Selected Writings on Financial and Economical Behaviours in the New Economy

Edited by

Saadet Ela Pelenk

Selected Writings on Financial and Economical Behaviours in the New Economy

Selected Writings on Financial and Economical Behaviours in the New Economy

Edited by

Saadet Ela Pelenk

Cambridge
Scholars
Publishing

TABLE OF CONTENTS

Section II: Innovative and Proactive Behaviour in the New Economy

LIST OF FIGURES, CHARTS AND TABLES

ACKNOWLEDGEMENTS

LIST OF ABBREVIATIONS

AI:	Artificial Intelligence
ATB:	Attitudes towards Behaviour
E-commerce	Electronic commerce
EIRO:	European Industrial Relations Observatory
EWCS:	European Working Conditions Survey
HLS:	Household Labour Statistics
ICSE:	International Classification of Status Employment
IoT:	Internet of Things
ILO:	International Labour Organization
PBC:	Perceived Behavioural Control
SN:	Subjective Norms
TPB:	Theory of Planned Behaviour
TSI:	Turkish Statistical Institute

INTRODUCTION

The rapid developments in technology, globalization, consumption behaviours and innovations in the investment processes in the late 1990s led to the emergence of the concept of the "new economy" by enabling knowledge to become the main production factor. The new economy is a digital economy emphasizing the concept of "virtualization" in economic activities where information and communication networks are extensively used. Therefore, it becomes possible for consumers to obtain products and services by comparing them in a shorter time (e-commerce). This situation closes the gap between the consumer and the producer and enables the needs and expectations of the consumers to direct production.

The changing financial behaviours of consumers in the new economy affect the profit-loss balance of enterprises. Contrary to the comparative advantage theories, constantly offering innovative products and services to the market and opening up to new markets have become the main target of enterprises in the new knowledge-based economy. This book consists of two sections and nine chapters based on the financial behaviours of consumers and businesses in the new economy and the innovative approaches used in employment, entrepreneurship and production processes. The first section, with the title "the new economic market conditions and consumption preferences", addresses the financial and economic behaviours required by businesses and individuals.

In the first chapter, Serpil ÇIĞDEM and Emine BALCI discussed the new self-employed issues, which are presented with the theme of entrepreneurship in order to increase flexible employment but in reality host the features of precarious work, in the context of the new economy based on information and technology. The digitalized economy offers new forms of employment that provide employees with flexibility and freedom. In particular, it leads to the creation of a new hybrid employment status between self-employed and paid work. In this context, the study primarily explains the concept of dependent self-employment and then presents an overall view of dependent self-employment in Turkey based on the statistics by the Turkish Statistical Institute (TSI) 2017 "Self-Employed and Employers".

In the second chapter, Abdulmuttalip PILATIN approached the efficient market hypothesis in an argumentative way and evaluated investment and

decision-making by taking an emotional decision on the behaviours that are not rational in the decision-making stages of the investors. The study presents a theoretical framework that includes the features that affect the investment decisions of individuals and the effects of non-rational behaviours on stock prices (anomaly). In addition, some points that should be taken into consideration in order for the investors to earn more are emphasized in the study.

In the third chapter, Önder DILEK discussed smartphone buying behaviour, one of the core products of the digital economy with the change of consumption habits. The determination of this situation was examined within the framework of planned behaviour theory. The study discusses the importance of individuals' previous experiences in spending decisions and the impact of the environment (adopted groups) within the framework of behavioural attitudes, perceived behavioural control, and subjective norms. In this context, it has been found that the change in intention is primarily created by the attitude towards the behaviour and the intention comes in the first place in determining the buying behaviour. Furthermore, it has been determined that, in choosing smartphones, consumers give most importance to guarantee coverage, camera resolution, quality, price, aesthetic appearance and battery life.

In the fourth section, Onur KÖPRULU, Mithat TURHAN and İlter HELVACI mentioned buying behaviour in the garment industry. Consumer decisions and brand in the garment industry, holding a crucial position in exports in Turkey, have been analyzed in terms of the five-factor personality traits in the study. In this context, "satisfaction" and "honesty" in brand selection have been identified as the main factors affecting the new generation consumers.

In the fifth chapter, Hande GUNEŞ emphasized that shopping has a different meaning for everyone. At this point, one of the most interesting aspects of the studies on consumer behaviour is the analysis of women and men in shopping. According to the study, shopping holds different meanings for women and men, and it also holds different meanings for different age and income groups. The study reveals the kinds of differences between women and men in terms of the shopping phenomenon. With this objective, a survey was carried out with 520 people from the most crowded cities, namely Sakarya and Istanbul in Turkey, by using the convenience sampling method.

Innovation, which is the basis of consumers' general spending trends, is a growth tool in the new economy. In this context, innovation, the meeting point of human capital and technology, has become a power that decreases costs with R&D investments, increases quality and prevents inflation. On

the other hand, fast consumption habits and products going out of fashion cause environmental damages. The second section of the book with the title "Innovative and Proactive Behaviours in the New Economy", provides information about innovation and quality which are a competitive factor for enterprises in the new economy, the effects of being proactive on the financial behaviour of individuals and businesses and issues as a competitive factor for business in the new economy.

In the sixth chapter, Salih YILDIZ discussed the impact of eco-innovation, i.e., the use of environmentally sensitive products and services, on brand image and buying preferences. The study shows that the enterprises that direct the spending habits of consumers along with technological advances cause environmental problems (environmental pollution, risk, etc.); however, eco-innovation reduces environmental damage through the enterprises' production process, marketing and changes in organizational structure.

In the seventh chapter, Meltem OZTURK explained that the fourth industrial revolution is set to change the way in which we live, work and interact. As part of that, emerging technologies and digitalization are redefining the way that people use buildings posing both an opportunity and a threat to those in the property industry. In terms of real estate, it is necessary to understand and apply the innovations brought about by the digital age. "Real Estate 4.0 And the Digital Marketing Age" is described in this chapter. It is explained how digital marketing is used as a strategic approach towards brands of real estate. So, we can see a real estate market that is constantly updated with digital innovations.

