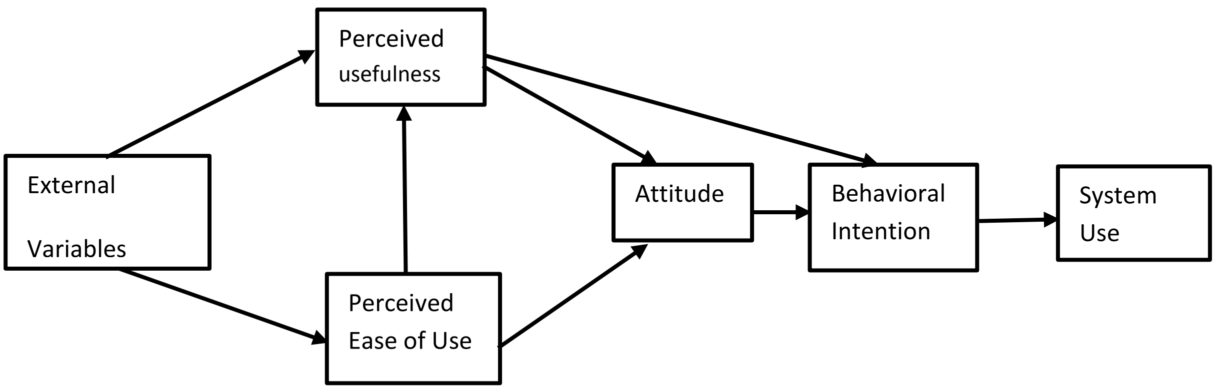
2.2. Technology Acceptance Model

As information technology becomes widespread and influential in everyday life, acceptance and use of technology has become an area that needs to be researched. Various theories have been put forward in order to better understand the factors behind the acceptance or use of technology.

In 1989, Davis proposed a technology acceptance model (TAM) to explain the intention of potential users to use technological innovation (King and Hu, 2006: 740-755). TAM, adapted from TRA (Theory of Reasoned Action), was developed to explain and predict the individual acceptance of computer technology (Chau and Hu, 2001: 703). The technology acceptance model is the theory of information systems and explains how an individual or a community can accept technology. The purpose of this theory is to explain the external factors that influence the attitude and intention while determining the behavior patterns of the consumers who will use innovation (Serçemeli and Kurnaz, 2016: 44).

TAM is based on social psychology and is based on the theory of reasoned action. TAM consists of a 4-step structure. The perceived ease of use and perceived usefulness found at the core of the theory have a direct influence on the attitude and behavioral intent of the individual. According to Davis; Behavioral intentions of the consumer to use technology are influenced by attitudes as well as beliefs (Karahanna et al., 2006: 782). Davis's TAM model suggests that perceived usefulness and perceived ease of use determine the consumer's intent to use a new technology. The perceived usefulness and perceived ease of use included in the technology acceptance model provide for the prediction of one's attitude towards technology. If the consumer believes that the use of a new technology does not require effort, the use of this technology results in increased performance, and the more positive attitudes towards technology use, the higher the likely it is to realize the behavior.

Figure 1: Technology Acceptance Model



Source: Davis, 1989: 319-340

External Variables

These variables are outside the control of the individual. Demographic characteristics of the consumer can be shown as an example. TAM argues that external factors are influential in consumers' preferences for use. (Park et al., 2009, as cited in Ceylan et al., 2013: 146). Examples of external variables include the individual's social environment, level of education, work experience, age, gender, personal abilities, etc. (Davis, 1989, as cited in Akbulut, 2015: 33).

Perceived Usefulness

According to Davis, the perceived usefulness is the tendency and thoughts of one about his increasing own performance as a result of his use of a system (Turan and Colakoglu, 2008: 113). Perceived usefulness refers to the degree to which a consumer will use a particular information system, perform a specific task (Keller, 2005: 302), or increase business performance (Aydin, 2015: 34).

Perceived ease of use

The perceived ease of use means that a person uses a system without difficulty and effortlessly. Effort is the limited resource for which the individual spares several activities (Davis, 1989: 320). Even if all other factors are equal, it is easier for the consumer to accept if it is perceived that the use of a technology is easy. According to Davis (1989: 320), perceived ease of use has a direct influence on the perceived usefulness.

Attitude

Attitude is positive or negative evaluation of an object, subject, idea, person or people, and these evaluations influence our tendency to behave in a certain way (Koç, 2007: 158). Our attitudes are influenced by our experience and the environment in which we live. Therefore, attitude can change over time because it is an impetus learned later.

Behavioral Intention

The concept of intention, which provides the link between attitude and behavior and is described as planning to do something in advance, is also defined as the most important indicator of the actual will to actualize the behavior (Mutlu et al., 2011: 55). Consumer intent is important for marketing researchers to predict the consumer's future behavior (Goldsmith, 2002: 23). According to Davis (1986: 16), intention is the likelihood that a consumer will exhibit a certain behavior. Perceived usefulness and perceived ease of use are related to intention (Karahanna, 2006: 782). Intent is to act towards the result of the behavior targeted. Intention is mentioned as the level of desire felt by the individual to perform an action and the intensity of the effort he intends to put forth (Ajzen, 1991, as cited in Kocagöz and Dursun, 2010: 140). The intention of the individual to use a technology is the basic step for success.

3. DATA AND METHODOLOGY

3.1. The Research Problem

The main research problem is to determine which factors influence consumers' intention to use the technology, within the technology acceptance model first introduced by Davis (1986), for products with the internet of things technologies. Sub-problems of the research are determined as following;

- Is there any effect of the perceived ease of use variable on the variable of perceived usefulness?
- Is there a significant effect of the perceived usefulness and perceived ease of use variables on the attitude towards use?
- Is there any significant effect of attitude towards use on the variable of intention towards use?

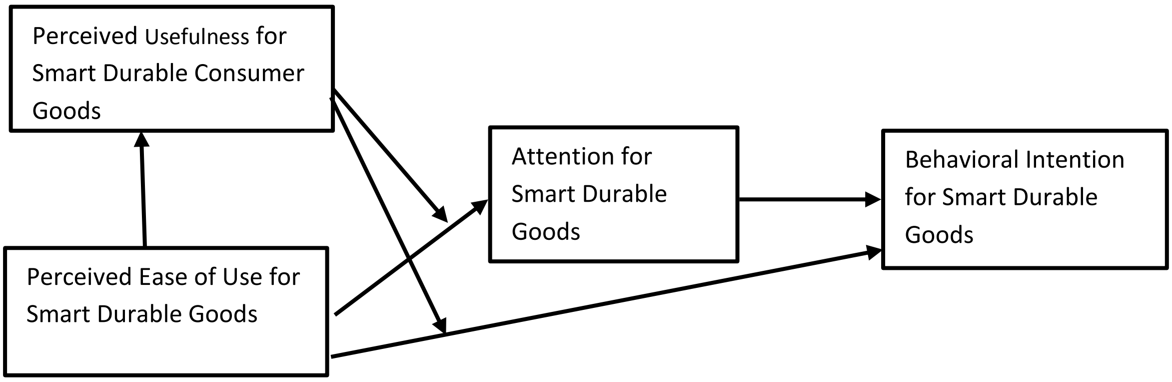
3.2. The Research Model

There are many models in the literature about consumers' acceptance and use of technology. The internet of things technology has made its name mentioned on durable consumer goods especially in recent years. In our study, the effects below have been tried to be revealed for durable consumer goods with internet technology,

the perceived ease of use → the perceived usefulness,
the perceived ease of use → attitudes,
the perceived usefulness → attitudes
attitude → intention to use.

In order to reveal the relationship between the variables in the study, the model given in Figure 2 is preferred.

Figure 2: The Research Model



The model has been adapted from the original Technology Acceptance Model developed by Davis (1986) for this study. The actual system use variable involved in Davis' model was left out of this modified model. Since the use of durable consumer goods with the Internet of things technology in our country is still not widespread, the behavior variable is excluded from the model in order to remove the risk of not getting enough data.

3.3. Universe and Sample

The research universe is consisted of the individuals aged 15 years or older who can use technology and live in the center of Düzce. According to TurkStat, 2016 household information technology use research, internet use rate of 16-74 age group is 61.2% (www.tuik.gov.tr/ Access date: 18.12.2017). Attention is drawn to the fact that the persons from whom the data are collected should have an experience in the use of domestic appliance. Also, it was not paid attention whether the respondent was a woman or a man, and data were collected from both groups.

The convenience sampling method was used to determine the sample. Through convenience sampling method, data are gathered from the persons who can be reached at ease till the required number of sample (Gurbuz and Şahın, 2016: 134).

According to Sekeran, if the size of the population is 75.000 and the size of the sample should be 382 and if the size of the population is 1.000.000, then it is sufficient to have a number of 384 (Sekeran, 2002: 294). Information was obtained from the Duzce Population Directorate's official web site in order that the population can be correctly identified. According to the report of TURKSTAT on 31 January 2017, the general population of Duzce province was 370.371 in 2016. Because the population of the province was 370.371 in 2016, the lower limit was determined as 384 persons with 95% confidence interval and 5% error margin.

3.4. Development of Data Collection Tool and Collection of Data

Data were collected by using the online survey on the internet (Malhotra, 2010: 219). An online survey has been preferred in the study in order to make the returns faster because of the difficulty of reaching the required number for the sample. Since the individuals who have intention to use the products with the internet of things technology are thought to be closer to the electronic environments, the form to collect the data was prepared as an online survey and they were provided with a link to this form.

The expressions of perceived usefulness and perceived ease of use variables belonging to the first part of the survey are taken from Davis (1986) and the expressions of attitude and intention variables are taken from Karahanna et al. (2000). Despite the fact that the variables included in the model were included in many studies before, the necessity of arranging statements was needed because the sample to be collected was different and the research topic was different from these studies. The validity of the scale in Davis' work was tested by following the process of "translation - re-translation" and then it was arranged so that expressions would be adapted to the subject. Survey questions were prepared in a 5-point Likert scale type [(1) strongly disagree ... (5) strongly agree]. The survey was applied to 90 people within the scope of the pretest, and the survey was continued after it was found that there was no need for any correction. During the survey, a total of 453 people were reached. However, after the data was collected, a total of 17 surveys with a response time of less than 3 minutes were extracted from the data set, possibly due to the fact that they were answered without reading. Analyzes were made with a total of 436 surveys available for analysis along with 90 surveys in the pre-test.

4. FINDINGS AND DISCUSSIONS

4.1. Demographic Characteristics and Descriptive Statistics of the Sample

As a result of the research, frequency and percentage analysis was applied to the data to find the demographic characteristics of the participants. Findings related to the demographic characteristics of the participants are as in Table 1.

Table 1: Descriptive Data for the Study Group

Gender	Frequency	%
Women	318	65,4
Men	118	24,3
Marital Status	**Frequency**	**%**
Married	196	40,3
Single	240	49,4
Age Group	**Frequency**	**%**
15-21	45	9,3
22-28	193	39,7
29-35	93	19,1
36-42	50	10,3
43-48	25	5,1
49-55	23	4,7
56 and above	7	1,4
Education Level	**Frequency**	**%**
Primary	6	1,2
High School	80	16,5
Associate degree	37	7,6
Bachelor's degree	265	54,5
Master Degree	48	9,9
Monthly Income	**Frequency**	**%**
0-1399 TL	140	28,8
1400-2799 TL	111	22,8
2800-4199 TL	105	21,6
4200-5999 TL	41	8,4
5600 TL and above	39	8,0
Job	**Frequency**	**%**
Civil Servant	64	13,2
Private Sector Employee	136	28,0
Self-employed	30	6,2
Retired	11	2,3
Housewife	57	11,7
Student	138	28,4

As shown in Table 1, the number of women participating in the survey is 318 (65.4%) and the number of males is 118 (24.3%). When the marital status of the participants is checked, it is seen that 49.4% are single and 40.3% are married. When age groups are analyzed; it is observed that 9,3% (45) are in the range of 15-21, 39,7% (193) are in the range of 22-28, 19,1% (93) are in the range of 29-35, 10,3% (50) are in the range of 36-42, 5.1% (25) are in the range of 43-48, 4.7% (23) are in the range 49-55, and 1.4% (7) are in the range of 56 and over . When the educational status is examined; it is found out that 1,2% (6) have primay school degree, 16.5% (80) have high school degree, 7.6% (37) have two-years degree, 54.5% (265) have bachelors' degree, 9% (48) have master degree. When monthly income is examined; it is observed that 28,8% (140) are in the range of 0-1399 TL, 22,8% (111) are in the range of 1400-2799 TL, 21,6% (105) are in the range of 2800-4199 TL, 8,4% (41)) are in the range of 4200-5999 TL, and 8% (39) are in the range of 5600 TL and above. When occupational groups are examined; it is observed that 13% (64) are public employee, 28% (136) are private sector employees, 6.2% (30) are self-employed, 2.3% (11) are retired, 11,7% (57) are housewives and 28.4% (138) are students.

For reliability analysis of the scale, Cronbach's alpha coefficient is used. The Cronbach alpha coefficient for all factors is 0,931. The Cronbach alpha coefficients of the factors are given below in Table 2.

Table 2: Cronbach's Alpha Coefficients of Factors

Factors	Item No	Cronbach's Alpha Coefficient
PBenefit	11	,939
PEase of Use	10	,817
Attitude	3	,931
Intention	2	,933

In the study, factor analysis is applied in relation to scale items. Prior to factor analysis, the Kaiser-Meyer-Olkin (KMO) Test for Sampling Adequacy and the Bartlett's Sphericity Test were conducted to measure the adequacy of the correlations of the items and factors for the factor analysis.

Table 3: KMO and Bartlett Test Results

KMO and Bartlett Tests		
Kaiser Meyer Olkin Tests		,936
Bartlett's Test of Sphericity	Approx.Chi-Square	7433,996
	Df	300
	P	,000

Since the KMO value is 0,936, it is seen that the suitability of the variables for the factor analysis is excellent and the significance according to the Bartlett test result is 000. According to the results of KMO and Bartlett test, factor analysis for the survey is suitable.

Table 4. Factor Analysis Results

Factors	Variables	Factor Mutual Variance	Factor Loadings	Variance Explained	Eigenvalue
Perceived Usefulness	PB1	,550	,741	26,880	10,728
	PB2	,545	,738		
	PB4	,674	,821		
	PB5	,696	,834		
	PB6	,752	,867		
	PB7	,579	,761		
	PB8	,521	,722		
	PB9	,618	,786		
	PB10	,560	,749		
	PB11	,729	,854		
	PB12	,742	,861		
Perceived Ease of Use	PEU1	,437	,717	15,615	2,690
	PEU3	,514	,708		
	PEU4	,160	,687		
	PEU7	,313	,661		
	PEU8	,407	,638		
	PEU9	,501	,622		
	PEU10	,369	,608		
	PEU11	,386	,565		
	PEU12	,319	,559		
	PEU13	,473	,400		
Attitude	A1	,891	,944	12,159	2,093
	A2	,923	,961		
	A3	,828	,910		
Intention	I1	,938	,968	10,226	1,358
	I2	,938	,968		

Evaluation Criteria	KMO: ,935. Approx.Chi-Square:8520,571. Bartlett's Test of Sphericity: ,000. Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Explained Variance: Total: 64,881

Principal component analysis and Varimax rotation technique are used for factor analysis. The factor loading value refers to the correlation of the item or variable with the factor, and the factors with the factor loading value of 0,50 result in strong factors (Gürbüz and Şahin, 2016: 311). AF3 (To use smart domestic appliance enhance my performance) item, which is under the perceived usefulness factor as a result of the factor analysis conducted, has been extracted from the structure due to the fact that the factor load is smaller than 0.5. When factor analysis table is examined, it is seen that some factor weights have close values under more than one factor. In such a case, when the item takes a close value in the column of more than one factor, the expression should be excluded from the analysis (Durmuş et al., 2013: 85). For this reason, AKK2 (I make mistakes when using smart domestic appliance), AKK5 (I have to use the manual in general to interact with smart domestic appliance) and AKK6 (I can easily compensate mistakes when using smart domestic appliance) expressions in the structure have been extracted from the analysis because of the close values.

Regarding the expressions extracted from the analysis; despite consumers perceive benefit related to the use of smart domestic appliance, they cannot perceive the ease of use because the use of smart domestic appliance has not yet become widespread.

In this part of the study, the relations between the variables in the model are examined.

Table 5: Correlation Table for Variables

	Mean	SD	1	2	3	4
PB	4,07	,74	1			
PEU	3,67	,55	,486**	1		
Attitude	3,78	,87	,586**	,495**	1	
Intention	3,62	1,00	,520**	,453**	,758**	1
		Correlation significant at 0,01				
						N=436

When Table 5 is examined, it is seen that there is a positive pairwise correlation (**) according to the correlation coefficients. When examining the data in the table; it is seen that there is a moderate positive correlation ($r = 0.488$) between the perceived usefulness and perceived ease of use, there is a moderate positive correlation ($r = 0.495$) between the perceived ease of use and attitude, there is a moderate positive correlation ($r = 0.586$) between the perceived usefulness and attitude, there is a moderate positive correlation ($r = 0.453$) between the perceived ease of use and intention, and there is a strong positive correlation between attitude and intention.

In the scope of the study, the following hypotheses were formed and tested according to the research problem.

H1. The perceived ease of use has a positive effect on the attitude towards smart domestic appliance use.

First, the effects of perceived ease of use on attitude, perceived ease of use on perceived usefulness, and perceived usefulness on attitude will be tested by simple linear regression, and finally, the effects of perceived ease of use and perceived usefulness variables on attitude will be tested by multiple regression.

Table 6: Simple Regression Analysis Result of Relationship between Perceived Ease of Use – Attitude

	Variables	B	Std. Error	β	t	p	Result
H1	PEU	,898	,246	-	3,651	,000	**Accept**
	Attitude	,785	,066	,495	11,874	,000	

R=,495 R^2 = ,245 Adjust R^2 = ,243 F= 140,994
Dependent variable: Attitude

The effect of perceived ease of use on attitude is tested by simple linear regression analysis and the analysis result is found to be statistically significant ($F = 140,994$ $p =0, 000$). When β value is examined ($\beta = 0,495$ $p <0,001$), the perceived ease of use variable has a significant contribution to explain the attitude variable. For this reason, the H1 hypothesis is accepted.

H2. The perceived ease of use has a positive effect on the perceived usefulness of smart domestic appliance use.

Table 7: Simple Regression Analysis Result of the Relationship between Perceived Ease of Use - Perceived Usefulness

	Variables	B	Std. Error	β	t	p	Result
H2	PB	1,641	,210	-	7,800	,000	**Accept**
	PEU	,663	,057	,490	11,714	,000	

R=,490 R^2 = ,240 Adjust R^2 = ,238 F= 137,209
Dependent variable: Perceived usefulness

According to the results of simple linear regression conducted to test the effect of perceived ease of use variable on the perceived usefulness variable, there is a significant and moderate positive relationship between the two variables (t = 7,800). The regression result is statistically significant (F = 137,209 p =, 000). When the β value is examined (β = 0.490 p <0.001), there is a significant contribution of the perceived ease of use variable in explaining the perceived usefulness variable. The H2 hypothesis has been accepted.