In the eighth chapter, Emel YILDIZ examined the service quality of logistics for electronic service customers with the spread of e-commerce. The study focuses on the effects of operational and relational logistic services on satisfaction and behavioural intention. In this context, it is stated that understanding quality service in e-commerce effects behavioural intention by providing satisfaction.

In the ninth chapter, Saadet Ela PELENK and Akif Ziya BAYRAK examined the effect of the financial literacy and proactiveness of individuals on their consumption preferences in terms of budgetary balance together with the information and communication technology offered by the new economy. In this study, it is emphasized that individuals who want to overcome economic crises easily and try to catch a growth trend should have financial knowledge and the ability to evaluate. On the other hand, it is observed that proactive people who are enterprising and perform decisively until they reach their financial goals have taken successful financial decisions about their future. In the new economy, where

information, communication technology, quality and marketing speed have become crucial, the behaviours of enterprises and individuals have been reshaping. I believe that this study will fill the gap in the literature. However, I think it could be further developed by other researchers.

SECTION I:

FINANCIAL MARKET CONDITIONS AND CONSUMPTION PREFERENCES IN THE NEW ECONOMY

CHAPTER ONE

BLURRED LINES BETWEEN EMPLOYMENT AND SELF-EMPLOYMENT: DEPENDENT SELF-EMPLOYMENT IN TURKEY[1]

SERPIL ÇIGDEM AND EMINE BALCI

Introduction

There has been an increase in the studies on self-employed workers conducted by both policy makers and academics in the last two decades. Entrepreneurship and self-employment are becoming more important in the policies intending to increase economic growth and employment. The increase in the number of non-agricultural self-employed workers in industrialized countries is used to increase employment for the vitalization of static economies because the significance of self-employment has always been distinct. According to the firms, self-employed workers provide more flexibility in the way that firms perform their activities. The increased use of atypical workers through especially outsourcing, subcontracting and franchising enables employers to manufacture at lower costs.

The revival of self-employment is one of the most significant developments in today's labour market. Although there had been a steady decrease in the percentage of self-employed in total employment in almost all developed countries by the second half of the 20th century, there has been a return to self-employment in recent years. Structural changes such as the increasing importance of the service sector, franchising, the development in contractual arrangements aiming for outsourcing and enterprises' tendency for degrowth have contributed to a massive increase in self-employment (Buschoff & Schmidt, 2009, p. 148). The increase in

---

[1] This paper is a revised version of a study presented at the 4th International Congress on Political, Economic and Social Studies (ICPESS), in Venice/Italy on 28-30 June 2018.

self-employment as a new way of working, on the other hand, is blurring the lines more between employed and self-employed people. In this period, as part of the tendency towards increasing the flexibility of the labour market, it is claimed that the number of "dependent self-employed" has increased.

Under normal circumstances the relationship between an employer and an employee is typically hierarchical. However, this hierarchical structure in firms has been changing. Dependent and permanent workers are replaced by temporary ones who are observed to be hierarchically and economically dependent on their employers they have signed a contract with. Yet these workers are considered as self-employed. Such a relationship is termed as "dependent self-employment" (Eichhorst, Braga, Famira-Mühlberger, Gerard, Horvath, Kahanec, Pedersen, 2008, p. 13; Williams, Lapeyre, 2017, p. 5; Oostveen et al., 2013, p. 1).

The International Labour Organization (ILO) (2003, p. 9), defines self-employed workers as "those who work under a civil or commercial contract; but who are in fact dependent on the firm they are working for or who are integrated into this firm". Dependent self-employed workers who are officially considered as self-employed reflect some characteristics of employed workers (Oostveen, Biletta, Parent-Thirion & Vermeylen, 2013, p. 1).

The report entitled "Dependent Self-employment: Tendencies, Difficulties and Policies" issued by the International Labour Organization (ILO) in 2017 deals with dependent self-employment within the context of efficient employment and a decent business approach. In this report, it is emphasized that the only issue is not a jobs gap for the working age population in European countries but there has been a decrease in the quality of available jobs as well. Employers prefer working with more self-employed workers to relieve themselves from the obligation of the contract. This tendency is increasing especially with the growth of the Gig economy. The purpose of this study, in this respect, is to shed light on the situation of self-employed workers in Turkey by defining the term "dependent self-employment". There has been no prior study carried out regarding the self-employed in Turkey.

Method

In this study, the conceptual framework of self-employment and dependent self-employment has been drawn by doing a literature review, and subsequently the socio-demographic characteristics and distributions of dependent self-employed people are presented in tables. Data regarding

the tendencies of dependent self-employment in Europe have been compiled from the data in the reports issued by the ILO (2017) and Eurofound (2013). In addition, an overview of dependent self-employment in Turkey is presented by analyzing the statistical data from the Turkish Statistical Institute (TSI), Household Labour Statistics (HLS), and the labour module named "Self-employed People and Employers" in 2017. At the end of the study, it is emphasized that although the dependent self-employed are actually seen as self-dependent, they work under working conditions similar to employed workers and are increasing flexible working practices. Some suggestions are also put forward to improve the working conditions of the dependent self-employed.

Self-employment and New Tendencies

The Term Self-employment

With the increasing importance of entrepreneurship in the growth and development process of economies, interest in the self-employment concept has started to rise as well. Recently a boost has been observed in non-agricultural self-employment in most of the OECD countries. Self-employment has become an important source of business in many countries. It is also important for the resource of entrepreneurship and the growth of small businesses. More entrepreneurs mean new ways to organize further innovation and production. People not only recruit themselves but they also hire others. Thus, this contributes to economic growth by creating a potential for long-term employment growth. The OECD (2000) refers to this increase in self-employment as a "partial renaissance" (OECD, 2000, p. 155; Ohlsson, 2004, p. 3). Industrial organization in an economy also has important impacts on self-employment. If the business is organized to create self-employment opportunities, the rate of self-employment can further increase. The current tendency towards flexible working arrangements worldwide has an important place in the development of self-employment (Hakim, 1988, p. 424).