H3. There is a mediator effect of perceived usefulness in the relationship between the consumer's perceived ease of use for smart domestic appliance and the attitude towards product use.

Table 8: Simple Regression Analysis Table of the Relationship between Perceived Usefulness – Attitude

Variables	B	Std. Error	β	t	p
Attitude	,984	,189	-	5,202	,000
PB	,687	,046	,586	15,058	,000

R=,586 R^2= ,343 Adjust R^2 = ,335 F= 226,747
Dependent variable: Attitude

A simple linear regression analysis of the perceived usefulness variable for the effect on attitude is performed and found statistically significant (F = 226,747 p =, 000). It is seen that there is a significant positive relationship (t = 5,233) between perceived usefulness and attitude. The effect of perceived ease of use as an independent variable with the perceived usefulness variable determined as a mediating variable on attitude as dependent variable are tested with multiple linear regression. The results are summarized in table 8:

Table 9: The Mediation Effect of the Perceived Usefulness Variable on Attitude

Steps	Regression Coefficients			Model Statistics
	B	S.H.	β	
1.Step PEU Attitude	,898	,24	,495**	R^2= 0,24 F= 140,994 P=,000
2.Step PEU PB	1,641	,05	,490**	R^2= 0,24 F= 137,209 P=,000
3.Step PB Attitude	,984	,18	,586**	R^2= 0,34 F= 226,747 P= ,000
4.Step PEU PB Attitude	,434 ,530	,05 ,06	,274 ,452	R^2= 0,4 F= 144,425 P= ,000

The effect of perceived usefulness variable on attitude is positive and significant (β =, 45 p = ,000) and the perceived ease of use variable has a positive and significant effect on attitude (β =, 27 p = ,000). When the mediating variable is added in the model, the value of the perceived ease of use is decreased ($β_1$ =, 49 $β_2$ =, 27). This situation shows the mediating role of the perceived usefulness variable between the perceived ease of use and attitude. The relationship is still significant, although there is a decrease in the β values of the perceived ease of use. Since its effect is decreased without being insignificant, the perceived usefulness variable is a partial mediator. The H3 hypothesis has been accepted.

H4. There is a mediator effect of perceived usefulness on the relationship between the perceived ease of use and intent to use towards consumer’s smart domestic appliance use.

In the analysis, a simple linear regression analysis is performed between perceived ease of use and perceived usefulness, perceived usefulness and intention, and perceived ease of use and intent, respectively. In the final step of the analysis, multiple regression is performed to test the effect of the mediating variable between perceived ease of use and intention. The results are given in Table 9:

Table 10: The Mediation Effect of the Perceived Usefulness Variable on Intention

Steps	Regression Coefficients			Model Statistics
	B	S.H.	β	
1.Step PEU PB	1,641	,05	,490**	R^2= 0,24 F= 137,209 P=,000
2.Step PB Intention	,770	,22	,520**	R^2= ,27 F= 161,039 P=,000
3.Step PEU Intention	,593	,290	,453**	R^2= 0,20 F= 112,135 P= ,000
4.Step PEU PB Intention	,475 ,528	,08 ,06	,261 ,392	R^2= 0,4 F= 144,425 P= ,000

Multiple regression analysis is performed to test the mediation effect of the perceived usefulness on the relationship between perceived ease of use and intent. When the mediating variable is added in the model, the perceived ease of use appears to be less effective on intention ($β_1$ =, 49 $β_2$ =, 26). Even if the effect of the variable is decreased, the relationship between them is still significant. Since the effect is not insignificant, the perceived usefulness is the partial mediator. The H4 hypothesis has been accepted.

H5. The attitude towards the use of smart domestic appliance has a positive effect on the intention of these products to use.

Table 11: Simple Regression Analysis Result of the Relationship between Attitude and Intention

	Variables	B	Std. Error	β	t	p	Result
H5	Attitude	,331	,140	-	2,375	,018	**Accept**
	Intention	,870	,036	,758	24,220	,000	

R=,758 R^2 = ,575 Adjust R^2 = ,574 F= 586,605
Dependent variable: Intention

It appears to be a strong and positive relationship between the two variables (, 758). In addition, when the value of table t is examined, there is a positive relationship between two variables at the level of p <0.01 (t = 2,375). According to the regression analysis that Davis (1986: 106) conducted in his study, it is seen that the perceived ease of use variable has a significant effect on both perceived usefulness variable (t = 10.66 p <.01) and attitude variable (t = 2.04 p <.05). It is also seen that the perceived usefulness variable has a significant effect on attitude (t = 9.89 p <.01). According to Davis et al. (1989) results of their studies on technology acceptance model; first, the consumer's use of a system can be explained by the intentions of the consumers. Perceived usefulness is the primary explanatory intent, and perceived ease of use is the secondary explanatory intent. In the study performed by Özbek et al. (2014), when the effect of perceived ease of use variable on intention was $\beta 1 = 0,582$; when the perceived usefulness variable is added to the model as mediating variable, $\beta 2 = 0,237$ is reached. The partial mediation effect of the perceived usefulness variable is also seen in this study. Findings in the study support the literature however; it is lower than that of the literature. Besides, the fact that the number of companies that sell technological products in Duzce is low, keeps the use of these products at a low level.

5. CONCLUSION AND RECOMMENDATIONS

Although many models exist in the literature to determine the intentions of consumers towards using a new technology, Davis (1986), who put forward the 'Technology Acceptance Model', is the most commonly used. According to this model, the intention lies behind the behavior of a person accepting a new technology, and the intention is influenced by its attitude towards that behavior. The attitude of the person is influenced by the benefit and ease of use that one perceives from that technology.

The aim of the study is to determine the main factors behind the intention to use domestic appliances with the internet of things technology. The model, the source of this study is Davis (1986) 's original technology acceptance model. Since the use of durable consumer goods with the internet of things technology is not yet widespread, the actual behavior variable in the original model has been left out of the model. An online survey was applied to consumers to measure the basic variables in the model.

The results obtained in the study support the results in the literature. Direct and indirect effects are presented in the study. As a result of the analyzes conducted, consumers' intentions to use smart domestic appliance is found to be most affected by attitude. The more positive attitudes of consumers towards smart domestic appliance, the more positive their intentions to use them.

The lowest relationship appears between perceived ease of use and perceived usefulness. Consumers perceive benefits for smart domestic appliance use. Although consumers are aware of the fact that when they use these products their lives will get easier, their quality of life will increase, they will save time, and they can spend this time in different ways, they think that the use of domestic appliances with the internet of things technology will be complicated because they are not yet widely used.

The mediation effect of the perceived usefulness variable in the study is also revealed. The partial mediation effect of perceived usefulness in the relationship between perceived ease of use and intent also arise from the fact that people have not yet fully perceived this technology.

The fact that the study is an introductory exploratory study in this area provides important clues that companies operating in this sector in our country can determine more successful marketing strategies. Companies, especially when they start to use interactive devices also in production mechanisms, will provide simultaneous delivery of data during production. With smart factories, every stage of production can be easily controlled and the probability of making mistakes will be reduced.

Today, consumers pay more attention to the content it offer than the promotion of the product. For this reason, it is considered important that the food is ready when the people return home and that they can control the refrigerator while away from home. Domestic appliance companies which came to realize this situation have started to act and produce products equipped with new technologies that will provide the expectations of the customers and to present the market. Bosch in 2016 in Turkey to be offered 'Home Connect' technology is an important step forward for this transformation (www.blog.bsh-group.com.tr/ Access Date: 11.12.2017). Arçelik aims to save time and energy by providing the interaction of products with this transformation called "HomeWhiz" (www.iot.gen.tr/arcelik/ Access date: 12.11.2017). Vestel provides the interaction of its products with this change called "Smart Home" (www.iot.gen.tr/vestel/ Access date: 12.11.2017).

As it has been seen, each domestic appliance company operating in Turkey has adopted the internet of things technology and started to use it to not remain behind technological developments and to be a pioneer in the industry. Their goal is to meet consumers' personalized product demands. Personalized products and devices that learn consumer habits will make life easier for the consumer. Consumers will be able to remotely control their smart products.

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A HIERARCHICAL APPROACH FOR DEFINING AND CLASSIFYING CONSTRUCTS IN MANAGEMENT AND MARKETING RESEARCH: EXAMPLES FROM THE FIELD OF DYSFUNCTIONAL BEHAVIOR

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ABSTRACT

Purpose - Construct clarity and overlapping problems are obvious in management and marketing literatures. Moreover, they cause serious methodological problems. It is vital to provide meaningful definition and classification procedures for management and marketing phenomena. Current paper argues that defining and classifying constructs using hierarchical approach can provide clear and practically meaningful construct definitions and classifications.
Methodology - Current paper reviews construct definition articles in the fields of management, marketing and psychology in order to provide hierarchical construct definition and classification procedure. Authors also apply this procedure in the field of dysfunctional behavior, which has seriously suffered from construct definition overlaps.
Findings- Although previous literature tends to classify constructs dichotomously (latent constructs and observable variables), our literature review discovers more than two levels in the hierarchical abstraction-generalizability continuum, such as umbrella and bridging constructs.
Conclusion- Current paper concludes that using hierarchical criteria map for defining and classifying constructs may cause meaningful, distinct (but not disconnected) construct definitions, which clearly target real world phenomena.

Keywords: Construct definition, dysfunctional behavior, construct clarity, umbrella constructs, bridging constructs
JEL Codes: M00, D23, D90

1. INTRODUCTION

Development of meaningful theory in the fields of management, marketing and other behavioral sciences need precision and clarity in conceptualization (DiRenzo, 1966; Podsakoff, Mackenzie, and Podsakoff, 2016). One major challenge in management and marketing research is providing construct clarity (Suddaby, 2010) because several study fields in these literatures suffer from meaningless and overlapping construct proliferation. Also, several frequently used constructs have overlapping problems, such as counterproductive work behavior, employee burnout and engagement, and customer satisfaction. Moreover, recent studies show that conceptual differences between these constructs are not supported by field data. For instance, independence of the dimensions of job burnout from employee (dis)engagement is generally accepted. However, Cole, Walter, Bedeian and O'Boyle's (2012) meta-analytic confirmatory factor analysis show that sub-constructs of engagement (vigor, dedication and absorption) are better explained by burnout than engagement. One of the sub-constructs of burnout (personal inefficacy), more strongly correlates with engagement constructs, than other burnout constructs (exhaustion and cynicism). Another example is from the field of interpersonal and organizational mistreatment in workplaces. According to several well-established scholars, popular mistreatment constructs, with a few distinctive characteristics, have considerable overlapping definitions and measurement methods (Aquino and Thau, 2009; Hershcovis, 2011; Shapiro, Duffy, Kim, Lean, and O'Leary-Kelly, 2008). Meta-analytic study of Hershcovis (2011) also finds no considerable differences between the effects of different interpersonal mistreatment constructs (such as aggression, incivility, social undermining and interpersonal conflict) on job outcomes (job satisfaction, turnover intent, affective commitment, and well-being). Therefore, several study fields have obviously suffered from construct clarity and overlapping problems and these problems cause serious methodological problems. Thus, it is vital to provide meaningful definition and classification procedures for management and marketing phenomena. The current paper argues that hierarchically defining and classifying constructs can provide clear and practically meaningful construct definitions and classifications.

With the purpose of developing protocol for construct classification, an extensive review of construct development and clarification studies in management and marketing literature is carried out (Bacharach, 1989; Bagozzi and Edwards, 1998; Churchill and Jr., 1979; Edwards and Bagozzi, 2000; Floyd, Cornelissen, Wright, and Delios, 2011; Gilliam and Voss, 2013; Hirsch and Levin, 1999; Jarvis, MacKenzie, and Podsakoff, 2003; Locke, 2012; MacKenzie, 2003; Mowen and Voss, 2008; Podsakoff et al., 2016; Rossiter, 2011; Suddaby, 2010). In this paper, based on the aforementioned review, main issues and contradictory arguments are discussed. Then, previous construct definition and classification arguments are synthesized and criteria map is suggested.

2. CONCEPTS AND CONSTRUCTS: IMPORTANCE OF CONSTRUCT CLARITY FOR BEHAVIORAL SCIENCES

Although prominence of the good conceptualization has been discussed since John Stuart Mill, problem of the inadequate concept and construct definitions still create crucial problems for social scientists, especially for management and marketing researchers (Podsakoff et al., 2016; Suddaby, 2010). Moreover, social scientists still have not arrived at a consensus on the definitions of "concept" and "construct" and the differences between them. There is a variety of definitions and meanings of the term "concept", for the purposes of this study, we prefer to use the definition of Podsakoff et al., (2016, p. 3);

"cognitive symbols (or abstract terms) that specify the features, attributes, or characteristics of the phenomenon in the real or phenomenological world that they are meant to represent and that distinguish them from other related phenomena. Thus, a concept is a cognitive symbol that has meaning for the scientific community that uses it."

There are two main reasons for preferring this definition: (1) This definition stresses the importance of distinguishing characteristics of concepts. Therefore, according to this perspective, discovering, defining and labeling a phenomenon are not enough for good conceptualization and clear construct definition (Gilliam and Voss, 2013; Goertz, 2006). Construct and concepts are distinct cognitive symbols in nature. (2) Contrary to the realist view (Bagozzi, 2007), Podsakoff et al., (2016) argue, concepts are not only the reflections of real world, but also phenomenological world phenomena so it can be argued that concepts are not strictly dependent on the actual empirical world. At this stage, Markus (2008) differentiates concepts from constructs although they are sometimes used interchangeably in literature. Bacharach (1989) defines constructs as approximated, but not directly observable, units of broad mental configurations or abstractions in an empirical world. According to Markus (2008), while constructs are highly dependent on actual conditions (population), concepts are abstractions can exist free from the actual conditions concepts. For instance, as previously explained, today, it cannot be easily argued that burnout and engagement are totally distinct constructs because previous studies find that dimensions of these constructs are highly correlated (Cole et al., 2012). Thus, revision for the construct definitions of burnout and engagement is needed. However, according to Markus (2008), we can still argue that burnout and engagement are conceptually different. We can rationally differentiate them and it is possible to confirm differences of these concepts in the future. Therefore, in this paper, it is assumed that concepts are hypothetical constructs (Podsakoff et al., 2016) but constructs are highly dependent on the actual empirical world.

Concepts or constructs are indispensable tools for scientific explanations (DiRenzo, 1966). According to Gerring (2008), concepts and constructs address the most basic scientific question in every social science: "What are we talking about?". Well-employed construct definitions need clarity that provides comprehensible, distinct and robust categories of observations related to phenomena (Suddaby, 2010). Moreover, according to Suddaby (2010), construct clarity involves (1) well-employed definitions that include precise distinction between concepts, (2) boundary conditions that elaboration of the context which a construct can be applied to or not applied to, (3) well-explained semantic relationships with other related constructs (4) logical consistency with overall theoretical argument. Locke (2012), on the other side, argues construct clarity should be supported by conceptual clarity, which additionally needs (5) logically valid conceptual definitions, (6) strict connection between concepts and their scales, (7) logical connection between constructs and subcontracts.

Based on these views, it can be argued that good constructs need to be distinct (but not disconnected), delimited, related (with overall theories of the field and actual conditions (reality) as well as with other constructs in the field). It is necessary that constructs should be positioned in the conceptual map in order to provide clarified hierarchical and horizontal position in their study fields. Hierarchical position (or abstraction level) of constructs reflects their distance with empirical area (variables) and their scope. Horizontal position, on the other hand, determines their dimensional differences and relations with other constructs in the same hierarchical level.

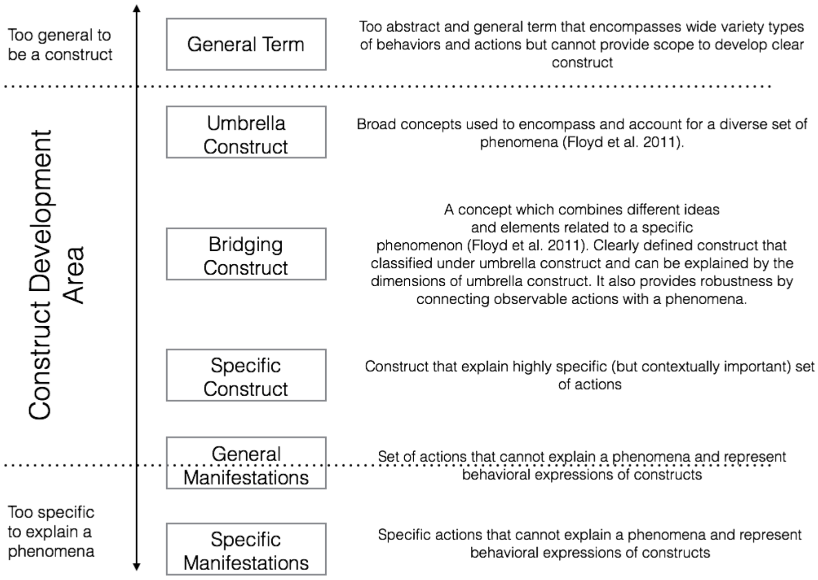
3. HIERARCHICAL CRITERIA MAP FOR CONSTRUCT CLARITY

Several studies on construct definition argue that there has to be distinction between constructs, concepts and variables (or expressions) based on their abstraction levels (Bacharach, 1989; Bagozzi, 2007; Osigweh, 1989; Podsakoff et al., 2016). For instance, Bacharach (1989) makes distinction between constructs and variables and states that constructs are more abstract and more generalizable than variables. He also argues that, certain constructs are specific, rich in detail but strictly bound to the empirical findings, while others are highly abstract level grand theoretical statements but lack in observational details. Osigweh (1989) argues there are two types of constructs based on their abstraction levels: universal (or theoretical) constructs and observational (or empirical) constructs. Universal constructs are totally abstract constructs that represent a large class of subconstructs and their connection to empirical world can be weak. Empirical constructs, on the other hand, are both abstract and concrete and they can be used in abstract definitions of phenomena and/or direct observations. Empirical constructs also consist of a level of abstraction but they have high ability to be more abstract or more concrete. According to Hirsch and Levin (1999), this distinction is rooted in the tendencies of scholars. They argue that, in literature, there are two groups with opposite tendencies for construct development: umbrella advocates and validity polices. First group, umbrella advocates, see broad patterns and synthesize regularities into integrative broadly defined constructs, namely umbrella constructs. Second, validity polices, see a lot of narrowly defined problems and issues, namely specific constructs, and challenge with inconsistencies within the umbrella constructs. According to Hirsch and Levin (1999), tension and challenge with umbrella advocates and validity polices initiate healthy construct lifecycle processes because this tension is eased with new typological explanations. It can be argued that ease of tension process between highly abstract and highly concrete constructs cause more healthy and valid intermediate forms of constructs, such as umbrella constructs, bridging constructs. In this paper, it is argued that abstraction level is critical since classifying and defining constructs in only two levels may not be enough to fulfill the needs of highly prolific and complex study fields in management and marketing literature.

Constructs need to be ordered and arranged based on their abstraction levels (Mowen and Voss, 2008). In this study, based on the literature review on construct definition studies in management, marketing and psychology in general, six hierarchical construct levels based on the abstraction level and generality of the construct are defined: General terms, umbrella constructs, bridging constructs, specific constructs, general expressions and behavioral expressions (see Figure 1). Authors develop and suggest a hierarchical model for organizing constructs within the fields of organizational and marketing research.

As visualized in Figure 1, authors argue that well-employed constructs should be positioned between the upper and lower thresholds of abstraction or generalization. As previously discussed, scholars argue that constructs are related to the real or phenomenological world phenomena and a construct definition should congruently reflect its phenomenon. However, in marketing and management literatures, there are several highly abstract and amorphous conceptualizations that include a bunch of weakly related behaviors, which cannot reflect a phenomenon. On the other hand, there are also several behavioral expressions in organizations or in markets, which cannot constitute a phenomenon on their own. Rather, these expressions can only be a manifestation of a phenomenon in the real world, not the conceptualization of it.

Figure 1: Criteria Map for Hierarchical Classification of Constructs



Note: Figure 1 is prepared by the authors

3.1. General Terms

Defining constructs too broad cause vague and meaningless terminology, which may embrace weakly related various constructs together. Too broad and unlimited definitions fail to target and explain a phenomenon. According to Locke (2012), several scholars believe concepts are subjective notions and one of the consequences of this belief is lumping unrelated constructs together. We use 'general terms' that indicate highly abstract labels and definitions that encompass wide variety of weakly related concepts that may not have substantive elements in common. Locke (2012) argues that these types of conceptualizations damage the meaning and value of the phenomena. It is obvious that using general terms cause researchers to miss some interesting, distinct and meaningful attributes and characteristics of concepts (Tepper and Henle, 2011). It is almost impossible to develop valid operational definitions for these terms directly. These are highly vague explanations and hard to connect operational areas. However, we argue that these types of broad terms are useful to indicate a study field. For instance, today, "organizational frontlines" is one of the most popular terms in marketing and service research. It identifies the "interactions and interfaces at the point of contact between an organization and its customers that promote, facilitate, or enable value creation and exchange" (Singh, Brady, Arnold, and Brown, 2017, p. 4). This term captures a wide variety of distinct service components (such as physical, digital, procedural) and actors (such as customers, frontline employees, managers, IT department) that can hardly be unified in a concept. However, as Singh et al. (2017) explained, it indicates a study field, rather than a concept, that tries to understand the intersection between customer-organization interactions and interfaces. We argue that these types of well-defined general terms clarify the subject matter and promotes systematized body of knowledge (Hunt, 1976) thus we believe that determining the 'general term' is the first step for answering the question of "What are we talking about?".

3.2. Umbrella Constructs

Different constructs can be grouped together under a single, explanatory label but they need elements in common. Although, umbrella constructs sometimes have negative connotations in the literature, we use it as a level for constructs that integrate diverse but interrelated group of concepts. Umbrella constructs are broad concepts used to encompass and account for a diverse set of phenomena (Hirsch and Levin, 1999). Umbrella constructs are broad in scope, encompass multiple ideas and they have broad interpretive framework (Floyd et al., 2011). Although they provide common elements for interrelated phenomena (Locke, 2012), umbrella constructs barely provide dimensional explanations. Constructs such as dysfunctional customer behavior (Harris and Reynolds, 2003; Reynolds and Harris, 2009) or consumer misbehavior (Fullerton and Punj, 2004) are broadly defined constructs that encompass all types of "inappropriate" customer behaviors that violate norms in exchange settings. However, abstraction level of dysfunctional behavior construct indicates that it appears to be a second-order or superordinate construct and it should be disaggregated by dimensions as sub-constructs (Bagozzi and Edwards, 1998; Edwards, 2001). Parasuraman and colleagues (1985)'s Service Quality construct is also a well-studied umbrella construct (Babakus and Boller, 1992), which combine and operationalize (SERVQUAL) five interrelated sub-constructs (tangibility, reliability, responsiveness, assurance and empathy) that indicate customers' overall subjective quality perceptions about the service delivery process. It is almost impossible to argue that their conceptualization explains a single distinct service quality phenomenon; rather it provides a diverse set of phenomena that have something in common. As previously mentioned, after phenomena start to appear, scholars tend to define them broadly and extend the scope of their definitions. Later on, they are challenged with validity criticisms and they either evolve into a more valid form in time or lose their significance (Hirsch and Levin, 1999). As a healthy consequence of broad construct definition of Service Quality, several revised conceptualizations, adaptations, refinements and alternative scales have been introduced for almost three decades (Parasuraman et al., 1991; Cronin and Taylor, 1992; Dabholkar et al., 1996; Parasuraman et al., 2005; Brady et al., 2002). Service Quality and its measures were challenged with validity problems and gained more valid forms in time. They were revised and refined (Parasuraman et al., 1991), alternative measures were suggested (e.g. SERVPERF of Cronin and Taylor, 1992). They were adapted to different sectors and service environments (Dabholkar et al., 1992; Parasuraman et al., 2005). At this point, Hirsch and Levin (1999) argue that if a construct can tidy up its major elements, it becomes clearer and overcomes validity crisis. In this process, service quality has gained a more valid form and dimensional characteristics have been uncovered. We argue Brady and Cronin Jr. (2001)'s conceptual definition of Service Quality has more valid referring of single service quality phenomenon thus, in the next section; we will also discuss conceptualization of Service Quality as a bridging construct.

3.3. Bridging Constructs

Unlike umbrella constructs, bridging constructs refers to a single phenomenon. Bridging constructs are concepts, which integrate different elements, related to a single phenomenon (Floyd et al., 2011). Bridging constructs unify conceptually different elements and bridge the gap between separate set of literatures (Floyd et al., 2011). Bridging constructs are also suitable for connecting different theoretical elements or units of analyses, such as employees, customers, organizations, and institutions (Fuglsang and Jagd, 2015). For example, the field of dysfunctional behaviors needs bridging constructs to be introduced because these constructs synthesize different constructs under a single phenomenon and reconcile the paradox in the literature (Floyd et al., 2011; Poole and Van de Ven, 1989). There are few well-constructed bridging constructs in the literature because they create challenges for empirical analysis and theoretical explanations (Echambadi, Campbell, and Agarwal, 2006; Floyd et al., 2011). For instance, according to Floyd et al. ambidexterity is a good example of bridging construct, because it ties different elements (exploration and exploitation) and different trajectories (searching and learning). Service Quality conceptualization of Brady and Cronin Jr. (2001) also can be viewed as a bridging construct that ties different quality dimensions in service provision process. Different from previous second-order conceptualizations (such as SERVQUAL), they discover that previously accepted service quality constructs (such as reliability, empathy and responsiveness) are explained by three service dimensions (interaction, physical characteristics and outcome) and service quality ties these dimensions as a third-order latent construct.

3.4. Specific Constructs

Specific constructs are precise but contextually important phenomenon that can be represented by a small but concrete set of behavioral expressions. Specific constructs are fine-grained aspects of broader constructs (Bagozzi and Edwards, 1998), and have highly context-specific dispositions (Mowen and Voss, 2008). It is imperative to differentiate specific constructs and observable behavioral expressions. By definition, "constructs are not reducible to specific observations but, rather, are abstract statements of categories of observations" (Suddaby, 2010, p. 346). Therefore, directly or indirectly observable dark side behaviors cannot constitute a specific construct. Specific constructs are needed, at least, at one level of abstraction. "Shoplifting" (Babin and Babin, 1996) is a good example of specific constructs because shoplifting (1) is manifested by specific set of consumer behaviors, (2) is a very important problem for retail sectors (3) has one level of abstraction and represents an aspect of broader constructs, such as dysfunctional behaviors.

3.5. Manifest Variables

As previously explained, there are also direct observable behavioral manifestations or group of manifestations that have low level or no abstraction. These expressions are too specific to explain phenomena. These manifestations are directly observable and/or measurable entities, such as events, situations, behavioral expressions, perceptions or evaluations (Bagozzi, 2007; Schaffner, 1969). In this paper, we make a distinction between general manifestations and specific manifestations. General manifestations are the sets of highly correlated actions that cannot explain a phenomenon but can represent manifestations of real world phenomena. These sets of manifestations are reflective indicators, rather than formative (or composite) measures so indicators in a set of manifestations are highly correlated with other indicators and their higher-order construct. Specific manifestations are observable actions that have weak relations with other expressions. Specific manifestations are more suitable for formative measurement because a group of these expressions can be causal indicators that provide a composition for a construct (MacCallum and Browne, 1993). However, as argued in several previous studies, relationship between abstract (or latent) constructs and observable entities should be constructed reflectively, rather than formatively (Bagozzi, 2007, 2011; Howell, Breivik, and Wilcox, 2007; Jarvis et al., 2003).

In Table 1, characteristics and features of constructs are summarized.

Table 1: Characteristics of Construct Types

Construct	Power	Abstraction Level	Dimensional Explanation	Examples from Dysfunctional Behavior Literature
General Terms	cannot account for any phenomenon	High level of abstraction	Weak	Organizational Misbehavior
Umbrella Constructs	account for a diverse set of phenomena	High level of abstraction	Weak/ multidimensional	Dysfunctional behavior
Bridging Constructs	account for a specific phenomenon	Moderate level of abstraction	Strong/ multidimensional	Workplace Aggression
Specific Constructs	account for a specific phenomenon	Low level of abstraction	Strong/ unidimensional	Fraudulent return
General Manifestations	cannot account for any phenomenon	Low level of abstraction	Weak/ unidimensional	Ridiculing
Specific Manifestations	cannot account for any phenomenon	No abstraction	Weak/ unidimensional	Swearing in front of his/her coworkers

Note: This figure is prepared by the authors

4. DEFINING AND CLASSIFYING THE CONSTRUCTS IN THE FIELD OF DYSFUNCTIONAL BEHAVIOR: AN EXAMPLE

Study areas that investigate negative, destructive, abnormal or dysfunctional behaviors in behavioral sciences (especially psychology, organizational behavior and marketing research) have suffered from construct proliferation and overlapping construct definitions for a long time. Bandura (1973) refers to these definitions in the abnormal psychology literature as semantic jungle. Nixon and Spector (2015) also define the field of workplace aggression as linguistic fog. Construct proliferation and using different labels for same phenomena are also one of the most stressed problems for defining customer misbehavior (Fisk et al., 2010; Greer, 2015). Thus, using the hierarchical approach proposed in this study for defining and classifying construct definitions in dysfunctional behavior fields provide clearer, more meaningful and less overlapping constructs that better fit the phenomena.

As the first step, authors scrutinize literature review articles and other published articles, which include construct definitions and classifications. Secondly, authors list all conceptual terms as well as scholar and lay definitions of these terms. Finally, scholar and lay definitions of the terms used in this literature are compared and dimensions, which are dominantly used for defining and dissociating them from other constructs, are determined.

4.1. Defining the Field of Dysfunctional Behavior

When defining the field, broadly defined general terms in organizational behavior and marketing literatures are determined: Organizational misbehavior, consumer misbehavior, aberrant behavior, problem behavior, deviant behavior and non-compliant behaviors. These terms have no clear dimensional explanation or indication for real world phenomena. From the consumer behavior perspective, consumer misbehavior and aberrant consumer behaviors are defined as "Behavioral acts by consumers which violate the generally accepted norms of conduct in consumption situations, and disrupt the order expected in such situations" (Fullerton and Punj, 1997, p. 336). Deviant behaviors are also defined as norm-violating harmful behaviors performed by organizational insiders or outsiders (Reynolds and Harris, 2006; Robinson and Bennett, 1995). These two definitions encompass all types of behaviors, which violate organizational or marketplace norms. However, norm-violation criterion is not comprehensive enough for demarcating the field because there are some negative and socially harmful behaviors that do not violate organizational or marketplace norms (Fowler III, 2007). Besides, there are also positive and constructive norm-violating behaviors (such as extra-role behaviors and some organizational citizenship behaviors) that violate the organizational norms but may have positive outcomes for organizational members, organization itself or society in general (Warren, 2003). It is argued that organizational misbehavior conceptualization of Ackroyd and Thompson provides well-fitted demarcation for these types of behaviors: “anything you do at work you are not supposed to do” (1999, p. 2). This definition has no dimensional explanation for these types of behaviors and no clear indication for a phenomenon so it cannot be labeled as a construct. On the other hand, it definitely has negative connotation and comprehensive limitation for negative and/or harmful behaviors. This definition encompasses not only deliberate harmful acts, which are the dominant subject matter of mainstream organization research, but also mistakes, accidents and errors, which are eschewed by mainstream works (Linstead et al., 2014).

4.2. Determining Umbrella Constructs: Finding Elements in Common

We determine two main conceptualizations that provide clear elements in common for a set of phenomena: “Dark side behavior” and “Dysfunctional behavior”. Griffin and O’Leary-Kelley (2004) conceptualize dark side behavior as a “Motivated behavior by an employee or group of employees that has negative consequences for an individual within the organization, another group of individuals within the organization, or the organization itself”. Griffin et al. (1998, p. 65) also define dysfunctional behavior as a “Motivated behavior by an employee or group of employees that has negative consequences for an individual within the organization, and/or the organization itself”. Both terms delimitate constructs under them as motivated behaviors so these construct definitions eliminate unintentional mistakes or failures. It is important to note that there are some other construct definitions that delimit their construct as “voluntary” (see Robinson and Bennett (1995)’s deviant behavior definition), “intentional” (see Vardi and Weiner (1996)’s organizational misbehavior definition) or “deliberate” (see Harris and Reynolds (2004)’s jaycustomer behavior definition) acts. There are some arguments for and against using “intentionality” in the definitions of dysfunctional behaviors in literature. According to Neuman and Baron (2005), presence of perpetrator’s intent is a prerequisite for defining aggressive events in organizations. According to them, if we eliminate the intent of the perpetrator, we assume some irrelevant cases as aggressive, such as dentists’ or surgeons’ unintentional harmful operational acts. According to Hershcovis and Barling (2007), on the other hand, if we assume all unintentional negative acts of employees or customers are beyond the scope of dysfunctional behaviors, we unnecessarily eliminate some specific cases or contexts that may have important contribution to the literature, such as alcoholic patients’ violent and sexually abusive acts towards the nurses, which are prevalent today. In this study we prefer to delimitate dysfunctional behaviors as “motivated behaviors” (rather than intentional, voluntary or deliberate behaviors) since all of these types of behaviors are somewhat motivated, consciously or unconsciously. For instance, a dentist’s or surgeon’s harmful operation cannot be a dysfunctional or dark side behavior because it is not motivated by unconscious motives or conscious goals of the dentist or the surgeon. On the other hand, alcoholic patient’s violence towards the nurses is clearly a dysfunctional behavior because it is motivated by alcohol and/or aggressive personality of the patient.

4.3. Uncovering Bridging Constructs: Robust Connections among Subconstructs

As previously explained, bridging constructs combine different ideas and dimensionally explain different elements related to a distinct phenomenon (Floyd et al., 2011). They also have the capacity to imply different levels and units of analyses (Floyd et al., 2011). However, it is hard to find well-defined bridging constructs in dysfunctional behavior studies. We believe that early conceptualization of “workplace aggression” by Baron and Neuman (1996), which is based on the classic typology of Buss (1961) qualify for a bridging construct. According to Baron and Neuman, there are eight types of aggressive behaviors that are performed for harming other organizational members and/or organization itself. These eight aggressive behavior types dissociate from others by three dichotomous dimensions: active/passive; direct/indirect and physical/nonphysical. For instance, ‘employee violence’ or ‘customer violence’ can be viewed as active, direct, physical (Neuman, 2004), ‘employee service sabotage’ (Harris and Ogbonna, 2002) can be viewed as active, indirect, nonphysical form and ‘incivility’ can be viewed as passive, indirect, nonphysical forms of workplace aggression. However, in time, empirical findings have not fully supported this typology and workplace aggression has turned into an umbrella construct that encompass all types of harmful acts within the organization (Hershcovis and Barling, 2007) and lost its connection with a specific phenomenon (intent to harm).

4.4. Specific Constructs in Dysfunctional Behavior Studies

As previously explained, a specific construct has low level of abstraction and is highly connected to specific observables actions. It can also be connected to contextually relevant and important phenomena. For instance, customers' fraudulent return, which refers "consumers taking back goods to a retailer knowing that such a return is contrary to the firm's or legal rules and regulations" (Harris, 2008, p. 461), is a severe, prevalent and harmful phenomenon for retail environment. Fraudulent return encompasses very specific deliberately performed dysfunctional actions of consumers, which are backed by opportunistic motivations. This construct is directly manifested by a few types of behaviors (or instance, "getting refund for products that consumer have used or broken" see Harris (2008)'s scale). It is meaningless to relate this behavior to any type of workplace aggression because dominant motivation behind fraudulent return behavior is "intent to benefit self", rather than "intent to harm" so it is closely related to opportunistic forms of dysfunctional behaviors, such as opportunistic customer complaints, shoplifting and cheating behaviors.

4.5. Manifest Variables and Suggestions for the Operationalization of Dysfunctional Behaviors

In the field of dysfunctional behavior, there is a multitude of manifest variables that can be observed in workplace and marketplace environments, such as yelling, swearing, kicking, making sexual jokes, eye rolling and ignoring. These variables have almost no abstraction and have no potential to explain a phenomenon but they serve as scale items for several differently labelled and conceptualized constructs (such as injustice, aggression, incivility) that use similar manifest variables as scale items. For instance, asking the frequency of "yelling" or "swearing" someone at work is used in aggression scales (Glomb and Liao, 2003), incivility scales (Guidroz et al., 2010), rage (Harris, 2013), and mistreatment scales (Wang et al., 2011). Operationalization is one of the main concern in the field of dysfunctional behavior. These manifest variables are used as scale items of formative dysfunctional behavior measures although they are generally disparate elements of misbehavior research (Herschcovis and Reich, 2013). Therefore, it can be argued that using weakly related specific manifest variables in operational definitions of higher order specific, bridging or umbrella constructs increase the clarity and validity problems in the field of dysfunctional behavior. Although analyzing operational definitions is not the primary concern of this paper, similar with Herscovis and Reich (2013), using reflective measures is suggested in this paper for more valid measurement of constructs.