Today with the development of digital technology more people than ever before prefer self-employment because of the freedom and flexibility it brings. Indeed, self-employment has shown an upward tendency in the last decade and it does not show any sign of slowing down. Most of the recent growth is shaped by the extension of the highly qualified freelance sector. Self-employed people are given importance especially in the economy of England. It is observed that just self-employed people who do

not have any personnel contributed 271 billion pounds to the English economy in 2017. The number of self-employed people who had no personnel has increased 34% between 2008 and 2017 (IPSE, 2017, p. 3).

Employment status is addressed in two groups, paid employment and self-employment, according to the ILO, ICSE (International Classification of Status in Employment) in 1993. This approach was embraced in the 15th International Conference of Labour Statisticians (ICLS) and up-to-date definitions are made by reviewing employment status.

In the 15th ICLS, under the category of wage employment, there were those who worked for wages, salaries and daily wages; and there were self-employed people, employers, unpaid family workers, and members of producer cooperatives and workers who cannot be classified under the heading of self-employed (International Work Organization, 2013). According to the ILO 1993 ICLS, the term "self-employed" is defined as: "Self-employed people are those who do the jobs defined as self-employment without any permanent employee during the reference period".

Even if the definition of self-employed has been done by the ILO, there are some difficulties in making a standard definition of this term, which can be applicable across countries. These difficulties stem from specific national contexts, legal frameworks and recent and important changes in employment relations. At the same time, one of the reasons for the uncertainty of the self-employed term defined in labour force surveys or tax, social security and labour law is caused by the fundamental distinction between the self-employed small companies and the self-employed without any personnel (Fraser & Gold, 2001, p. 681).

Therefore, it is hard to draw an institutional framework for self-employment and to set up rights and security systems accordingly. There is more than one type of self-employment and there are differences between them (Pedersini, 2010, p. 5).

Self-employed people represent a diverse and complex group: conventional professionals, artisans and small entrepreneurs represented by enterprise and employer institutions, journalists, performing artists and those who do not have union rights and the evident occupational identity of "self-employed" are thought to be in this concept.

In some countries, the distinction between these groups is based on legislation. For instance, in Austria, self-employed workers with a trade licence are considered as a firm and have to be a member of the Austria Federal Chamber of Economic Affairs (WKO). In other countries, like Italy, self-employed workers need to register in the professional chamber (Pedersini, 2010, p. 39).

Despite all the differences, however, it is possible to define the five most used fundamental self-employment categories in the literature:

1. Entrepreneurs who carry out their work with the help of their employees;
2. Conventional free professionals who have to meet specific requirements for working to comply with the codes and codes linked to regulations and pass the exams, which will be recorded, in their public registries. They usually practise their activities alone or with other professionals and with the help of a limited number of workers.
3. Traditional self-employed workers such as craftsmen, traders and farmers. These people usually work with family members and possibly a small number of employees.
4. Self-employed people working in qualified but irregular occupations. They are sometimes called "new" professionals.
5. Self-employed people working in unqualified professions. They work without the help of employees but sometimes supported by family members (Pedersini & Coletto, 2010, p. 2).

In general, statistics divide self-employment into three sub-categories: self-employed without any personnel or "self-employed workers"; self-employed with personnel or "employers"; and unpaid family workers. The term "self-employment" generally means the sum of "self-employed workers" and "employers" (OECD, 2000, p. 156).

While self-employment has long been related to agriculture or trade, the increase in this area occurs in different occupations and sectors: new self-employed people with no personnel, public relations officers, interim managers, bricklayers, carpenters, truck drivers or domestic care workers. While most of these new self-employed people are forced to work in that way especially during economic crises, others prefer working in that way voluntarily with the idea of being free and autonomous (Conen, Schippers, Schulze, 2016, p. 4).

The Turkish Statistical Institute (TSI) defines "self-employed" as: "People who work alone or with family members (with no paid worker) in their work, field, vineyard, garden, shop, office, factories, garages, etc., to earn income in kind or cash."

Legal regulations about the identity of the self-employed or independent workers in Turkey are determined according to different elements. For example, in accordance with the Social Security and General Health Insurance Law (Number: 5510), self-employment is dependent on small

business taxation, not paying income tax, and registering the related institutions or legal entity of the company. However, in Turkish Commercial Law (Number: 6102) it depends on the physical labour more than the capital of the economic activity. Furthemore, the terms "merchant" and "industrialist" are mentioned in the laws apart from the tradesman craftsman. According to the decision of the Council of Ministers numbered 2007/12362 and the Income Tax Law (Number: 213; item: 177), the owners of the enterprises "which do not exceed half of the 1st class bookkeeping limits" are named as tradesman and craftsman; the ones who exceed the limit are defined as merchant and industrialist.

In the tax system, the tradesman and craftsman are classified as "small business taxation","subject to operational account" and "subject to balance sheet" in terms of taxation. Being an employer is legally depended on if there is a paid employee in line with the international or regional approaches (Kumaş, 2017, 1). To sum up, the self-employed person works for himself revealing his entrepreneurial talent, physical capital and effort, and in return makes a profit.

Chart 1-1. The Share of Self-employed People in OECD Countries in Total Employment, % (OECD, 2017)

Country	Values
United Kingdom	15,359
	32,735
Switzerland	14,855
	9,857
Spain	16,484
	14,581
Slovak Republic	15,154
	6,557
Portugal	
	20,415
Norway	6,526
	18,536
Netherlands	16,735
	31,450
Lithuania	12,009
	11,541
Korea	25,411
	10,397
Italy	23,203
	12,426
Ireland	15,362
	10,336
Greece	34,070
	10,200
France	11,643
	13,176
European Union (28 countries)	15,539
	14,952
Denmark	8,236
	17,119
Colombia	51,924
	27,432
Canada	8,345
	32,941
Belgium	14,293
	12,377
Australia	10,135

Table 1-1. The Situation of Employed People in the Sector and Work According to the TSI Labour Force Survey (TSI, 2018)

The Situation at Work		Agriculture	Non-Agricul.	Total by Gender	Total Employment	The rate in Total Employment %
Waged, Salaried and Daily Waged	Women	262	5657	5919	19824	67,626%
	Men	403	13503	13906		
Employer	Women	3	92	95	1289	4,397%
	Men	46	1148	1194		
Self-employed	Women	295	603	898	4954	16,899%
	Men	1983	2074	4057		
Unpaid Family Worker	Women	2017	280	2297	3246	11,073%
	Men	616	333	949		
Total		5624	23690		29314	

In the academic literature, self-employment can generally express insecurity and informality in working life. The OECD data also reveal that self-employment exists in underdeveloped and developing countries or emerging markets. For example, looking at the data of the self-employment rate in different countries in 2017, it is seen that while the self-employment rate in total employment in Columbia is 51,924%; it is 32,941% in Brazil and 32,735% in Turkey.