5. CONCLUSION

Severity of construct proliferation problem in literature disconnects communication between the members of scientific community, damages theoretical development and fragments accumulated knowledge (Suddaby, 2010). It is important to uncover construct overlaps, confusions between research streams and relational network between constructs. In order to overcome these problems, as previously mentioned, it is imperative to provide analytical vocabulary that would enable differentiation and connect actions and structures (Poole and Van de Ven, 1989). Current paper suggests a hierarchical approach for defining and classifying constructs and implements its approach to the field of dysfunctional behaviors in organizations and marketplace. It may help to develop distinct and clear constructs that have specified relations with other constructs in the field.

As suggested by Moven and Voss (2008), a hierarchical approach can provide distinctiveness between constructs and order constructs in a specific field based on their abstraction level. In our suggested hierarchical procedure, researchers can also determine overlapping problems of a construct with other constructs and its explanatory power of a phenomenon. At this point, difference between umbrella and bridging constructs becomes crucial. These two types of constructs have different characteristics for explaining phenomena. As previously explained, umbrella constructs have high abstraction and broad scope that encompass multiple ideas and account for a diverse set of phenomena (Hirsch and Levin, 1999; Floyd et al., 2011). On the other hand, bridging constructs also combine multiple ideas and elements but these ideas and elements are related to a single phenomenon (Floyd et al., 2011). Bridging constructs account for a phenomenon with multidimensional explanations and associate different elements (or subconstructs) with these multidimensional explanations and typologies. We argue that one of the few bridging constructs in the field of dysfunctional behavior, which is workplace aggression conceptualization of Baron and Neuman (1996), has turned into an umbrella construct because scholars in the field have broadened the concept and thus it lost connection with its target phenomenon. As a consequence, authors determine well-fitted umbrella constructs and discuss potential bridging constructs for closing the gap among study fields, connecting research streams and synthesizing different elements related to a specific phenomenon. In our proposal, every level of the abstraction continuum has idiosyncratic characteristics and determining the level of the construct helps to define it clearly.

Finally, it is important to note that this study mainly focuses on the conceptual characteristics of construct definitions, rather than operational characteristics and scale development processes. On the other hand, successful operationalization processes need clear and well-specified conceptual definition and clarification processes. We believe that our approach can be useful if it is applied before the operationalization of constructs. By doing so, researchers may clarify the characteristics of a phenomenon, its relations with other social phenomena, and its actual and possible manifestations in practical world.

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INVESTIGATION OF THE MEDIATOR EFFECT OF STRATEGIC MANAGEMENT IN THE RELATIONSHIP BETWEEN ETHICS LEADERSHİP, JOB SATISFACTION AND INTENTION TO LEAVE

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ABSTRACT
Objective- This study examines the effects of ethical leadership and strategic human resources management on job satisfaction and intent to leave work.
Methodology- The study's questionnaire, it was applied to 410 white-collar workers in public and private sectors in the Central Anatolia. The data obtained from the questionnaires were analyzed with SPSS 23 statistical package software.
Findings- The ethical leadership has shown that job seekers are less inclined to leave the job and have positive influence on job satisfaction levels. The mediation variable effect of strategic human resources management revealed that the level of job satisfaction increased and the level of intent to leave job decreased.
Conclusion: More attention needs to be paid to what the different effects of human resources and leadership styles on occupations may be in terms of better future work and the emergence of qualitative work and the emergence of new concepts from the theoretical perspective.

Keywords- Strategic human resources management, ethical leadership, ıntentions to leave, job satisfaction, business behavior
JEL Codes- M50, M53, M54

ETİK LİDERLİĞİN İŞ MEMNUNİYETİ VE İŞTEN AYRILMA NİYETİ İLİŞKİSİNDE STRATEJİK İNSAN KAYNAKLARI YÖNETİMİNİN ARA DEĞİŞKEN ETKİSİNİN İNCELENMESİ

ÖZET
Amaç- Günümüz iş dünyasında değişim ve rekabet anlayışı, iş gören performansını temel alan yönetim anlayışı ile hızla ilerlemektedir. Bu durum iş görenlerin örgüt içindeki tutum ve davranışlarına etki etmektedir. Bu çalışmada etik liderlik ve stratejik insan kaynakları yönetiminin, iş memnuniyeti ve işten ayrılma niyeti üzerindeki etkileri incelenmektedir.
Metodoloji- Çalışmanın anketi, 2017 yılında iç Anadolu bölgesinde kamu ve özel sektörde yer alan 410 beyaz yakalı iş görene uygulanmıştır. Anket verileri, SPSS 23 istatistiksel paket yazılımıyla analiz edilmiştir.
Bulgular- Etik liderliğin, iş görenlerin işten ayrılma niyetini azalttığı ve iş memnuniyet düzeylerinde olumlu yönde etkide bulunduğu ortaya koymuştur. Stratejik insan kaynakları yönetiminin ara değişken etkisiyle iş memnuniyet seviyesinin yükseldiği, işten ayrılma niyeti seviyesinin düştüğü ortaya çıkmıştır.
Sonuç- Gelecek çalışmaların daha iyi olabilmesi ve nitel çalışmaların ortaya çıkartılıp teorik açıdan yeni kavramların oluşturulabilmesi açısından insan kaynakları ve liderlik tarzlarının işgörenler üzerindeki farklı etkilerinin neler olabileceği hususu üzerinde daha çok durulması gerekmektedir.

Anahtar Kelimler: Stratejik insan kaynakları yönetimi, etik liderlik, işten ayrılma niyeti, iş memnuniyeti, iş davranışı
JEL Kodları: M50, M53, M54

1. GİRİŞ

Bugüne kadar liderliğin etik potansiyeline ilgi duyan araştırmacılar, etik liderliği fedakârlık ile egoizm arasında temel bir gerilim olarak tasvir etmişlerdir (Turner, Barling, Epitropaki, Kasap and Milder, 2002). Örneğin, Kanungo (2001) liderin etik olması için başkalarına karşı yararlı ve erdemli davranışlara girmesi gerektiğini ve başkalarına zarar veren davranışlardan kaçınması gerektiğini belirtmektedir. Örgüt içinde, iş görenlerin güç paylaşımının önemi bulunmakla birlikte, işgörenlerin güçlendirilmesi ve maksimum verim alınması yönünde yüksek performanslı çalışma sistemleri tartışılmakta, güç paylaşımı gibi kapsayıcı süreçlerin işgörenlerin işlerini daha anlamlı hale getirebileceği önerilmektedir (Spreitzer, 1995; Becker and Huselid, 1998; Feldman and Khademian, 2003). Burada liderlik tarzının önemi ortaya çıkmaktadır. Örneğin, Khuntia ve Suar (2004), Hindistan'da özel ve kamu yöneticileri üzerinde yaptıkları çalışmada etik liderliğin; iş performansı, işe katılım ve duygusal bağlılık üzerinde olumlu etkilerini tespit etmişlerdir.

Brown ve ark. (2005), etik liderliğin, liderin memnuniyeti, liderin etkililiğini algılaması, iş görenlerin, işe bağlılığı ve iş görenlerin, sorunlarını yönetime bildirme isteği ile pozitif yönde ilişkili olduğunu vurgulamaktadır. Bazı araştırmalar, liderlerin etik bütünlüğünün bir göstergesi olarak etik olmayan davranışların yokluğuna odaklanmıştır (Craig and Gustafson, 1998). Yapılan birçok araştırma, iş görenlerin örgüt içindeki memnuniyetsizliklerinin, işten ayrılma niyetinin nedeni olduğunu ortaya koymaktadır (George and Jones, 1996). İşten ayrılma niyetiyle ilgili kuramlar genellikle iş tatmininin karşılanamamasına neden olan süreçlerin önemli bir rol oynadığı belirtilmektedir. Özellikle, işten ayrılma niyetiyle ilgili birçok teori, iş tatmininin doğrudan ve olumsuz olarak işgörenlerin ayrılma niyeti ile ilişkili olduğunu ortaya koymaktadır (Chen et al., 2011). Ayrıca, işgörenler farklı nedenlerle gönüllü olarak örgütten ayrılabilirler. İşten ayrılma niyetinin bir sonucu olarak, kuruluşlar, işgörenler tarafından performans kriterlerinden mahrum edilmektedir. İnsan kaynakları yöneticileri, örgütsel hedeflere ulaşmak için işten ayrılma niyeti isteğini ortadan kaldırma çabası içinde olmalıdırlar (Yüksel, 2006).

Lider ve işgörenler arasındaki iletişim ve etkileşim, örgütün amaçları ve hedefleri doğrultusunda performans çıktılarına yansımaktadır. Bu açıdan stratejik insan kaynakları yönetiminin örgüt içinde işgörenlerin memnuniyeti ve bağlılıkları açısından önemli bir fonksiyonu bulunmaktadır. Hem liderlik tarzı açısından hem de işgörenlerin tutum ve davranışları açısından örgütlerin performanslarının istenilen düzeyde olması açısından önem arz etmektedir.

2. LİTERATÜR İNCELEMESI VE TEORIK KAPSAM

2.1. Etik Liderlik

Etik liderlik, egoist güdülerden ziyade fedakârlıktan kaynaklı bir liderlik tarzıdır. Buna karşılık, Howell ve Avolio (1992), etik olmayan liderliği kendi kendine manipülatif olarak tanımlar; yani, kendi menfaatlerini yerine getirme yetkisine sahip olan, takipçilerin ihtiyaçlarına duyarsız olan ve toplumsal olarak yapıcı yollarla davranmaya pek az saygı duyan liderlerdir. Brown, Trevino ve Harrison (2005) etik liderliği "kişisel eylemler ve kişilerarası ilişkiler yoluyla normatif olarak uygun davranışın gösterilmesi ve bu davranışın iki taraflı iletişim, destek ve karar verme yoluyla iş görenlere iletilmesi" olarak tanımlamıştır. Etik liderlik tanımına ve daha önceki araştırmalara uygun olarak (Trevino et al., 2003) Brown ve ark. (2005) etik liderleri dürüst, güvenilir, adil ve sevecen olarak tanımlar. Bu gibi liderler ilkeli ve adil seçimler yaparlar ve çalışma ortamlarını adil bir şekilde yapılandırırlar.

Etik liderliğin organizasyon üyelerini topluma fayda sağlayan amaçlara yönelttiği ve yönlendirdiği düşünülmektedir (Kanungo, 2001). Başka bir deyişle, etik liderliğin etkili olduğu ileri sürülmektedir. Etik liderler, rol modellemesi yoluyla örgüt üyeleri arasında fedakârlık davranışını geliştirirler. Sonuç olarak, takipçilerinden karşılıklı olarak bağımlı olmalarını, rekabetten ziyade işbirliğine daha fazla odaklanmalarını ve örgüte daha fazla bağlı olmalarını beklerler (Kanungo and Conger, 1993). Üstelik etik davranış yoluyla liderler, takipçilerinin güvenini ve sadakatini kazanmaktadırlar (Aronson, 2001). İşgörenlerin, örgütleri ve çalışma durumu hakkında daha olumlu, umutlu ve iyimser olacağını ve liderlerinin ahlaklı davranmaları durumunda başarılarına katkıda bulunmaya daha istekli olması beklenmektedir. Liderin ahlaki bütünlüğü şüphe edildiğinde, lider muhtemelen takipçilerini örgütsel amaçlara ulaşmak için etkileme konusunda sıkıntı yaşayacaktır (Kanungo, 2001). Etik liderliğin öneminin vurgulanmasında, örneğin; kurumsal yönetimde etik olmayan davranışlar (Vitell and Davis, 1990), kurumsal etik değerleri (Hunt, Wood and Chonko, 1989) ve lider bütünlüğünün (Craig and Gustafson, 1998) iş doyumu üzerine, iş bırakma niyeti üzerine ve örgütsel bağlılık gibi değişkenlerle incelenmektedir.

Ayrıca, bugüne kadar, etik liderliğin potansiyel bir sonucu olarak, üst yönetim kadrosunun etkinliğini algılamaya çok az önem verilmiştir. Etkili bir üst düzey yönetim ekibi, kuruluşlarının hedeflerini ve misyonlarını net bir şekilde anlayarak stratejik karar verme sürecine katılır ve hedeflerine ulaşmaya yönelik bir takım olarak tutarlı bir şekilde çalışmaktadır. Buna karşın, kendi menfaatlerine hizmet etmek için güç kullanan, takipçilerin ihtiyaçlarına duyarsız olan ve toplumsal olarak yapıcı davranışlarda bulunmak için çok az saygı duyan liderlerin grup süreçlerini kötü yönetmesi beklenmektedir. Etik liderlerin adil seçimler yapmak, takipçilerin duygularını gözetmek ve sadece çalışma ortamı yaratmaya çalıştıkları göz önüne alındığında, işgörenlerin örgütleri ve çalışma durumu hakkında olumlu ve iyimser olmaları, başarılarını devam ettirmeye ve katkıda bulunmaya daha istekli olmaları beklenmektedir.

2.2. Stratejik İnsan Kaynakları Yönetimi

İşgören yeterlilikleri rekabet avantajı olarak kullanılabilmektedir. Wright, Dunford ve Snell (2001) insanların yetkinliklerini (bilgi, beceri, deneyim, motivasyon ve değer) ve firmayı uyumlu hale getirebilecek bir insan kaynakları yönetiminin önemini belirtmektedirler (insan-iş uyumu, insan-örgüt uyumu). İnsan kaynakları yönetimi, işgörenlerin davranış, tutum ve performansını etkileyen tüm politikaları, uygulamaları ve sistemleri içermektedir (Noe, Hollenbeck, Gerhart and Wright, 2000). En iyi sonucu elde etmek için, insan kaynakları yönetimi stratejik olarak yürütülmelidir. Her zaman örgüt stratejisi ile ilişkilendirilmeli ve hizalandırılmalıdır (Millmore et al., 2007; Leopold and Harris, 2009; Snell and Bohlander, 2010). Pourkiani ve arkadaşları (2011), stratejik insan kaynakları yönetiminin, şirketin insan kaynakları yönetimi ve performans üzerindeki etkisi ile firma hedefleri ile uyumlu stratejik seçeneklere odaklanılması gerektiğini belirtmektedirler. Wright ve McMahan (1992), stratejik insan kaynakları yönetiminin, şirketin hedeflerine ulaşmasını sağlayacak insan kaynaklarının yönetimi için planlanan modeller ve faaliyetler olarak tanımlamaktadır. İnsan kaynağı yönetimini; istihdamla (istihdam ilişkisi) bağlantılı olan karar verme ve planlamanın, örgütün stratejik bir yaklaşımı olarak tanımlayan Armstrong (2001), stratejik insan kaynakları yönetiminin istihdam, eğitim, geliştirme, performans yönetimi faktörlerinin birbirleriyle yatay olarak (diğer fonksiyonlarla birlikte) ve dikey olarak (kurumsal strateji) işgörenler arasındaki ilişkileri kapsadığını belirtmektedir.

2.3. İşten Ayrılma Niyeti

İşten Ayrılma Niyeti, bir kişinin yakın gelecekte mesleğinden ve bulunduğu örgütten ayrılmak için değerlendirme sürecinde olduğu öznel bir görüştür. Bu kavram, örgütü yakın gelecekte terk etme konusundaki bilinçli ve kasıtlı isteği yansıtmaktadır. Aynı zamanda, bu kavram alternatifleri aramak, aktif veya pasif iş arama gibi sürecin son parçası olarak değerlendirilmektedir (Carmeli and Weisberg, 2006: 193). İşten ayrılma niyeti iş yerinden ayrılma fikri olarak açıklanmaktadır (Chen, Lin and Lien, 2011: 1330). İşten ayrılma niyetinin, işgörenlerin örgütten ayrılmak için yalnızca gönüllü olarak çalıştığı bir kavram olduğu unutulmamalıdır (Tsai and Wu, 2010: 3566). İşten ayrılma niyeti, işgörenlerin örgütün çalışma koşullarından memnun kalmadıklarında aktif bir olumsuz eylem olarak açıklanmaktadır (Onay and Kılcı, 2011: 365).

İşgörenler arasında, İşten ayrılma niyetini belirlemek tüm işletmeler için önemlidir. Bu konu, yöneticilerin yanı sıra çok farklı disiplinlerden araştırmacılarında ilgisini çekmektedir. Bu ilgi, son otuz yılda, işgörenlerin işten ayrılma niyetlerinin maddi etkisi nedeniyle giderek artmaktadır. İşten ayrılma niyeti, şirketler, işgörenler ve genel ekonomi açısından önemli sonuçlar doğurmaktadır. Hangi faktörlerin etkili olduğunu ve işten ayrılma niyetinin nasıl geliştiğini belirlersek, bu olumsuz eğilimi ortadan kaldırmak için ihtiyaç duyulan adımlar atılmış olacaktır. Son yıllarda bu konuda yapılan araştırmalar demografik faktörlerin, iş doyumunun ve çalışma koşullarının işten ayrılma niyeti üzerindeki etkilerini ele almaktadır (Avcı and Küçükusta, 2009).

Ayrılma niyeti, örgütler için önemli olan insan kaynaklarının kaybedilmesi ve devam eden operasyonların aksamasından dolayı muhtemelen organizasyona zarar verebilecek olumsuz durumların ortaya çıkması anlamına gelmektedir. Ayrılma niyeti önemli bir ekonomik ve psikolojik sorun olarak görülmektedir. Örgüt için önemli olan işgörenlerin işten ayrılması, eğitim süreçleri, uzmanlaşma ve aday seçme süreçleri gibi yatırımlar başarısızlıkla sonuçlanacaktır. Bu bağlamda ayrılma niyetini etkileyen psikolojik ve sosyal değişkenlerin anlaşılması önemlidir. Aynı zamanda, son yıllarda yapılan araştırmalarda, kültürlerarası farklılıkların işgörenlerin işten ayrılma niyetlerinin psikolojik yönlerinin de önemli olabileceğini ortaya koymaktadır (Abrams, Ando and Hinkle, 1998). Gelecek çalışmalarda kültürel farklılıkların işten ayrılma niyeti üzerine odaklanılması yeni bulguların teoriye kazandırılması açısından da önemlidir.

2.4. İş Memnuniyeti

Locke, iş memnuniyetinin "kişinin iş veya meslek deneyimlerinin değerlendirilmesinden kaynaklanan keyifli ya da olumlu bir duygusallık" olduğunu belirtmektedir (Locke, 1976: 1300). Başka bir deyişle, iş memnuniyeti, işgörenin işinden ne derece memnun kaldığına ilişkin olumlu ya da olumsuz duygusal değerlendirmedir (Spector, 1997). Bu bağlamda, iş memnuniyeti, bireye, önemli bir seviyede özgün bir değerlendirmedir.