In relation with the ICSE 1993 approach, it is seen that according to the labour force statistics in June 2018, there are 4954 self-employed in Turkey and this number constitutes 4,397% of total employment (Turkish Statistical Institute, Labour force Statistics, June 2018) (Chart 1-1).

Dependent Self-employment and Its Overall Picture in Employment

The Concept of Dependent Self-employment

There is "a dual separation" between paid employment and self-employment in most of the legal systems worldwide and paid employment is the basis of labour law. However, when the rights and responsibilities of some parties are not evident or when there are "grey areas" in law, employment relations may also be uncertain. Dependent self-employment

is one of these grey areas as well. In dependent self-employment, the employee serves in accordance with a contract other than an employment contract; but his income depends on one or more employers and he gets instructions from one employer (Eichhorst et al., 2008, p. 8). While people who conduct their own business and transfer their products and services to customers are defined as self-employed, people who are dependent on an employer and who work full-time constantly are defined as waged employees. Recently, though, these two concepts have not been as clear as black and white. A new and uncertain area has begun to emerge between these two (Kansikas, 2007, 49). Self-employed people generally work for many employers without being dominated hierarchically. They have entrepreneurial risks and take advantages of this at the same time. However, if self-employed people work in a (partial) commitment to one employer, part of the entrepreneurial risk is transferred to the employee and entrepreneurial opportunities are restricted as well. In such cases, the business relationship between the self-employed and the employer actually becomes increasingly similar to the employment relations (European Parliament, 2008, p. 26).

Research conducted by the European Industrial Relations Observatory (EIRO) reveals that economically dependent employees work as self-employed officially, they generally land a service contract and they are dependent on only one employer for their income (or most of it). On the other hand, economically dependent employees have similarities with full-time employees in many ways. There is not a clear organizational difference between dependent self-employees and full-time employees and the tasks of both are the same or similar. Indeed, self-employment does not define a homogeneous working status (ILO, 2014, p. 11). One of the basic two elements which define self-employment is workers having their own means of production and self-management or their autonomy at work. This ideal type, however, is moving far away from the self-employment reality. For example, in England, where self-employment has increased significantly since the 1980s, the nature of self-employment has also changed. Most of the self-employed people consist of people working from home, freelance workers and outworkers (Tucker et al., 2002, p. 6). "New self-employment" types are having more and more atypical employment relations, which include higher labour market risks than traditional "petit bourgeois" entrepreneurs similar to temporary employment (Buschoff &Protsch, 2008; Standing, 2011). In relation with the characteristics related to entrepreneurship such as business decision-making autonomy, financial autonomy and responsibility, self-employed with staff are accepted as the real self-employed. Self-employed without

staff are more diverse and uncertain. Dependent self-employed belong to this category. Dependent self-employed people who are defined as "new self-dependent employed" do not correspond to the traditional profile of the entrepreneur as they often work in jobs which generally require low capital on its behalf and are without staff. Self-employment principally provides employees with a wide range of opportunities to organize their work and decide on their own agenda. Thus, dependent self-employment does not exactly meet the characteristics of self-employment (Buschoff & Schmidt, 2009, p. 148).

It is not easy to differentiate the working conditions of dependent self-employed people from waged employed ones. However, dependent self-employed people may experience more exploitation with working hours and may face more problems related to job descriptions. Dependent self-employment is seen as a way to get rid of social security contributions and decrease the common costs by the employer. It is generally preferred to avoid labour acts and the sanctions of social protection provisions (European Parliament, 2008, p. 9; Eichhorst et al., 2008) since dependent self-employed people lose their legal rights due to being excluded from the scope of labour acts and take less advantage of social security provisions. They also fall outside union presentation and labour negotiations (Böheim & Muehlberger, 2006, p. 3).

Figure 1-1. Dependent Self-employment, Dependent Employment and the Self-employment Intersection
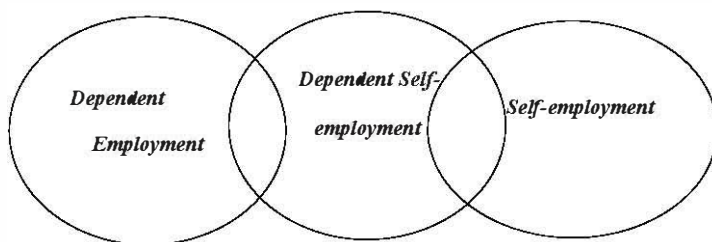
According to a research study by the European Industrial Relations Observatory (EIRO), the status of "economically dependent self-employment" has the characteristics of both the typical dependent employee and the self-employed:

1. They officially work as self-employed. (Because they work with a service contract.)

2. They are economically dependent on an employer. They have similar characteristics to typical dependent employees:
   - The organizational diversion is not clear. They follow employers' instructions and use their equipment;
   - There is no clear distinction between duties. They perform the same or similar duties as permanent workers or the duties carried out by their own employees earlier are transferred to these people.

Dependent self-employment is vital for social and labour market policies. The employment status of a person is highly important for having access to employment protection rights. A waged worker has social security rights, as they are included in the scope of labour law. However, self-employees are largely excluded from labour law and social security law. Therefore, the classification of employment situations is not only legally, but also socially important (Muehlberger & Pasqua, 2007, p. 3).