İş görenlerin gelişmesine de katkıda bulunan bu tutum, çalışma koşulları ve işyeri ortamı gibi çeşitli iç ve dış faktörler açısından olumlu veya olumsuz olabilmektedir. İş memnuniyeti iş görenlerin hem duygusal ruh halini gösterirken, düşünsel anlamda mevcut koşulların değerlendirilmesi, beklentilerin ve standartların karşılaştırılması anlamına gelmektedir (Organ, 1988: 547). Genel olarak, iş memnuniyeti yüksek olan işgörenler işlerine ve örgütlerine karşı olumlu ve yapıcı bir davranış sergilerken, iş memnuniyeti düşük olan işgörenler, örgüt için olumsuz duygular taşımaktadır (Greenberg and Baron, 2000: 43).

İş memnuniyeti, iş görenlerin ihtiyaçlarıyla uyumlu önemli değerleri yerine getirdiğinin algısıdır (Locke, 1976). Karatepe, Yorgancı ve Haktanır (2008), işgörenlerin işlerinden memnun olmaması durumunda, örgütten ayrılmayı düşündükleri konusunda vurgu yapmaktadır. Driscoll ve ark. (1995) işyerinde fiziksel saldırıların psikolojik etkilerini incelemiş ve saldırıya uğramış işgörenlerin, saldırıya uğramamış iş arkadaşlarına göre depresyon, kaygı ve düşük iş doyumu yaşama olasılıklarının daha yüksek olduğunu belirtmektedir.

3.ARAŞTIRMA METODOLOJISI

3.1. Örneklem

Araştırmanın amacı kapsamında 410 işgören ile anket çalışması yürütülmüştür. SPSS 23.00 İstatistik Paket Programı kullanılarak elde edilen veriler değerlendirilmiş ve Demografik bilgilerde descriptive (tanımlayıcı) analiz kullanılmıştır. Likert ölçeğinin kullanıldığı sorularda faktör analizi ve güvenirlilik analizi yapılmıştır. Değişkenler arasındaki ilişkilerin incelenmesinde korelasyon analizi; hipotezlerin test edilmesinde regresyon analizi yapılmıştır.

3.2. Analiz

İki bölümden oluşan anket sorularının ilk bölümünde, katılımcıların demografik bilgileri ve işleri ile ilgili sorular yer almaktadır Anketin ikinci bölümü ise, stratejik insan kaynakları yönetimi, etik liderlik, işten ayrılma niyeti ve iş memnuniyeti ile ilgili ölçeklerden oluşmaktadır. Stratejik insan kaynakları yönetimi ölçeği; Green ve ark. Tarafından 2001 yılında geliştirilen sorular kullanılmıştır. Etik liderlik ölçeği; 2005 yılında Brown ve arkadaşları tarafından geliştirilen sorular ile ölçüldü. İşten Ayrılma Niyeti; Kelloway et al., 1999; Sager et al., 1998; Nissly et al., 2005; tarafından kullanılan sorular ile ölçülmüştür. İş Memnuniyeti Ölçeği; Raziqa A. ve Maulabakhsha R. 2015 yılındaki çalışmalarında kullandıkları sorular ile ölçülmüştür.

4. BULGULAR

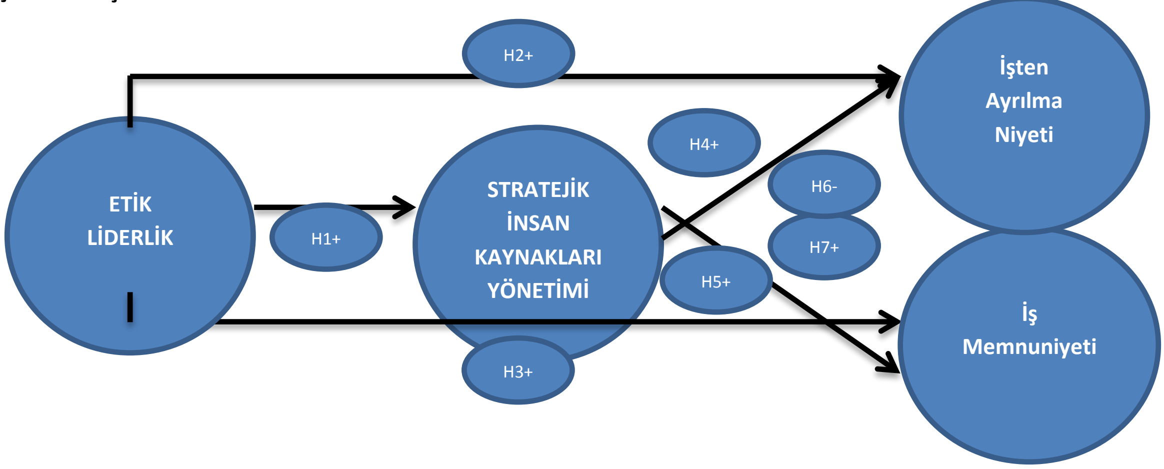
Likert ölçekli anketimizde özel ve kamu kurumlarının farklı departmanların da çalışan 410 beyaz yakalılar örneklem kitlemizi oluşturmaktadır. Anketimize beyaz yakalı 194 kadın, 216 erkek cevap vermiştir. Ankete katılanların; %17.5'i 18-25 (72 Katılımcı) yaş arasında, %28.4'u 26-30 (115 Katılımcı) yaş arasında, %26.3'ü 31-35 (108 Katılımcı) yaş arasında, %15.1'i 36-40 (62 Katılımcı) yaş arasında, %9.2'si 41-45 (38 Katılımcı) yaş arasında, %3.6'sı 15 Katılımcı 46 ve üzeri yaştadır.

İşgörenlerin %47.3'ü Kamu'da (194 çalışan) bulunmakta, %52.6'sı Özel Sektörde (216 çalışan) bulunmaktadır. İşgörenlerin bağlı bulundukları kurumlarda çalışma zamanları; %11.2'si 1 yıldan az (46 çalışan), %27.8'i 1-3 yıl arasında (114 çalışan), %31.4'ü 4-7 yıl arasında (129 çalışan), %13.6'sı 8-10 yıl arasında (56 çalışan), %15.5'i 10 yıl ve üzeri (65 çalışan) görev yapmaktadırlar.

Katılımcıların çalıştıkları kurumların faaliyet alanları; 114 katılımcının çalıştığı kurum ulusal, 168 katılımcının çalıştığı kurum bölgesel, 128 katılımcının çalıştığı kurum uluslararası, alanda faaliyetlerine devam etmektedir. Katılımcıların; %3.4'ü (14 katılımcı) ilk öğretim, %14.6'sı (60 katılımcı) lise ve dengi, %17.3'ü (71 katılımcı) meslek yüksekokulu/ön lisans, %20.4'ü (84 katılımcı) üniversite, %44.1'i (181 katılımcı) lisansüstü derecesine sahiptir.

İşgörenlerin bireysel anlamda belirledikleri hedeflere ulaşma düzeyi; 31 katılımcının hedeflerine ulaşma düzeyi Çok Düşük, 38 katılımcının hedeflerine ulaşma düzeyi Düşük, 145 katılımcının hedeflerine ulaşma düzeyi Orta, 141 katılımcının hedeflerine ulaşma düzeyi Yüksek, 55 katılımcının hedeflerine ulaşma düzeyi Çok Yüksek olarak belirtmişlerdir.

Şekil 1: Araştırma Modeli



Çalışmamızda 5'li likert ölçeğine göre hazırlanan değişkenlerimiz, 32 soruluk anket formu ile ölçülmüştür. Değişkenler; Stratejik İnsan Kaynakları Yönetimi, Etik Liderlik, İş Memnuniyet ve İşten Ayrılma Niyeti faktör analizine tabi tutulmuştur. Faktör analizi sonucunda 8 soru faktör dağılımı göstermediğinden, güvenirliliği düşürerek farklı faktörlere düştüğünden ölçekten çıkarılmıştır. Kalan 24 soru 4 faktöre dağılmıştır. Faktör yükleriyle birlikte faktör analizine tabi tutulan değişkenlerimiz aşağıdaki tabloda gösterilmiştir:

Tablo 1: KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,942
Bartlett's Test of Sphericity	Approx. Chi-Square	6153,782
	df	276
	Sig.	0,000

Kaiser-Meyer-Olkin örneklem uygunluğu değerinin 0,942 ve Bartlett'in küresellik testinin anlamlılık seviyesinin 0,000 çıkması (p≤0,05 için), verilerin faktör analizine uygun olduğunu göstermektedir. Eldeki verilerle, faktör analizini yapılabilecek bir şekle getirebilmek için uygulanan temel bileşenler analizi sonucunda, 4 faktör oluşmuştur. Elde edilen sonuçlar Tablo 2'de gösterilmiştir.

Tablo 2: Rotated Component Matrix

Rotated Component Matrix[a]				
	Component			
	1	2	3	4
SIKY5. Kurumumuzda personelin ihtiyacına göre davranışsal iş analizleri yapılmaktadır.	,799			
SIKY6. Kurumumuzda personelin davranışsal gelişimi açısından eğitimler verilmektedir.	,778			
SIKY8. İnsan kaynakları planlaması resmi ve açık bir prosedür olarak yapılmaktadır.	,778			
SIKY7. İK Bölümü, kararlar açısından düzenli olarak personelle ilgili bilgileri takip etmekte.	,776			
SIKY4. Personelin performans değerlendirmeleri hedeflere ulaşma açısından düzenli yapılır.	,743			
SIKY9. Kurumumuzda herkesçe bilinen formal insan kaynakları stratejisi uygulanmaktadır.	,698			
SIKY3. Kurumumuzda personel seçimi stratejik hedeflere ulaşma açısından önemlidir.	,690			
SIKY2. Kurumumuzda yöneticilerimiz uzun vadeli stratejik hedeflere ulaşmak için çalışanları teşvik ederler.	,670			
SIKY1. Kurumumuzda yönetimsel anlamda uzun süreli planlar yapılmaktadır.	,602			
İSM4. Ben kesinlikle işimi seviyorum.		,826		
İSM6. Şimdiki işimden veya görevimden oldukça memnunum.		,821		
İSM3. Ben şu an için işimden memnunum.		,806		
İSM5. Çalışma arkadaşlarıma göre işimden çok mutlu olduğumu hissediyorum.		,765		
İSM8. İşimle ilgili oldukça iyi düşünceler beslerim.		,725		
İSM1. İşimde gerçek çalışma keyfini bulmaktayım.		,647		
EL3. Yöneticimiz bize karşı özverili davranmaktadır.			,786	
EL2. Yöneticimiz davranışlarıyla herkese örnek olmaktadır.			,774	
EL1. Yöneticimiz çalışanlara örnek teşkil eden bir yönetici karakteri çizmektedir.			,770	
EL4. Yöneticimiz çalışanlara örnek teşkil ederek bizden daha çok çalışmaktadır.			,766	
İSN1. Benim mevcut işim, önemli kişisel ihtiyaçlarımı karşılamıyor.				,785
İSN2. İş yerinde benim en önemli hedeflere ulaşmam için maalesef iyi fırsatlar yoktur.				,742

İSN3. Başka bir kurumda daha iyi pozisyon için iş arama niyetindeyim.				,715
İSN4. Bazen bu kurumu terk etmeyi düşünüyorum.				,683
İSN5. Çok sık olarak bir girişimci olmayı düşünüyorum.				,557
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.[a]				
a. Rotation converged in 6 iterations.				

SIKY: Stratejik İnsan Kaynakları Yönetimi

ISM: İş Memnuniyeti

EL: Etik Liderlik

ISN: İşten Ayrılma Niyeti

Geçerlilik bir ölçme aracının bir değişkeni doğru ölçebilme derecesidir. Yapı geçerliğinin tespitinde ise faktör analizi kullanılmıştır. KMO ve Bartlett test değerleri; ölçeklerin faktör analizine uygunluğu, örneklem büyüklüğünün yeterliliği ve verilerin normal dağılımda olup olmadığını saptamak amacıyla yapılmıştır. Faktör analizinde test edilen değişkenleri tanımlayan soruların 0,50'nin üzerinde olması, faktör analizinde anlamlı düzeyde olduğu kabul edilmektedir. Faktör analizleri sonucunda 0,50'nin altında çıkan değişkenleri tanımlayan sorular faktöre düşmediği için analiz dışında tutulmuştur.

Tablo 3: Güvenirlilik Analizi

DEĞİŞKENLER	Soru Sayısı	Cronbach Alfa (α) Değerleri
Etik Liderlik	4	,913
Stratejik İnsan Kaynakları Yönetimi	9	,929
İşten Ayrılma Niyeti	5	,779
İş Memnuniyeti	6	,932

Güvenirlilik analizi; sorular arasındaki ortalama ilişkiyi dikkate alan ölçümün içsel tutarlılığı olarak tanımlanmaktadır. Literatürde Nunnally (1978)'in belirttiği Cronbach Alfa katsayısı 0.50 ve üzeri olan ölçümler yeterli kabul edilmektedir (Nunnally, J. C., 1978; Hair et al., 2000; Büyüköztürk, 2007). Sosyal bilimlerde, özelliklede işletme-yönetim alanında yapılan araştırmalarda güvenirlilik analizi 0,70 ve üzerinde olanlar kabul edilmektedir.

Tablo 4: Bağımsız Değişkenlerin Bağımlı Değişkenlere Etkisinin Regresyon Analizleri Sonuçları

Bağımsız Değişkenler	Bağımlı Değişkenler	Standart β	Sig.	Düzeltilmis R^2	F Değeri
Etik Liderlik	Stratejik İnsan Kaynakları Yönetimi	,646***	,000	,416	252,966
Etik Liderlik	İşten Ayrılma Niyeti	-,360***	,000	,127	52,607
Etik Liderlik	İş Memnuniyeti	,643***	,000	,412	249,336
Stratejik İnsan Kaynakları Yönetimi	İşten Ayrılma Niyeti	-,253***	,000	,061	24,039
Stratejik İnsan Kaynakları Yönetimi	İş Memnuniyeti	,643***	,000	,411	248,340

*: $p<0.05$ **: $p<0.01$ ***: $p<0.001$

Korelasyon analizi; Tablo 5 ve Tablo 6'da da görüldüğü üzere, Stratejik İnsan Kaynakları Yönetimi, Etik Liderlik, İşten Ayrılma Niyeti ve İş Memnuniyeti arasındaki birebir ilişkiler ele alınmıştır. Daha önce de belirttiğimiz üzere, şimdiye kadar yapılan analizler (faktör analizi, güvenilirlik analizi, tanımlayıcı analizler) kurumlardan elde edilen 410 anket üzerinde yürütülmüştür.

Tablo 5: Tanımlayıcı İstatistikler

Descriptive Statistics			
	Mean	**Std. Deviation**	**N**
Etik Liderlik	3,4310	1,21439	355
Stratejik İnsan Kaynaklari	3,3058	1,07054	355
İsten Ayrilma Niyeti	2,9549	1,02896	355
İs Memnuniyeti	3,7399	1,07486	355

Araştırmalarda elde edilen çok miktarda sayısal veriyi birkaç basit ifade ile özetlemek için betimsel istatistiklerden yararlanılmaktadır. Betimsel istatistikler, bir değişken içerisinde her bir değerin ya da değer kümesinin kaç kez tekrar ettiği, değerlerin merkez olarak seçilen bir nokta etrafında nasıl bir dağılım gösterdiği, orta noktaya ya da birbirlerine göreceli olarak nasıl bir uzaklıkta oldukları gibi özet bilgileri kapsamaktadır.

Tablo 6: Korelasyon Analizi

Correlations					
		Etik Liderlik	**Stratejik İnsan Kaynaklari**	**İsten Ayrilma Niyeti**	**İs Memnuniyeti**
Etik Liderlik	Pearson Correlation	1	,646**	-,360**	,643**
	Sig. (2-tailed)		,000	,000	,000
	Sum of Squares and Cross-products	522,059	297,353	-159,304	297,294
	Covariance	1,475	,840	-,450	,840
	N	355	355	355	355
Stratejik İnsan Kaynaklari	Pearson Correlation	,646**	1	-,253**	,643**
	Sig. (2-tailed)	,000		,000	,000
	Sum of Squares and Cross-products	297,353	405,706	-98,463	261,772
	Covariance	,840	1,146	-,278	,739
	N	355	355	355	355
İsten Ayrilma Niyeti	Pearson Correlation	-,360**	-,253**	1	-,410**
	Sig. (2-tailed)	,000	,000		,000
	Sum of Squares and Cross-products	-159,304	-98,463	374,799	-160,562
	Covariance	-,450	-,278	1,059	-,454
	N	355	355	355	355
İs Memnuniyeti	Pearson Correlation	,643**	,643**	-,410**	1
	Sig. (2-tailed)	,000	,000	,000	
	Sum of Squares and Cross-products	297,294	261,772	-160,562	408,985
	Covariance	,840	,739	-,454	1,155
	N	355	355	355	355

**. Correlation is significant at the 0.01 level (2-tailed).

Korelasyon analizi sonucunda, işten ayrılma niyetinin; etik liderlik, iş memnuniyeti ve stratejik insan kaynakları yönetimi ile ters yönde anlamlı ilişki vardır. Ters yönde ama anlamlı olan bu ilişkide etik liderlik, iş memnuniyeti ve stratejik insan kaynakları yönetimi ayrı ayrı etkileri açısından işten ayrılma niyetini ortadan kaldırmaktadır. etik liderlik, iş memnuniyeti ve stratejik insan kaynakları yönetimi değişkenleri arasında olumlu ve anlamlı ilişki bulunmaktadır.

Regresyon Analiz Sonuçlarına Göre Desteklenen ve Desteklenmeyen Hipotezler; Öngörülen araştırma hipotezlerini test etmek için regresyon analizi kullanılmış ve bu regresyon analizleri sonuçlarına göre ara değişken etkisi dışında kabul edilen 5 hipotez Tablo 7'de gösterilmiştir.

Tablo 7: Araştırma Hipotezlerinin Desteklendi/Desteklenmedi Durumu

Hipotezler	**Desteklendi / Desteklenmedi**	**Anlamlılık Düzeyi (Sig.)**
***H1**: Etik Liderlik, Stratejik İnsan Kaynakları Yönetimi üzerine etkisi vardır.*	DESTEKLENDİ	*P<0.001*
***H2**: Etik Liderliğin, İşten Ayrılma Niyeti üzerine etkisi vardır.*	DESTEKLENDİ	*P<0.001*
***H3**: Etik Liderliğin, İş Memnuniyeti üzerine etkisi vardır.*	DESTEKLENDİ	*P<0.001*
***H4**: Stratejik İnsan Kaynakları Yönetimi, İşten Ayrılma Niyeti üzerine etkisi vardır.*	DESTEKLENDİ	*P<0.001*
***H5**: Stratejik İnsan Kaynakları Yönetimi, İş Memnuniyeti üzerine etkisi vardır.*	DESTEKLENDİ	*P<0.001*

Ara değişken etkisi dışında araştırma modelimizde belirtilen değişkenler arasında yapılan hipotez testleri sonucunda, regresyon analiziyle hipotezler desteklenmiştir. Değişkenler arasındaki ilişkiler regresyon analizi sonucunda istatistiksel olarak anlamlıdır. Tablo 3.5'deki Stratejik İnsan Kaynakları Yönetimi Değişkenine etki eden Etik Liderlik bağımsız değişkeni ile ilişkisi açısından regresyon analizi sonucuna göre, (β=,646***; Sig=,000) **H1 hipotezi desteklenmektedir.** İşten Ayrılma Niyeti Bağımlı Değişkenine etki eden Etik Liderlik bağımsız değişkeni ile ilişkisi açısından regresyon analizi sonucuna göre, (β=-,360***; Sig=,000) **H2 hipotezi desteklenmektedir.** İş Memnuniyeti Bağımlı Değişkenine etki eden Etik Liderlik bağımsız değişkeni ile ilişkisi açısından regresyon analizi sonucuna göre, (β=,643***; Sig=,000) **H3 hipotezi desteklenmektedir.** İşten Ayrılma Niyeti Bağımlı Değişkenine etki eden Stratejik İnsan Kaynakları Yönetimi bağımsız değişkeni ile ilişkisi açısından regresyon analizi sonucuna göre, (β=-,253***; Sig=,000) **H4 hipotezi desteklenmektedir.** İş Memnuniyeti Bağımlı Değişkenine etki eden Stratejik İnsan Kaynakları Yönetimi bağımsız değişkeni ile ilişkisi açısından regresyon analizi sonucuna göre, (β=,643***; Sig=,000) **H5 hipotezi desteklenmektedir.**

Araştırma Modelimizde Ara Değişken Etkisinin Belirlenmesi; Araştırma modelimizde ara değişkenin etkisinin belirlenmesi konusunda özellikle, Stratejik İnsan Kaynakları Yönetimi'nin; Etik Liderlik Bağımsız Değişkeni ile İşten Ayrılma Niyeti ve İş Memnuniyeti bağımlı değişkeni arasındaki ilişkide ara değişken rolü; analizler sonucunda kurulan hipotezlerle etkisi olup olmadığı belirtilmiştir;

Tablo 8: Ara Değişken Etkisinin Regresyon Analizi Sonuçları

	Bağımsız Değişkenler	**Bağımlı Değişkenler**	**Standart β**	**Sig.**	**Düzeltilmis R^2**	**F Değeri**
Regresyon	Etik Liderlik	İşten Ayrılma Niyeti	-,360***	,000	,127	52,607
	Stratejik İnsan Kaynakları Yönetimi		-,034	,602	,125	26,386
	Etik Liderlik	İş Memnuniyeti	,643***	,000	,412	249,336
	Stratejik İnsan Kaynakları Yönetimi		,390***	,000	,500	177,664

*: p<0.05 **:p<0.01 ***:p<0.001

Tablo 9: Araştırma Hipotezlerinin Desteklendi / Desteklenmedi Durumu

Hipotezler	**Desteklendi / Desteklenmedi**	**Anlamlılık Düzeyi (Sig.)**
***H6**: Etik Liderlik ile İşten Ayrılma Niyeti Arasındaki ilişkide Stratejik İnsan Kaynakları Yönetiminin Ara değişken etkisi vardır.*	Desteklenmedi	
***H7**: Etik Liderlik ile İş Memnuniyeti Arasındaki ilişkide Stratejik İnsan Kaynakları Yönetiminin Ara değişken etkisi vardır.*	Desteklendi	*P<0.001*

Stratejik İnsan Kaynakları Yönetimi ara değişken etkisinin ölçüldüğü araştırma modelimizde, Stratejik İnsan Kaynakları Yönetimi ara değişken etkisi olarak Etik Liderlik ile İşten Ayrılma Niyeti arasındaki ilişkide, etkisinin olmadığı analizler sonucunda ortaya çıkmıştır. Bu durum çalışanların benimsemedikleri ve/veya o an yaşadıkları durum itibariyle gereksiz olduğunu düşündükleri kurallara uymayarak, İnsan kaynakları yönetiminin, örgütte var olan liderlik rolü karşısında etkisinin olmadığı ortaya çıkmaktadır.

İç Anadolu bölgesinde özel ve kamu sektöründe beyaz yakalılar üzerinde yaptığımız çalışmada, işgörenlerin kurumlarında karşılaşmış oldukları İşten Ayrılma Niyeti'ne etkisi açısından Etik liderliğin ve Stratejik İnsan Kaynakları Yönetimi'nin, anlamlı ve ters ilişkilerinin olduğu ortaya çıkmıştır. Yani Etik Liderlik ve Stratejik İnsan Kaynakları Yönetimi Bağımsız Değişkenler olarak işgörenlerin İşten Ayrılma Niyetlerini ortadan kaldırmaya yöneliktir. Bu durum İç Anadolu bölgesinde faaliyette bulunan kurumların hem üretim sektörü açısından hem de hizmet sektörü açısından belirlemiş oldukları kurumsal prosedürlerin, işgörenlerin ve kurumun faydasına olduğu, işgörenlerin uygulanan liderlik modeli ve insan kaynakları yönetimi açısından kurumlarından ayrılmayı düşünmedikleri araştırmamızda bulunan bulgulardan açıklayabilmekteyiz. Yoğun rekabet ortamında kurumların işlerin işleyişi ve belirli düzende devam etmesini sağlamak amacıyla belirledikleri prosedürlerin tam anlamıyla doğru olarak belirlendiği ve/veya yapıldığı gerçeği bulunmaktadır. Bu durum kurumların sürdürülebilirlik ilkesi açısından rekabet ortamında avantajlı duruma düşürecek bir konuma getirebilmektedir. Çünkü prosedürlerin işgörenler tarafından sürekli memnun karşılandığı bir kurumda, düzeni sağlamak gün geçtikçe kurumlar açısından önem taşımaktadır. Ancak ara değişken etkisi açısından Stratejik İnsan Kaynakları Yönetiminin etkisinin olmadığı ve Etik liderlik ile İşten Ayrılma Niyeti arasındaki ters etkiyi olumsuz yönde etkilediği ortaya çıkmaktadır. Bu durum işgörenler arasında ya etik liderlik modelini benimsediklerini ya da insan kaynakları prosedürlerini benimsediklerini ortaya koymaktadır. Hem etik liderlik tarzının hem insan kaynakları prosedürlerinin aynı anda işgörenler üzerinde etkisinin olmadığı gerçeğini ortaya çıkarmaktadır.

5. TARTIŞMA

Örgütlerde, üst yönetimle çalışanların birlikte hareket etmesi ve takım olarak çaba göstermesi örgütlerin sahip olması gereken önemli bir özelliktir. Bunu başarmak için liderliğe ihtiyaç vardır. Liderler toplumların kültürel değerlerini başkalarından daha iyi bilmelidir. Bu özellik iş memnuniyetini ve işten ayrılma niyetini etkileyebilmektedir. Yoğun rekabet ortamında örgütlerin tepe yönetiminde bulunan liderler, sahip oldukları özelliklerle örgütün sürdürülebilirliğini etkileyecek karar mekanizmaları olarak yer almaktadır. Gelişen iletişim teknikleri ve teknoloji sayesinde sınırların ortadan kalktığı 21 yy. da karşılaşılan yeni liderlik tarzları örgütlerin ne kadar yaşayacağını belirleyen önemli etkenler haline gelmiştir. Ancak kültürel farklılıkların insanların yönetim tarzlarına olan tepkileri ve sahip oldukları değerlerin etkisini ölçen araştırmalar sınırlı sayıda kalmaktadır. Liderlik tarzlarının kültürel anlamda karşılıklı yapılacak analizlerle ortaya çıkacak sorunlara yönelik araştırmalara gün geçtikçe daha çok ihtiyaç duyulmaktadır. Ancak bu konudaki araştırmalara destek verecek kurum sayısıda maalesef yok denecek kadar azdır. Carmeli, Atwater ve Levi (2011) pozitif liderlik davranışlarını sergileyen ve yüksek kaliteli lider üye değişimiyle karakterize olan yöneticilerin, takipçilerde kişisel ve organizasyonel tanımlamalar geliştirmesi daha olası olduğunu tespit etmişlerdir. Özellikle, liderler şirket politikalarını uygulamada, yasal ve mali sorumluluklarını yerine getirmede ve hedeflerine ulaşmak için astlarla çalışmaktadırlar. liderler örgütsel kimliği daha çekici hale getiren destekleyici çalışma ortamlarına katkıda bulunabilirler (Shamir, Zakay, Breinin, and Popper, 2000). Ancak bu varsayımların tam anlamıyla desteklenebilmesi için kurumların yapılacak araştırmalara destek vermesi gerekmektedir. Maalesef, ülkemizde kurum yöneticileri her ne kadar üniversite-sanayi işbirliğini savunduklarını belirtseler de sosyal bilim alanında yapılan araştırmalara kapıları kapatmaktadırlar. Yaşanan bu durum, teorik açıdan belirtilen unsurların tam olarak kurulan hipotezlerle desteklenmesi yönündeki araştırmaları sonuçsuz bırakabilmektedir. Gerçekten kurumların yönetim tarzlarının; çalışanları ve kurumu nasıl, ne yönde etkilediğini görmek isteyen liderlere ihtiyaç vardır. Biliyoruzki çok büyük şirketler ve holdingler sosyal bilimler alanında yapılmak istenen çalışmalara sıcak bakmamaktadırlar ve genellikle'de şu cevabı vermektedirler; şirket politikalarımız gereği anket ve benzeri çalışmalara izin verememekteyiz. Yönetim kademesinde alınan bu karar, bir kurumu kapalı kapılar ardında nasıl yönetildiğine dair soru işaretleri bırakabilmektedir. Örgüt ve çalışanlar arasında kurumların maksimum verimlilikte olmasının sağlanması yönünde üniversite-sanayi işbirliğinin gerçek anlamda sağlanması gerekmektedir.

6. SONUÇ

Özellikle iç Anadolu bölgesinde yaptığımız araştırma sonucunda, işgörenlerin bağlı bulundukları kurumlarda hem stratejik insan kaynakları yönetimi açısından hem de etik liderlik açısından İşten Ayrılma Niyetleri analizler sonucunda anlamlı ve işgörenlerin kurumlarında karşılaştıkları liderlik tarzı yada stratejik insan kaynakları yönetimi açısından İşten Ayrılma Niyetleri etkisinin azaldığı yada ortadan kalktığını görebilmekteyiz. Bu durum hem özel sektörde hem de kamuda olması açısından önemli bir durum teşkil etmektedir. Kamu da var olan iç tüzük uygulamaları ve memurların uyması gereken kurallar dışına çıkmamalarının gerekliliği düşünüldüğünde, kamu kurumlarında var olan prosedürlerin kamunun ve vatandaşların lehine olacak şekilde uygulamada esnetilebildiği anlaşılmaktadır. Özel kurumlar rekabet ortamında müşteri kaybetme korkusu yaşadıklarından dolayı ve işgörenlerin kurumlarına karşı bağlılıklarının göstergesi olan kurumlarının menfaatini koruyarak prosedürlerin dışına çıktıklarını elde ettiğimiz bulgulardan analiz edebilmekteyiz. Gelecek çalışmaların daha iyi olabilmesi ve nitel çalışmaların ortaya çıkartılıp teorik açıdan yeni kavramların oluşturulabilmesi açısından insan kaynakları ve liderlik tarzlarının işgörenler üzerindeki farklı etkilerinin neler olabileceği hususu üzerinde daha çok durulması gerekmektedir. Özel olarak, bölgeler arasındaki kültürel farklılıklardan dolayı ortaya çıkabilecek yeni kavramlar yönetim ve organizasyon alanında olmakla birlikte, sosyal bilimler alanında yeni bulguların ve kavramların elde edilmesi mümkün olabilecektir. Gün geçtikçe ortaya çıkan çalışma hayatındaki sorunlar ve yeni liderlik, yönetim tarzları aynı zamanda akademik açıdan yeni kavramlarında ortaya çıkmasına yardımcı olmaktadır. Çalışma hayatında yaşanılan sorunların akademik açıdan daha yoğun ve öncelikli olarak incelenmesiyle, gelecek çalışmalarda dünya literatürüne katkıda bulunabilecek teorik ve analizler açısından yeni kavramların kazanımı mümkün olabilecektir.

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AN INVESTIGATION ON AIRLINE CUSTOMERS' LEVEL OF LOYALTY AND TRUST IN RELATION TO DEMOGRAPHICS, USE OF AIRLINES AND TICKET-PURCHASING HABITS

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ABSTRACT
Purpose- Loyalty and trust have been analyzed in relation to customers' behaviors and attitudes in various service sectors in previous studies in the literature. This study aims at evaluating how Turkish customers' characteristics affect their perception of loyalty and trust considering both low cost and network airlines.
Methodology- A survey was conducted and 967 airline passengers responded. Exploratory statistical methodology was conducted in order to analyze the data. These statistical techniques were used and hypotheses are tested with t-test and ANOVA.
Findings- According to the results of the analyses; (1) high level of education leads customers to having less level of loyalty and trust, (2) low cost carrier customers' level of loyalty and trust is lower than network customers', (3) where price research and online ticket purchase is less or none, the customers' level of loyalty and trust is high, (4) business travelers have higher level of loyalty and trust to their preferred company than the travelers' with touristic/entertainment or visiting family/friends purposes.
Conclusion- Airline companies should better evaluate their customers' demographics and habits in relation to their loyalty and level of trust.

Keywords: Loyalty, trust, demographics, habits, ANOVA
JEL Codes: M10, M31, L89

1. INTRODUCTION

Airline transportation industry is one of the most important economic sectors in the world which transports people and cargoes from one point to another. Not only it provides people faster international and intercity traveling, compared to other transportation types, but also plays an important global role for countries to have better relations economically, commercially, and politically. Passenger airline companies can be classified as low cost and network carriers. Demir and Ozturk (2011) mentioned, if organizations and employees become integrated, in other words, if companies make employees' purposes harmonize with their own purposes, companies will be able to reduce the risk of losing their employees. Similarly, airline companies can also minimize the risks of losing their customers as long as they understand their needs, wishes, and purposes.

Every service provider under uncertain market conditions should be a good decision-maker to deal with the issues related to pricing and selling. A service provider must know the best price for the product or service and when to decrease or increase. It is also hard to find the customers who have high level of loyalty and trust to their most preferred airline company in the competitive market.

Airline companies divide their customers into the segments considering their buying behavior, demand for product/service and characteristics. Customer loyalty is a very desirable quality for any company. The majority of loyalty-related behaviors are largely related to each other. In order to achieve a good performance, customers' demographics, purchasing habits, and perceptions of loyalty and trust should be well examined. Trust is important where there is risk, uncertainty, or interdependence occur (Mayer et al., 1995). The high level of mutual trust for the company-customer relationship allow the parties to take more risks and communicate more clearly with each other (Kwon and Suh, 2004).

In this study, it is planned to investigate airline company passengers' behavior and characteristics in relation to their level of loyalty and trust. Thus, this study tries to find answer for the question: How loyalty and trust levels of airline customers' for their most preferred airlines differ according to their demographics, airline usage, and ticket purchasing habits. For that purpose, a large sampling survey was conducted with airline passengers in Turkey.

2. LITERATURE REVIEW

2.1. Loyalty

One of the objectives of customer relationship management is to improve and maintain the relationships with customers (Winer, 2001). There are many definitions in the literature for customer loyalty. Customer loyalty is the tendency to repurchase a product/service which was experienced or recommended (Altintas, 2000). According to another definition, customer loyalty is to establish strong and profound relationships between customers and the company (Duffy, 1998). If a customer repurchases and recommends a product or service from a company he/she purchases, and develops positive opinions and maintains, that customer is a loyal customer for that company (Kandampully and Suhartanto, 2000).

Customers' perceived values have an impact on loyalty, customer engagement has also proved to be an antecedent of loyalty and the passenger loyalty is a result of positive engagement. Furthermore, customer engagement is a new structure that plays an important role in enhancing passenger loyalty (Hapsari and Dean, 2015). Both customers' experience of love and trust are important indicators for customer loyalty (Chen and Quester, 2015). Prentice and Loureiro (2017) studied on demographic and psychological variables of customers for modeling customer loyalty. They emphasized the importance of deep understanding of antecedent conditions for customer loyalty. Binsar (2014) stated that customer relationship management has an important impact on customer loyalty.

Two sides of customer loyalty come into prominence when these definitions are considered: behavioral side and attitudinal side. Tending to purchase a product or service consistently is related to the behavioral side of customer loyalty. Attitudinal side of customer loyalty is related to a customer commenting on a product or service positively to encourage others even though he or she does not repetitively purchase that product or service (Cati and Kocoglu, 2008).

In the recent years, with the development of technology and globalization, businesses are in competition to be able to obtain more customers. In such an environment, obtaining new customers, and then making them loyal customers is highly essential. Additionally, obtaining a new customer is more costly than keeping an existing customer (Lin and Wang, 2006). Considering all these cases, the term of customer loyalty becomes more of an issue for companies.

2.2. Trust

Trust is usually considered as an important point when it comes to positive relationships (Moorman et al., 1992; Morgan and Hunt, 1994). It is especially significant for mutual relationships (Gronroos, 1990). Development of trust increases the loyalty of customers (Garbarino and Johnson, 1999), loyalty (Dwyer et al., 1987), and profitability (Doney and Cannon, 1997). Organizational researches show that trust has a positive effect on loyalty and it is also more important than satisfaction for loyalty (Colquitt et al., 2001; Kim and Mauborgne, 1997; Wetsch, 2005). Chung and Herrera points that trust should be considered as a basic psychological need in various service industries according to their focus group studies (Chung and Herrera, 2007).

Lee et al., (2015) stated that if consumers expect positive results confidently trust occurs. Customers' behavioral intention was importantly and positively affected by the price value and trust (Alalwan and Rana, 2017). Emotional experiences of customers have a positive influence on trust (Molinillo et al., 2017).

Revenue management practice in airlines is one of the most important problems for customers to lose their trust in the company. Price differentiation, which is one of the revenue management practices, may occur depending on flight capacity and traveling habits of customers. These pricing techniques may decrease the trust of a customer due to the lower pricing practices offered to another customer who bought the same service at a different time. Long-term relationships between customers and airline companies can provide mutual benefits. Trust is a prerequisite for buyer-seller relationship (McMahon-Beattie et al., 2002).