The TSI, on the other hand, reviews the economically dependent self-employees and waged employees under the category of "dependent employee". In other words, dependent employees consist of economically dependent self-employees and waged employees. Economically dependent self-employees are "self-employees having only one customer or the ones having more than one customer one of whom is the determiner (provides at least 75% of the income) and the ones whose working hours are determined by the customers" (TSI, 2017).

The Share of Dependent Self-employed People in Employment

Countries do not seem to collect regular data about dependent self-employed people, so it is difficult to do multinational comparisons measuring the prevalence and growth of dependent self-employed people. The European Working Conditions Survey (EWCS) reports some data related to this issue. In 2010 (and 2015), "self-employed people with staff" were asked three questions according to the criteria given below to find out whether they were real self-employees or dependent self-employees.

These criteria are as follows:

   - A real self-employed person must have more than one customer,
   - A real self-employed person must have the right to recruit workers if needed,
   - A real self-employed person must have the right to take his own decision on important issues about how to carry on the work.

The self-employed people who conform to two or more of these three criteria are called real self-employed people while the ones who conform to fewer than two criteria are called dependent self-employed people. In 2015, in the scope of the sixth European Working Conditions Survey, approximately 44.000 workers (including both employees and self-employees) were interviewed in 35 European countries including the 28 EU member countries, 5 EU candidate countries, Norway and Switzerland (Oostveen, Biletta, Parent-Thirion & Vermeylen, 2013, pp. 1-2). In 2015, because they conform to fewer than two of these three criteria, 1,4% of total employment in the EU28 was classified as real dependent self-employed. According to a similar research study done in 2010, this percentage was found to be 1,3. On the other hand, 2,9% of total employment in the EU28 conformed to just two of these 3 criteria and fell into a "grey area". As a result, in 2015, 4,3% of total employment in the EU28 not complying with one or more of these three criteria is classified as dependent self-employed. Actually, in 2015, 53% of self-employed without staff constituted "real" self-employees as they complied with the three criteria. This rate was found to be 51% in 2010. The rate of dependent self-employed is 47%. 15% of dependent self-employed meet only one or none of these three criteria in the year while 32% (39% in 2010) meet just two criteria (Williams & Lapeyre, 2017, p. 16).

Figure 1-2. Self-employees in the EU28 (%), 2015 (Williams & Lapeyre, 2017, p. 17)
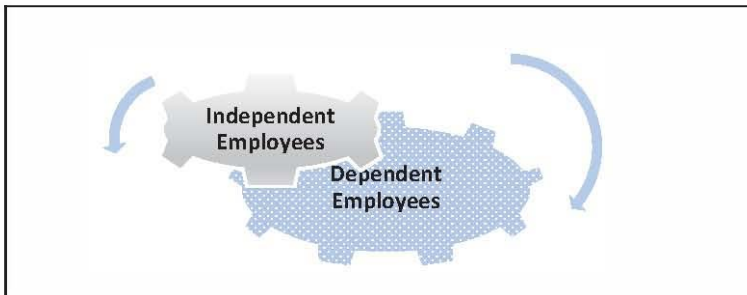
In Europe, it is observed that dependent self-employed people are concentrated especially in two countries. The rate of dependent self-employees is seen to be 18,2% in England while it is condensed as 20,6% in Italy (Williams & Lapeyre, 2017, p. 18). EWCS data obtained in 2010 and 2015 reveal an increase in dependent self-employment by years. The

highest increase is seen to be in the United Kingdom, Italy, Poland, Germany, Romania, France and Spain.

Chart 1-2. Density of Dependent Self-employed People in Some EU Countries (Williams & Lapeyre, 2017, p. 18; Oostveen et al., 2013)
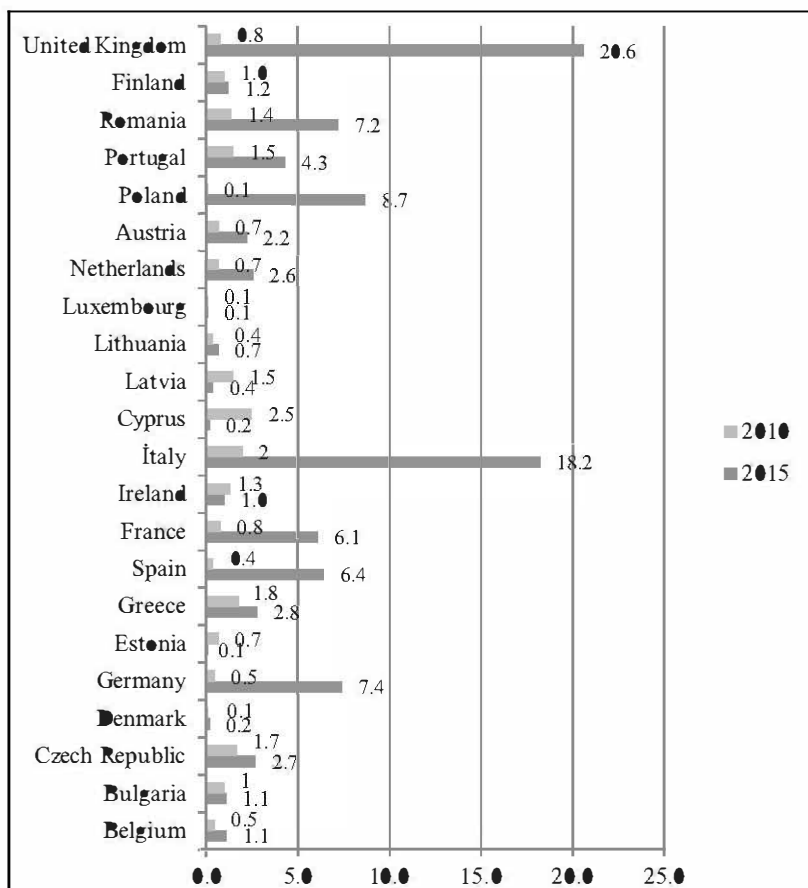
Analyzing the share of dependent self-employees in total employment, it is seen that dependent self-employees are 9% of total employment in Portugal, and 8% in Italy, Greece and Romania. In Denmark and Sweden, it accounts for 1% of total employment and the share of dependent self-employees is seen to be 2% of total employment in Belgium, Estonia, France and Germany. Therefore, while there appears to be a regional

division East-West and North-South, dependent self-employment has a greater share in total employment in Eastern and Southern European member countries. It has, on the other hand, a lower share in Western and Scandinavian member countries. Regarding the rate of dependent ones among self-employees, it is observed that it has the proportion of 63% in Romania, 52% in Slovakia, 43% in England and Australia and 42% in Austria. Of the total self-employees; 42% in Lithuania and Poland, 18% in Germany and Belgium, 12% in Sweden and 11% in Denmark are dependent self-employed (Williams & Lapeyre, 2017, p. 18).