3. DATA AND METHODOLOGY

3.1. Methodology

A survey was used in order to test the loyalty and trust of airline customers depending on their demographics, airline usage, and ticket purchasing habits. The scales in the literature, which include customer loyalty and trust variables, were revised and added to the questionnaire form to conduct a comprehensive study. To execute this study, a questionnaire form was developed and applied on 967 customers who used the airlines in Turkey. Additionally, detailed information was given about developing the survey, sample selection, sample space, structure of the questionnaire, data collection process, pilot tests, and results.

3.2. Survey Design

The survey prepared for this research consists of two parts. Before these parts, there is a cover text which informs participants that this research will be conducted for academic purposes, the responses given will be kept private, and they will only be subject to scientific usage.

After the literature review, the aim and content of this research, the variables which are considered, and the scales which are used to measure the variables were specified and the unique value of this research was explained. Accordingly, the survey involves, in the first section; the categorical questions which were designed in relation to demographics, use of airlines, and ticket purchasing habits. In the second section; questions which contain variables used in the research model were developed depending on the literature. For evaluating the responses; five-point Likert Scale was used. The survey consists of close-ended questions.

3.3. Scale Development

The surveys applied in this research were taken and adapted from the other researches which were proved to be reliable. The data obtained in this research was analyzed using exploratory statistical techniques. Exploratory statistical techniques, such as T-test and ANOVA, were applied and the results were evaluated for the Turkish customers.

The scales used in the second section of this survey were adapted from the valid scales which are loyalty (Too et al., 2001; Walsh and Beatty, 2007) and trust (Morgan and Hunt, 1994).

3.4. Pre-Test and Pilot Study

After specifying the scales that will be used in the research, the survey was prepared both in Turkish and English. Firstly, the scales from the literature were translated into Turkish. To make the survey simple and clear, reverse questions were avoided. Then, the Turkish version of the survey was translated back into English by a language expert. Pilot tests were conducted after completing the pre-tests.

The first pilot surveys were distributed to the participants and 98 surveys were collected to analyze the results. Then, the second pilot test was conducted with minor changes on the scales. 108 surveys were gathered and analyzed considering the first pilot test, too.

Reliability and validity of the scales were proved by the Pilot test. The actual survey was published online and was responded by 967 participants. As a result, the survey results were statistically analyzed.

Cronbach's Alpha values of each variable were calculated. The values which are over 70% are considered viable values (Fornell and Larcher, 1981). According to the specified criteria, Cronbach's Alpha test results were calculated for the scales as for loyalty α=0.882 and for trust α=0.948, and it is found that the results are reliable.

4. RESULTS AND DISCUSSION

The analyses were achieved by using the SPSS. According to the data collected; demographics, use of airlines, and ticket purchasing habits of the participants are as follows:

Of 967 respondents, 412 were females (42.6%) and 555 were males (57.4%). 231 (42.6%) of them were aged between 18 and 24, 274 (28.3%) of them were 25 to 34, 196 (20.3%) of them were 35 to 44, 86 (8.9%) of them were 55 to 64, 45 (4.7%) of them are in the age group of 65 years and over. Also, participants have education levels as follows: 15 (1.6%) of them had primary school education, 22 (2.3%) had secondary school education, 75 (7.8%) were high school graduates, 89 (9.2%) had associate degree, 529 (54.7%) had bachelor's degree and 237 (24.5%) had graduate degrees (Master's Degree/PhD). Most of the participants prefer the low cost airlines rather than the network airlines; 438 (45.3%) and 521 (53.9%), respectively. 298 (30.8%) of them mostly fly for business purposes, while 411 (42.5%) fly for visiting family and friends, and 258 (26.7%)

fly for touristic and entertainment purposes. 140 (14.5%) of them answered "no" to the question "Do you generally buy your ticket via the internet?", while 827 (85.5%) of them said "yes". 32 (3.3%) of them said never, 504 (52.1%) of them said rarely, 431 (44.6%) of them usually make price research prior to buying a ticket, while nobody does it all the time.

While executing the statistical tests of group differences, questions were asked for variables with five-point Likert scale. With these hypotheses we analyzed how demographics, use of airline, and ticket purchasing habits differ for the level of customer loyalty and trust. Therefore, null hypothesis H_0 and alternative hypothesis H_A were formed. These hypotheses are as follows:

H_1: There are statistically significant differences between gender and customers' level of loyalty.

H_2: There are statistically significant differences between gender and customers' level of trust.

H_3: There are statistically significant differences between age and customers' level of loyalty.

H_4: There are statistically significant differences between age and customers' level of trust.

H_5: There are statistically significant differences between education and customers' level of loyalty.

H_6: There are statistically significant differences between education and customers' level of trust.

H_7: There are statistically significant differences between carrier preferences and customers' level of loyalty.

H_8: There are statistically significant differences between carrier preferences and customers' level of trust.

H_9: There are statistically significant differences between travel purpose and customers' level of loyalty.

H_{10}: There are statistically significant differences between travel purpose and customers' level of trust.

H_{11}: There are statistically significant differences between internet buying and customers' level of loyalty.

H_{12}: There are statistically significant differences between internet buying and customers' level of trust.

H_{13}: There are statistically significant differences between price search and customers' level of loyalty.

H_{14}: There are statistically significant differences between price search and customers' level of trust.

In order to test the analyses of hypotheses; for the independent groups (when there are two groups), t-test; if there are more than two groups, one-way ANOVA test was used. Findings are shown in Table 1, 2, 3, and 4. Post-hoc test was applied when there are differences between the groups to determine which group causes the difference. Analyzed results are in 95% confidence interval (p (sig.) <0.05). When H_0 hypothesis is not supported, post-hoc tests results show which customer group has a significant difference. Post-hoc test results are shown in Tables 5 and 6.

It is shown in Table 1 that there is a significant difference between loyalty level and airline carrier preference (p=0.00<0.05). H_0 is rejected and alternative hypothesis H_7 is accepted. The mean value for loyalty level of low cost carrier customers (x=2.939), is lower than network carriers' (x=3.553). This refers to the fact that the loyalty of customers who prefer low cost carriers is lower than the loyalty of customers who prefer network carriers.

There is a statistically significant difference between loyalty level and customers' online ticket purchasing habits (p=0.02<0.05). H_{11} is accepted. Therefore, it can be said that customers who refuse buying tickets from internet have higher loyalty to the company (x=3.450>x=3.242). There is no statistically significant difference between gender and loyalty (p=0.833>0.05).

Table 1: The Results of T-Test Analysis for Airline Customers' Loyalty Levels by Gender, Carrier Preference, Internet Purchasing Habits

Loyalty	Category	N	Mean	Sd	F	Sig.	T	P (sig two-tailed)	Result
Gender	Female Male	412 555	3.278 3.265	0.915 1.019	5.677	0.017	0.211	0,833/2	H_1 Rejected
Carrier preference	Low cost Network	438 521	2.939 3.553	0.957 0.896	3.430	0.064	10,189	0,000/2	H_7 **Supported**
Internet	Yes	827	3.242	0.968	0.483	0.487	-2.331	0.020/2	H_{11}

purchasing	No	140	3.450	1.00	**Supported**

*N=967; *p<0.05*

When Table 2 is considered, there is a significant difference between trust level and airline carrier preference (p=0.00<0.05). H_0 is rejected and alternative hypothesis H_8 is accepted. Mean value for trust level of low cost carrier customers (x=3.532), is lower than network carriers' (x=4.00). This is interpreted as trust level of low cost customers is lower than trust level of network customers.

There is no statistically significant difference between trust level and customers' online ticket purchasing habits (p=0.174>0.05). H_{12} is rejected.

There is no statistically significant difference between gender and trust (p=0.906>0.05). H_2 is rejected.

Table 2: The Results of T-Test Analysis for Airline Customers' Trust Levels by Gender, Carrier Preference, Internet Purchasing Habits

Trust	Category	N	Mean	Sd	F	Sig.	t	P (sig two-tailed)	Result
Gender	Female Male	412 555	3.781 3.778	0.823 0.895	1.911	0.167	-0.118	0.906/2	H_2 Rejected
Carrier preference	Low cost Network	438 521	3.532 4.00	0.889 0.771	14.374	0.000	8.882	0,000/2	H_8 **Supported**
Internet purchasing	Yes No	827 140	3.771 3.878	0.859 0.895	0.000	0.995	-1.361	0.174/2	H_{12} Rejected

*N=967; *p<0.05*

The ANOVA results are given in Table 3. According to the ANOVA test results, there is no statistically significant difference between loyalty and either age or price research. H_3 and H_{13} are rejected because p=0.065>0.05 and p=0.498>0.05, respectively.

There is a statistically significant difference between loyalty and education level (p=0.00<0.05). H_0 is rejected and H_5 alternative hypothesis is accepted. Similarly, there is a statistically significant difference between travel purpose and customer loyalty level (p=0.001<0.05). H_0 is rejected and H_9 alternative hypothesis is accepted.

It is found that there are differences between sub-groups (education level and travel purpose) represented by supported hypotheses H_5 and H_9. Post-hoc test results in Table 5 show which groups have the differences.

Table 3: The Results of ANOVA Analysis for Airline Customers' Loyalty Levels by Age, Education, Travel Purpose and Price Search

Loyalty	Category	N	Mean	Sd	F	P (sig.)	Result
Age	18-24	231	3.70	1.436	2.084	0.065	H_3
	25-34	274					Rejected
	35-44	196					
	45-54	135					
	55-64	86					
	Above65	45					
Education	Primary School	15	4.87	1.041	5.22	0.000	H_5
	Secondary School	22					**Supported**
	High School	75					
	Associate Degree (Vocational School Graduates)	89					
	Undergraduate Degree (Bachelor's Degree)	529					
	Graduate Degree (Master/PhD Graduates)	237					

Travel Purpose	Business	298	2.12	0.849	6.904	0.001	H_9
	Visiting family and friends	258					**Supported**
	Entertainment and Touristic	411					
Price Search	Never	32	2.41	0.556	0.698	0.498	H_{13}
	Rarely	504					Rejected
	Usually	431					
	Always	0					

*N=967; *p<0.05*

ANOVA results were given in Table 4. According to the ANOVA test results, there is no statistically significant difference between age and trust (p=0.136>0.05). H_4 is rejected.

There is a statistically significant difference between education level, travel purpose, price research and trust (p=0.015<0.05; p=0.008<0.05; p=0.004<0.05, respectively). Therefore, H_6, H_{10}, H_{14} are accepted.

It is found that there are differences between sub-groups (education level, travel purpose, and price research) represented by supported hypotheses H_6, H_{10}, H_{14}. Post-hoc test results in Table 6 shows which groups have the differences.

Table 4: The Results of ANOVA Analysis for Airline Customers' Trust Levels by Age, Education, Travel Purpose and Price Search

Trust	Category	N	Mean	Sd	F	P (sig.)	Result
Age	18-24	231	3.70	1.436	1.683	0.136	H_4
	25-34	274					Rejected
	35-44	196					
	45-54	135					
	55-64	86					
	Above65	45					
Education	Primary School	15	4.87	1.041	5.22	0.015	H_6
	Secondary School	22					**Supported**
	High School	75					
	Associate Degree (Vocational School Graduates)	89					
	Undergraduate Degree (Bachelor's Degree)	529					
	Graduate Degree (Master/PhD Graduates)	237					
Travel Purpose	Business	298	2.12	0.849	6.904	0.008	H_{10}
	Visiting family and friends	258					**Supported**
	Entertainment and Touristic	411					
Price Search	Never	32	2.41	0.556	5.437	0.004	H_{14}
	Rarely	504					**Supported**
	Usually	431					
	Always	0					

*N=967; *p<0.05*

ANOVA tests results in Table 5 and 6 show if there are significant differences between groups. If the significance value is less than 0.05 at 95% confidence interval, Null hypothesis (H_0) is rejected. In this study H_5, H_6, H_9, H_{10}, H_{11}, H_{14} are supported. There are differences between sub-groups for these hypotheses. Table 5 and Table 6 show which groups have the differences.

Table 5: Post-Hoc Test Results for Loyalty

		Mean Difference	Post hoc (Sig.)
Education			
Secondary School	Undergraduate Degree (Bachelor's Degree)	0.566*	0.007
	Graduate Degree (Master/PhD Graduates)	0.580*	0.007
High School	Undergraduate Degree (Bachelor's Degree)	0.322*	0.007
	Graduate Degree (Master/PhD Graduates)	0.336*	0.009
Associate Degree (Vocational School Graduates)	Undergraduate Degree (Bachelor's Degree)	0.389*	0.006
	Graduate Degree (Master/PhD Graduates)	0.403*	0.011
Travel purpose			
Business	Visiting family and friends	0.289*	0.000
	Entertainment and Touristic	0.211*	0.004

Table 6: Post-Hoc Test Results for Trust

		Mean Difference	Post hoc (Sig.)
Education			
High School	Graduate Degree (Master/PhD Graduates)	0.259*	0.023
Associate Degree (Vocational School Graduates)	Undergraduate Degree (Bachelor's Degree)	0.237*	0.016*
	Graduate Degree (Master/PhD Graduates)	0.295*	0.006*
Travel purpose			
Business	Visiting family and friends	0.222*	0.002
	Entertainment and Touristic	0.141*	0.031
Price Search			
Never	Usually	0.340*	0.031
Rarely	Usually	0.161*	0.004

H_5: The customers with secondary school, high school, and associate degrees are more loyal to their preferred airline company than the customers with undergraduate and graduate degrees. Mean differences for these sub-groups are 0.566* - 0.580*, 0.322* - 0.336*, and 0.389* - 0.403*, respectively, and confidence level is less than 0.05.

H_6: The customers with high school degrees have higher level of trust than the customers with graduate. The customers with associate degrees have higher level of trust than the customers with undergraduate and graduate. Mean differences for these sub-groups are 0.259*, 0.207* - 0.295*, respectively, and confidence level is less than 0.05.

The findings show that the customers with higher education level have less loyalty and trust to the company.

H_9: The passengers who travel for business purpose are more loyal to their preferred airline company compared to the passengers who travel for visiting family and friends or entertainment and touristic purposes. Mean differences for these sub-groups are 0.289* - 0.211*, and confidence level is less than 0.05.

H_{10}: The passengers who travel for business purpose trust their preferred airline company more, as compared to the passengers who travel for visiting family and friends or entertainment and touristic purposes. Mean differences for these sub-groups are 0.222* - 0.141*, and confidence level is less than 0.05.

H_{14}: Customers who never or rarely do research for ticket prices trust their preferred airline company more than the customers who usually do research for ticket prices. Mean differences for these sub-groups are 0.340* - 0.161*, and confidence level is less than 0.05.

5. CONCLUSION AND LIMITATIONS

This study provides significant contributions in terms of airline customers' level of loyalty and trust in relation to demographics, use of airlines, and purchasing ticket habits. According to the findings; if the customers' education level is higher, their level of loyalty and trust for their preferred airline company are lower. Customers who prefer to use low cost carriers have low level of trust and loyalty to the company than the customers who prefer to use network carrier. The reasons lying behind the customers' having low level of "loyalty and trust" may be explained by Turkish customers' with previous experiences with this company or practices and recognition of the company. It would be beneficial to add service quality as a variable to examine in the future researches.

In case of considering the travel purpose, passengers who travel for business purposes are more loyal and they trust the airline company more than the passengers who are traveling to visit family or friends or for touristic and entertainment reasons. This situation can be explained as the business travel is recognized as a routine part of their business by those passengers and they make it a habit to fly with the airlines they are satisfied with and this leads to higher loyalty and trust.

Customers who prefer buying printed (paper) tickets are more loyal to the company. The reason for this may be that loyal people do not consider the alternatives such as buying online tickets from the internet. Turkish people usually do not opt for online shopping because they feel safer if the purchasing is verified physically.

Airline customers, who never or rarely do price researching prior to buying a ticket, trust their preferred company more than the customers who always research for the prices beforehand. This shows that the trust feeling leads customers to questioning the company much less than the people who have lower level of trust. Additionally, they may be choosing to trust the company just because they do not find it necessary to spend time for researching for the prices.

The results of this research provide valuable information about customers for the airlines already operating or planning to operate in Turkey. Both low cost and network airline companies should consider these findings to develop approaches to increase the demand for and profits of the company.

This study will lead future researches. Even though analyzed data were gathered from a large sample, there are certain limitations: Respondents are generally the passengers who use the airlines operating in Turkey. There is only one network carrier operating in Turkey. Because the respondents generally did not experience various low cost and network carriers, they may have answered the survey questions considering the airlines they have had experience with. Even though 967 airline passengers participated in the survey, a wide range of passenger experience could not take into consideration due to Turkey's limited number of airlines. Due to the financial limitations, this study was conducted only in Turkey, where experiences, cultures, and habits of people are similar. For further studies, including international and more experienced airline passengers from diverse cultures would be advantageous.

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THE INFLUENCE OF CITY IMAGE ON THE UNIVERSITY SELECTIONS OF STUDENTS STUDYING IN THE DEPARTMENT OF MARKETING

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ABSTRACT

Purpose - This study analyses the influence of city image on university students. The question "How are students influenced by city image when they are making their school selections?" is the main topic of the study.
Methodology - The questionnaire form was created after a literature search and subjected to a pilot scheme after it was revised based on the opinions of specialist academicians. When determining research questions, studies by Demirel (2014) and Özdemir and Karaca (2009) were drawn upon, and its validity and reliability were tested by administering 40 pilot questionnaires before putting it into its final form. Data obtained were subjected to an SPSS analysis, and the influence of city image on university selections was analysed with the help of regression and correlation analyses and comparative tables.
Findings- In this study, it is concluded that students primarily choose those schools which are in a close distance to where they live. As a result of increasing competition, many schools have begun to acquire students from their own region. Factors like natural and historical attractions and social environment also shape the selections of students. When making these selections, students consult with those around them such as their friends, and thus they obtain the first information about a certain school from them.
Conclusion- It is seen when the findings of the study were assessed in general that students make their university selections primarily based on the city in which universities are located. Proximity of a school to where they live and factors shaping the image of a city such as sociality and cultural/natural richness also become influential in this selection. Those students who act according to city images become happier during their educational lives, and their level of satisfaction with their university tends to increase.

Keywords: City image, university students, university selection, consumer preferences, city development
JEL Codes: M30, M31, M39

1. INTRODUCTION

In Turkey, millions of students take the university entrance exam each year. Therefore, the contribution that students make to the city of their university education by their socioeconomic influences bring about important results.

As of 2015, the number of students studying in undergraduate departments is 3,628,800. A total of 2,013,762 students study in associate degree programs including open education and distance education, 342,101 students study in master degree programs and 78,223 students in doctorate programs. The total number of students studying open education is 2,803,064, while 59,282 students study in distance education. The number of students studying in state universities is 5,615,293. (http://www.sinavtakvim.com)

University exams that concern millions of students raise the question “the schools in which city will students prefer?”. Opening of many universities especially in recent years has increased the demand for certain departments. Thousands of unfilled quotas remain each year. In 2016, the number of unused quotas remaining after the central placement in universities was 60,147 (http://www.haberturk.com).