Chart 1-3. Cross-country Variations of the Prevalence of Self employees (Williams & Lapeyre, 2017, p. 19)

Percentage of dependent self-employed in self employment
Percentage of dependent self-employed in total employment
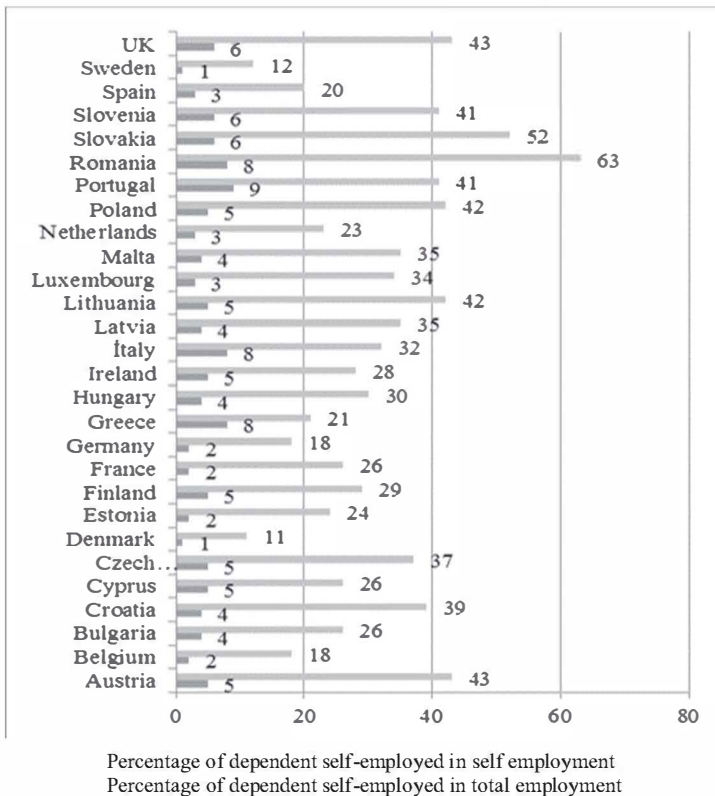
Distribution of Dependent Self-employed in Turkey

In accordance with data obtained from the Turkish Statistical Institute (TSI); in Turkey 4,39% of total employment consists of self-employees (TSI, Household Labour force Statistics, 2018). There is no reliable research or statistical data about dependent self-employees, though. In the scope of European Union adaptation practices, the TSI has conducted a modular survey on "Self-employees and Employers" in order to help the European Union Statistical Office (Eurostat) to contribute to the compilation of more detailed information every year.

The 2017 module is the sixth study applied with the labour force survey in Turkey and is the first study carried out on "the economically dependent self-employed". The module survey conducted by the TSI was applied on the sample on which the household labour force survey was also applied.

Observing the rates of economically dependent self-employed people among the EU 27 countries, it is seen that there are some differences. The highest rates are seen in southern countries such as Italy, Greece, and Portugal and Eastern European countries (such as Slovakia, the Czech Republic, Latvia, Romania and to a lesser extent Hungary and Bulgaria). There is a relatively high variation in K ratios. The highest rates are seen in southern countries (such as Italy, Cyprus, Greece and Portugal) and in Central and Eastern European countries such as the Czech Republic, Romania and Latvia.

The lowest rates are seen in Denmark, Luxembourg, and the Netherlands. According to the module survey data conducted by the TSI in 2017 on economically dependent self-employees, only 80 of 4.781 economically dependent self-employees are considered as dependent self-employees (Oostveen et al., 2013, p. 3; Turkish Statistical Institute, 2017).

Table 1-2. The Number of Dependent Self-employed People in Turkey and Various Countries in the period 2010-2017 (Oostveenetal, 2013 and Turkish Statistical Institute, 2017)

Country/2010 and 2017	Economically Dependent Self-employed (Persons)
Belgium	18
Bulgaria	9
Czech Republic	16
Denmark	1
Germany	10
Estonia	6
Greece	16
Spain	4
France	22
Ireland	12
İtaly	28
Cyprus	25
Latvia	13
Luxembourg	1
Netherlands	7
Austria	6
Poland	1
Portugal	13
Romania	10
Finland	10
United Kingdom	12
Turkey*	**80**

*Only Turkey data were obtained in 2017. Since, there is no numerical data from previous years in Turkey.

In relation with the data from TSI, the majority of dependent self-employed are 35 years or older (Table 1-3).

Table 1-3. The Distribution of Dependent Self-employed by Age in Turkey (Turkish Statistical Institute, "Self-employed and Employer", 2017)

Self-employed (persons)

Age group	Economically Dependent	Economically Non-dependent
Total	80	4 701
15-19	2	21
20-24	2	103
25-34	13	671
35-54	48	2 504
55+	15	1 402

In relation with the data from the TSI, it is seen that the education of self-employed people is below high school level (Table 1-4).

Table 1-4. Participation in Dependent Self-employment by Educational Background (Turkish Statistical Institute, "Self-Employed and Employer", 2017)

Self-Employed (Persons)

Educational level	Economically dependent	Non dependent
Total	80	4 701
Illiterate	5	237
Less than High school	49	3 502
High school	8	332
Vocational High School	6	305
Higher education	12	325

When we look at the probability of some socio-demographic and socioeconomic groups being dependent self-employed compared to others, it is seen that the number of self-employed men is more than women. Men constitute 77, 5% of the total dependent self-employed (Table 1-5).

Table 1-5. Participation of Dependent Self-employed by Gender (Turkish Statistical Institute, "Self-employed and Employer", 2017)

Person	Self-employed	
Gender	Economically Dependent	Economically Non-dependent
Women	18	820
Men	62	3881
Total	80	4701

According to the data obtained by the TSI with regard to the occupations of dependent self-employees, most of the dependent self-employed are seen to be qualified in agricultural, forestry and fishing professions. These are followed by office services and service and sales workers (Table 1-6).

Table 1-6. Participation of Dependent Self-employed by Occupation (Turkish Statistical Institute, "Self-employed and Employer", 2017)

Person	Self-employed	
Occupation Group	Economically Dependent	Economically Non-dependent
Total	80	4701
Managers	3	164
Professionals	8	144
Technicians and associate professionals	2	139
Office services and service and sales workers	15	738
Skilled agricultural, forestry and fishery workers	17	2195
Craft and related trades workers	11	641
Plant and machine operators and assemblers	13	298
Elementary occupations	11	383

When the distribution of dependent self-employed people by sector is examined, it is observed that they mostly work in the services sector followed by agriculture and trade (Table 1-7).

Table 1-7. Distribution of Dependent Self-employed by Sector (Turkish Statistical Institute, "Self-employed and Employer", 2017)

Self-employed (Persons)

Economic Activity	Economically Dependent	Economically Non-dependent
Total	80	4 701
Agriculture	18	2 216
Industry	5	414
Construction	6	229
Trade	15	807
Services	37	1 035

Conclusion

The self-employment phenomenon has become very significant with the increasing importance of entrepreneurship in the economic growth and development process of countries. In relation with the global financial crisis and the development of new technologies, there has been a serious rise in unemployment rates all over the world, particularly in developed countries. Entrepreneurship and self-employment are seen as important elements in the process of increasing employment. Besides, due to the increase in the use of outsourcing and subcontracting practices in recent years, businesses tend to employ more self-dependent employees in order to get rid of obligations resulting from the labour and social security laws and reducing labour costs. Recently, however, the increase in new employment forms has made the boundaries between dependent employment and self-employment more blurred.

It is obvious that employment status influences working conditions. Issues such as worker rights and social security scope, work and wage security, trade union representation and labour negotiations may vary depending on employment status. The emergence of "new employment forms" has caused the creation of a new hybrid status among employment statuses or a decrease in the differences between existing statuses. A significant increase is seen especially in the number of dependent self-employed. In terms of working conditions, the position of economically dependent employees is not very simple. Although their working conditions are similar to those of waged employees, in some respects they

have similar characteristics to the self-employed and they are officially labelled as self-employed.

In many countries, protective rights for workers gradually encompass the employees with a standard employment relationship. "Self-employed" people who are generally treated as a group outside the scope of protective working standards cannot benefit from these arrangements. This is because they do not have an employment relationship with their customers but they make a service contract with the people they work for instead.

Moreover, in principle they are not subject to labour law, but civil and commercial law and because of this they cannot fully benefit from the protection provided by their right to work. However, dependent self-employed are exposed to the same social risks as waged employees but they usually have fewer social rights. Not only in Turkey but in most European countries, these employees are not protected to the same extent as the employees who are dependent on the social security programmes in legal status. Yet in the framework of the decent work approach, the ILO is observed to increase its interest in the subject of dependent self-employment. Research and initiatives to clarify the legal statuses of the dependent self-employed have increased. In this respect, establishing a new legal employment status is crucial in terms of taking such employees under legal protection.

There is no comprehensive study for the dependent self-employed in the Turkish labour market. The regulations for the self-employed in Turkey are carried out by the 5510 Social Security and General Health Insurance Act, 6102 Turkish Commercial Law, and the 5362 Professional Association of Tradesmen and Artisans Act. Yet there is no protective labour law or regulation on the rights of self-employed workers.

Although the modular study carried out by the TSI does not provide any reliable data for the dependent self-employed, it is important as it is the first study on this subject. It is thought that special attention should be paid to the work life problems of the "dependent self-employed" who are also called the "new self-employed" all over the world by both policy makers and academics.

Suggestions

The existing legal regulations include limited forms of protection for the new dependent employment relations by focusing on the dependent employment relations between the employee and the employer. New employment forms have emerged with the increase and diversification in the forms of flexible work in recent years. In particular, project-based or

task-based employees have to work under adverse conditions due to the misuse of contracts. Employment status and the acquisition of legal rights are crucial issues. While making a clear definition of dependent self-employment, marking out employment status, based on the fact that dependent self-employment is a form of self-employment, may not be a deterrent to new enterprises that may arise in this direction. Taking this feature into consideration, protective flexible regulations should be made. For example, it is possible to make it real by creating a hybrid interim category which may be covered by labour law or social security. This element seems to be ignored in the identification of economically dependent self-employed people in Turkey. Dependent self-employed people are included along with the wage-employed in the concept of "dependent employed". This situation hides the self-employment feature at the core of the subject.

Carrying out research that will provide reliable information on the number of dependent self-employees and their working conditions will increase the validity and reliability of academic studies based on these data. This will also be a guide for future political arrangements.

Regulations made at the country level are striking for taking dependent self-employed people into the scope of social protection. In the current 4857 Labour Law, the business relationship is based on the "dependency" element. Actions should be taken to make this model more compatible with current professional and productive needs at the national and international levels. In relation with the developments in mobile technologies, the Gig Economy model is becoming increasingly widespread. The number of self-employed people who work for one or more projects at the same time on digital platforms is increasing. The ILO (2016) report indicates that there is a shift from standard wage employment to non-standard in which "new self-employment forms" take the lead especially in industrialized countries. This tendency is seen to be common in all of the EU countries (ILO, 2016, p. 2). Today, when technological developments spread to all areas of life, it is seen as a deficiency that the contracts created on the basis of the traditional dependency relationship are the only ones accepted by the labour laws.