As of 2017, there are 183 universities in Turkey. Of these, 118 are state universities while 65 of them are foundation universities. As of 2015, the total number of students is 6.062.886. Of these, 3.276.658 are male while 2.786.228 are female (https://tr.wikipedia.org).

Especially the unfilled quotas in many Anatolian universities and in some private schools are striking. In some universities, associate and undergraduate programs are removed due to a lack of demand. Therefore, the question of the criteria that students consider when they are making their university preferences gains importance. Universities need to act according to these preference variables.

The current study is based on the assumption that students determine their university according to city images. Rather than factors such as the presence of certain academicians, educational quality and social opportunities of a school, students make their university preferences according to the city in which a university is located. Therefore, city image should be carefully examined by local governors.

2. LITERATURE REVIEW

There are some Turkish and foreign studies about the criteria that students consider when they are making their university preferences. According to Drives and Michael (2006) and Shah and Nair (2010), students take the following factors into consideration when they make their university preferences;

- Amount of scholarship that a school will offer to a student and the total amount of school fee that a student has to pay,
- Information that students obtain from their friends and other people around them,
- Safety of the campus area,
- Expectations regarding their academic careers,
- Opinions of the families of students,
- Expectations of university lecturers.

In addition to these factors, a city's image and location, its characteristics and level of development also influence the university preference of students. Those cities which make a positive impression in terms of image attract the audience which is influenced by it, and show development in areas like tourism and education.

An image, which is utilised in all marketable products and processes, is a picture, impression or map that forms in human mind as regards any event, object, person, business, country or city (Bakan, 2008: 293). An image relating to a certain destination is classified into two as basic image and special image. A basic image is such factors as places to be seen, recreation, infrastructure adequacy, urban cost, access network structure, and historical, political and cultural characteristics. A special image on the other hand is a relative image that changes from person to person. A special image is a type of image which emerges in connection with a basic image and involves the differences among consumers arising based on perception (Özdemir, Karaca, 2009:118). When forming a city image, therefore, it is necessary to try creating a special image that will have a positive influence on people. A city image is a person's group of beliefs that consists of that person's thoughts and opinions about a city. The totality of psychological characteristics impressed on the mind of an audience as regards a city can also be called city image (Gecikli, 2012: 5).

The goal of city image development involves the idea of attracting people's attention to it and creating a positive image about it. But the marketing of cities is not as easy as that of branded products or other commercial goods (Dumbraveanu, 2010: 54). Therefore, the aim in the context of a city image is to increase the awareness of a certain city, to be recognised nationally and internationally.

There is a communication between a city and the people who live in or visit that city. This communication gives people a perception about the image of the city (Uçkaç, 2006: 4). When a city is evaluated from an individual perspective, the person's past, social status, environmental experience, worldview, and lifestyle can be important factors. As for the evaluation of a city based on a group identity, what gains importance is the common values and social roles in the society in which a person lives and whether or not these values are compatible with environmental quality. Rather than persons, the socio-cultural characteristics of the community in which the person lives play an active role in this second type of evaluation. (Ünlü, 1991: 328). Thus, differences of opinions in the evaluation of a particular region are due to the variety of personal characteristics.

What is understood from the concept of city image is the appearance and lifestyle of that city. The streets, avenues, parks and gardens, sculptures and libraries of the city, its places that people collectively use, the clothing and behaviors of its people, and its architectural structure change the feelings and thoughts we have about that city. Space, time, and movement determine the boundaries of the city and impose a meaning on all living/ inanimate beings and things (Sevindi, 2003: 101).

In recent years, local governors, city planners and urban decision-makers have begun to take important initiatives to promote their cities and strengthen their image globally. These people believe that the general image of a city is an important factor in the decision making process for various target groups (Avraham, 2004: 471).

In current times of intense competition, it is necessary to actively get covered in media to improve the image of one's city rather than waiting for a coincidental media coverage (Paşal Taşoğlu, 2012: 70). Kotler stated that city images in the minds of people may be positive, negative or mixed. There are very few cities with a totally positive or negative image. Many cities have a mixed or weak image. Cities with a negative image have obstacles in front of their socio-cultural development. People living in that city tend to have negative thoughts about it (Yuan and Chong, 2007: 257).

The current appearance of a city creates our first impressions of that city. The images occurring in the mind of a person who lives in or visits the city are influential in the formation of an image of that city in their mind (Engez, 2007: 47).

There are many factors that influence city images. According to Beerli and Martin (2004) these factors are as listed below:

Table 1: Factors Influencing City Images

Natural resources	Weather (temperatures, humidity, sun, overcast, etc.), Beaches (sands, nature of sea, quality of beaches, rocky areas etc.), Richness of rural areas (protected natural resources, lakes, mountains, sea, etc.), Diversity and uniqueness of fauna and flora.
Infrastructure	Advanced and quality roads, airports and ports, Private and public transport, Status of health services, Status of communication services, Status of commercial infrastructures, Prevalence of modern buildings.
Tourism Resources	Quality of hotels and accommodation (number of beds, facilities, etc.) Existence of restaurants, bars, disco clubs, cafes, etc. Number and quality of tourism centres, accessibility of destinations.
Entertainment Resources	Thematic parks, Entertainment and sports activities (golf, fishing, hunting, skiing, diving, etc.), Water parks, zoos, adventure activities, shopping.
Cultural, historic and artistic opportunities	Abundance of historical sites, musical and artistic activities. Centres of religion, folklore, handicrafts and gastronomy.
Political and Economic Factors	Political stability, Political trends, Economic development, Security (crime rate, terrorist attacks), prices of products and services.
Environment	Landscape beauty, Attractiveness of cities and districts, Cleanliness, Crowd population, Air and noise pollution, Traffic congestion.
Social Factors	Hospitality and friendliness of local people, Discrimination and poverty, Quality of life, Language barrier
Urban Atmosphere	Luxury, Fashion, Famous places, Family places, Exotic, Mystical, Relaxing, Stressful, Fun-pleasant; Existence of Pleasant, Boring, Attractive or interesting places.

In addition to the resources of a city, there are things that should be done in order for it to be a marketable product and develop. These are as follows (Rainisto, 2003: 13):

1) A city should provide fundamental services and develop its infrastructure facilities for the satisfaction of its citizens, business circles, investors and visitors.

2) It should create attractive resources to maintain existing business activities, receive general public support, and attract new investors, entrepreneurs and tourists.

3) It should improve its advertising activities and its image, and believe in the benefits of these.

4) It should receive support from civil society, leaders, and company representatives.

A favourable city image increases the interest that students take in a city and influences their university preferences. And cities attracting more students show more development (Demirel, 2014: 233). University students make a specially significant influence on the economic and social development of a city. Besides, universities and their stakeholders make a contribution to a city in many topics such as creation of a qualified workforce, development of new fields of business, interaction with different cultures, development of employment and commerce.

3. DATA AND METHODOLOGY

For the purpose of the research, numeric data collected by the method of face-to-face questionnaire were analysed using the SPSS 18 software package. The population of the research was 4364 students studying in the marketing departments of different universities. As it was not possible to reach all the population, the sampling method was embraced.

The "Convenience Sampling Method" was used in the research. When determining the sample size, the sampling formula which is utilised for quantitative variables and considered for unlimited populations or those with an unknown volume was used (Özdamar, 1999: 260).

The questionnaire form was created after a literature search and subjected to a pilot scheme after it was revised based on the opinions of specialist academicians. When determining research questions, studies by Demirel (2014) and Özdemir and Karaca (2009) were drawn upon, and its validity and reliability were tested by administering 40 pilot questionnaires before putting it into its final form.

The questionnaire form, which was drawn up according to the 5-Point Likert Scale, was administered to associate degree students studying in 10 different colleges in Turkey between 1 January and 15 February 2017. The research was expanded to involve students from another 5 colleges between 20 May and 10 June 2017.

The questionnaire form consists of four parts.

In the first part, the participants were asked questions about the importance of city image in their university selections.

In the second part, they were asked a question about the sources from which they obtained information about their school before choosing it.

In the third part, students were asked to rank their reasons for choosing the university that they currently attend to.

In the last part, questions regarding the demographic data of participants were asked.

In the research, a total of 600 questionnaire forms were obtained taking into consideration that there might be questionnaire forms which might be excluded from analysis due to such reasons as level of reliability, margin of error, deficient or erroneous coding, etc. and also considering the researcher's opportunities of reaching the target audience. A total of 500 questionnaire forms were included in the analysis by excluding 100 questionnaire forms due to deficient or erroneous coding.

The research data collected by the questionnaire method were described by calculating their frequency-percentage distributions, arithmetic means and standard deviations. Reliability of the study was established through Cronbach's Alpha Analysis. The factors which are influential in university selection were presented with the mean and standard deviation values of the influence of city image on university selection. The relationship between the school district and student satisfaction was shown by regression analysis, whereas the relationship between city image and student satisfaction was shown by correlation analysis. In this way, it was studied how the place where students live influences the satisfaction they get from their school. The "t-test" was used for unrelated measurements in comparing the participants' views on the topic and their demographic characteristics.

4. FINDINGS AND DISCUSSIONS

Validity and Reliability Analysis

In the reliability analysis, the alpha coefficient, which is calculated by the method of internal consistency, was taken into consideration. The alpha coefficient is expressed as the weighted standard mean change, which is obtained by proportioning the sum of variances of the k expression in the scale to the general variance. The alpha coefficient is assessed according to the below ranking when calculating the reliability of the scale (Özdamar, 1999: 513-522).

$0.00 \leq \alpha < 0.40$: The scale is not reliable,

$0.40 \leq \alpha < 0.60$: The scale has low reliability,

$0.60 \leq \alpha < 0.80$: The scale is reliable,

$0.80 \leq \alpha < 1.00$: The scale has high reliability

Table 2: Cronbach's Alpha Analysis

Cronbach's Alpha	N of Items
.760	18

According to the results of the reliability analysis, the questionnaire is in the category of reliable questionnaires by a coefficient of 0.76. Of the questionnaire participants, 272 are male and 228 are female. Forty-four percent of the participants live in a metropolis, 25% in a city centre and 20% in a city district. Fifty-four percent of the participants study in a metropolis and 37% of them study in a city.

Statements of Students about Their University Preferences

Table 3 shows the reasons for which students preferred the city in which they study. According to the table, the most important factor that influences their preference is the city's proximity to where their family lives. Students make their selections according to ease of access and proximity to their family. Level of development in terms of tourism and presence of natural and historical attractions are other important reasons.

Table 3: The Influence of City Image on University Preference

Statements (my reason for preferring my current school is because the city is...)	N	Average	Standard Deviation
Reliable.	500	3.18	1.274
Socially Attractive.	500	3.23	1.259
Economically Powerful.	500	2.95	1.217
Has a Good Image.	500	3.15	1.220
Cheap.	500	2.65	1.271
Close to where my family live.	500	3.56	1.490
Developed.	500	3.20	1.255
Peaceful.	500	3.44	1.192
Big.	500	2.92	1.252
Developed in Terms of Education.	500	3.23	1.141
Has a High Life Quality.	500	3.20	1.150
Has Natural and Historical Beauties.	500	3.45	1.750
Developed in Terms of Culture/Art.	500	3.22	1.204
Has a Powerful Infrastructure.	500	2.91	1.229
Developed in Terms of Tourism.	500	3.52	6.782
Has Good Municipality Services.	500	2.87	1.290
Located in an Easily Accessible Area.	500	3.37	1.222
Modernist.	500	3.09	1.233

Table 4 includes statements showing the sources from which students gathered information about their current universities before making their school selections. According to the table, students mostly obtain information from their acquaintances. The rate of those who agree with this statement is 40%. Thus, students' friends and others around them provide them with information about universities and shape their selections. And the rate of the students collecting information from Internet sources such as social media and school websites is around 20%.

Table 4: Information Gathered about a School before Making University Selections

Statements	Yes	Percentage
Hearsay (I don't remember where I heard about it)	49	9.8
Media (TV, newspapers, radios, etc.)	17	3.4
Celebrities (artists, politicians, sporters, etc.)	6	1.2
Written sources (books, brochures,	20	4

journals, etc.)		
Acquaintances (friends and other acquaintances)	204	40.8
Internet (social media, school website, etc.)	104	20.8
OSYM booklet	31	6.2
Had no information.	67	13.4

Table 5 lists the reasons for which students preferred their current school. According to the table, the city in which a school is located is a factor that primarily determines the university selections of students. While city is the most important reason of preference for about 37% of students, the score acquired in the undergraduate placement exam is the second most important factor. When Tables 3 and 4 are taken together, it is seen that city characteristics and image are the most decisive factor in university preferences.

Table 5: Factors Influential in University Selections

Statements (in percentage expressions, values following a dot were not considered.)	1st Row (%)	2nd Row (%)	3rd Row (%)
The City in Which the School Is Located	37.2	14.4	13.6
Education Quality of The School	4.6	15.0	13
My Exam Score Was Sufficient Only for This School	16.8	22	16.8
My Preference Was Based on Department, Not on School	12.2	11.2	8.4
Family Desire/Pressure	6.8	8.8	8.8
Guidance by Prep/High School Teachers	3.0	6.4	6.2
Academicians available in a School	1.8	3.4	2.4
Social Opportunities of a School	3.6	5.4	8.0
The Desire of Getting Away from the City of Dwelling	10	8	11.4
None of These	2.6	2.4	5.2

Table 6 shows the influence of sex on university preferences. According to the table, when compared with female students, male students acted more based on the guidance of their prep school teachers and considered the academicians available in universities when they made their university selections.

Table 6:. The T-Test Comparing the Influence of City Image in School Selections by Sex Difference

Statements (My reason for selecting the university in which I study)	Sex	Average	Sig 2 (tailed) Level of significance
Guidance of my prep/high school teachers	Male Female	3.78 3.56	0.02
Academicians in a certain university.	Male Female	3.87 3.74	0.03

Table 7 shows the relationship between the size of the city in which students receive education and their level of satisfaction. According to the model summary table, 42% of students' satisfaction is related to the size of the city in which they study. It is understood, therefore, that the satisfaction level of those students who study in a metropolis is higher.

Table 7: The Regression Analysis Showing the Relationship between the Location of a School and the Satisfaction Level of Students

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.209a	0.44	0.42	1.137

The value on the significance column of the ANOVA table reveals that the relationship between level of satisfaction and city size is statistically significant at $p < 0.01$. Formulating the relationship in the table, we get;

$F (1.905) = 22.730; p < 0.01$

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	29.366	1	29.366	22.730	.000[a]
	Residual	643.392	498	1.292		
	Total	672.758	499			

a. Predictors: (Constant), School Location

b. Dependent Variable: Satisfaction Level

The coefficients table on the other hand gives the regression coefficients used for the regression equation and their levels of significance. In our example, the coefficient of the variable of the size of the school location is 0.372, and the constant value of the equation is 1.905. When we place these values in the equation of $Y = bX + a$, we get the equation $Y = 0.372X + 1.905$. This equation shows the influence of the size of the university location on student satisfaction.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.905	.130		14.602	.000
	Location	.372	.078	.209	4.768	.000

a. Dependent Variable: Satisfaction Level

The relationship of the satisfaction levels of students with two different variables is examined in Table 8. The first of these variables is the life quality of the location and the other is image. In the table, the relationship between the satisfaction of students and city image, on the one hand, and the influence of urban life quality on student satisfaction, on the other hand, were analysed.

According to the correlation analysis, a slightly significant positive relationship exists between the level of satisfaction of students and the image and life quality of the city in which a university is located. If a city has a high quality of life and a good image, the satisfaction level of students regarding their university increases. This result that emerges when Tables 3 and 4 are taken together supports the assumption that there is a relationship between city image and university selections. Students prefer cities with a high quality of life and a good image and, consequently, their levels of satisfaction increase during their university lives.

Table 8: The Correlation Analysis Showing the Relationship between the City Image of a University and the Satisfaction Level of Students

		Level of Satisfaction with School	Life Quality of City	City Image
Level of Satisfaction with School	Pearson Correlation	1	.415**	.423**
	Sig. (2-tailed)		.000	.000
	N	500	500	500

**. Correlation is significant at the 0.01 level (2-tailed).

5. CONCLUSION

The university entrance exam is extremely important for millions of students because this exam determines what kind of a life students will have in the future. Therefore, the department and school selections that students make become very decisive for their academic and social lives. The fact that many universities have been opened in recent years puts a strain on students regarding their preferences and cause them to remain hesitant among different choices. This situation has also led to the emergence of competition among universities. Opening of numerous departments, presence of vocational high schools in many districts, and spreading of private universities have resulted in an excess supply of quotas in universities. Associate degree programs in many places have been closed because of a lack of students. In some universities, however, none of the departments are closed and, in fact, they face an increasing number of student demand each year. The current study analysed the influence the location of a school on the university selections of students. An answer was sought for the question regarding how the image, size, cultural/social opportunities and economic development level of the area where a university is located influence the preferences of students. According to the findings of the study;

When making their university selections, students primarily choose those schools which are in a close distance to where they live. As a result of increasing competition, many schools have begun to acquire students from their own region. Factors like natural and historical attractions and social environment also shape the selections of students. When making these selections, students consult with those around them such as their friends, and thus they obtain the first information about a certain school from them. It follows based on this finding that especially those schools that suffer a lack of students would be able to fill their quota by satisfying their existing students.

The point that university candidates consider the most when they make selections after the exam is the city in which a university is situated. A favourable city image and a high quality of life will influence their educational life. It is known that those students who study in developed touristy locations with diverse social opportunities become more satisfied with their universities. Thus, city image, which involves all these factors regarding a city, is extremely important for the school selections of students.

Academic criteria like the educational quality in a school, presence of certain academicians and scientific publications are not among the primary points that students consider when they make their school selections. Male students care for the presence of certain academicians in universities and act based on the guidance of their prep school teachers at a higher extent when compared with female students.

It is seen when the findings of the study are assessed in general that students make their university selections primarily based on the city in which universities are located. Proximity of a school to where they live and factors shaping the image of a city such as sociality and cultural/natural richness also become influential in this preference. Those students who act according to city images become happier during their educational lives, and their level of satisfaction with their university tends to increase. Students also consult with their friends, in particular, when obtaining information about certain schools. If universities do not desire to suffer unfilled quota in the future, therefore, they should care more for their existing students. Besides, as the occupancy rate in a university is related to city image, activities that can be taken by the local governors of a city also turn out to be very important. Carrying out image studies, attaching importance to public relations, increasing social opportunities and creation of an urban life which is suitable for students for the purpose of enhancing a city's image are critically important for development of universities and the cities in which they are located. In order to actualise this, it will be beneficial in terms of the development of cities and universities to work with specialists who have experience in brand city activities.

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