Preventive measures should be taken about policy makers seeing a dependent self-employed person as a self-employed person, even though a dependent employee performs .similar duties under the same conditions as an a paid employee. Such practices impair the quality of business life by leading to a rise in precarity.

References

Böheim, R., & Muehlberger, U. (2006). Dependent forms of self-employment in the UK: identifying workers on the border between employment and self-employment (Discussion Paper No. 1963).

Buschoff, K. S., & Schmidt, C. (2009). Adapting labour law and social security to the needs of the new self-employed – comparing the UK, Germany and the Netherlands. *Journal of European Social Policy, 19*(2), 147–159. doi: 10.1177/0958928708101867.

Conen, W., Schippers, J., & Schulze Buschoff, K. (2016). Self-employed without personnel between freedom and insecurity. *Hans-Böckler-Stiftung.* doi: 10.1177/0950017200442772.

Eichhorst, W., Braga, M., Famira-Mühlberger, U., Gerard, M., Horvath, T., Kahanec, M., & Pedersen, J. L. (2008). Social protection rights of economically dependent self-employed workers. *WIFO Studies.*

Hâkim, C. (1988). Self-employment in Britain: Recent Trends And Current Issues. *Work, Employment and Society,* 2(4), 421-450. http://doi.org/10.1177/0950017088002004002.

ILO. (2003). *The scope of the employment relationship fifth item on the agenda.* Geneva. Retrieved from https://www.ilo.org/public/english/standards/relm/ilc/ilc91/pdf/rep-v.pdf.

ILO. (2014). *Employment relationships in the media and culture industries.* Geneva.

ILO. (2016). *Non-standard employment around the world: Understanding challenges, shaping prospects.* Geneva.

IPSE. (2017). *Exploring the rise of self-employment in the modern economy.* London.

Kansikas, J. (2007). Disguised employment the nature of forced entrepreneurship. *EJBO Electronic Journal of Business Ethics and Organization Studies,* 12(2).

Kumaş, H. (2017). Socio-demographic characteristics of employees as self-employed and employers and income status in Turkey: Turkish statistical institute labor, income and living conditions and life satisfaction surveys. *Research Gate* (October).

Muehlberger, U., & Pasqua, S. (2007). Workers on the border between employment and self-employment. *Review of Social Economy,* 67(2), 1–24. Retrieved from http://www.seipa.edu.pl/s/p/artykuly/93/930/Dependentselfemploymen t Italy.pdf.

OECD. (2000). The Partial Renaissance of Self-employment. *Employment Outlook*.

OECD. (2017). Data, Self-employment rate. doi: 10.1787/oecd_lfs-2017-en.

Ohlsson, H. (2004). Introduction: Self-employment and Entrepreneurship. S*wedish Economic Policy Review*, 11, 3–13. Retrieved December 20, 2018, from http://www.government.se/49b73a/contentassets/981bf0429ca14288919b4ca50dc1984f/ henry-ohlsson-introduction.

Oostveen, A., Biletta, I., Parent-Thirion, A., & Vermeylen, G. (2013). *Self-employed or not self-employed? Working conditions of economically dependent workers*. Dublin: Author. Retrieved December 20, 2018, from https://www.eurofound.europa.eu/publications/customised- report /2013/working-conditions-labour-market/self-employed-or-not-self-employed-working-conditions-of-economically-dependent-workers-back ground.

Pedersini, R., & Coletto, D. (2010). *Self-employed workers: Industrial relations and working conditions*. Dublin.

Stanworth, C., & Stanworth, J. (1995). The self-employed without employees – autonomous or atypical? *Industrial Relations Journal*, 26(3), 221–229. doi: 10.1111/j.1468-2338.1995.tb00739.

TUIK. (2017). *Self-employed employees and employers*. Retrieved from http://www.tuik.gov.tr/.

TUIK. (2018). *Labor force statistics, employment in the sector and job*. Retrieved from http://www.tuik.gov.tr/PreTablo.do?alt_id=1007.

International Labor Organization. (2013). *Revision of the international classification of status in employment (ICSE-93)*, Room Document: 8. Retrieved from http://www.ilo.org/wcmsp5/groups/public/---dgreports.

Williams, C. C., & Lapeyre, F. (2017). Dependent self-employment: Trends, challenges and policy responses in the EU (Working Paper No. 228 2017). Geneva. Retrieved from http://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_614176.pdf.

CHAPTER TWO

BEHAVIOURAL FINANCE AND ANOMALIES: A THEORETICAL FRAMEWORK

ABDULMUTTALIP PILATIN

Introduction

In accordance with the efficient market hypothesis which has a crucial place in the field of finance, stock prices of the companies trading in the market are purchased and sold at their real value. It is assumed that the actors in the market will evaluate and implement all of the information they possess. Besides, it is supposed that economic individuals do not make any constant and systematic mistakes in their future expectancy. Likewise, individuals are believed to be affected by the political changes in line (Sarfati & Karabulut, 2004, p. 64). Actually, this is valid for standard finance. That is to say, it is the finance type for people who are assumed to be rational in society; however, this is not valid for normal people being the subject in behavioural finance (Statman, 2010, p. 1).

People in the market, in fact, are not rational. Thus, it is probable for the market to provide higher returns to stock buyers or dealers at different times. The securities market sometimes does not react in the same direction even if it has achieved the new information at the same time. Prices in the securities market are fluctuating randomly (Fama, 1970, p. 385). In other words, according to this hypothesis, no informed or uninformed person in the market can out-earn the market. Therefore, it is pointless to use some techniques to get extra revenue. However, many studies have shown some results conflicting with the efficient market hypothesis and it is understood that time has an effect on the returns. This situation is called an "Anomaly".

Behavioural Finance

The Concept of Behavioural Finance

Behavioural finance, assuming that people are not entirely rational, works to make sense of the differences between the market value and the book value of an asset. That is to say, it tries to find a method to explain the differences between prices. Revealing the market anomalies that cannot be explained by the Efficient Market Hypothesis and conventional theories, behavioural finance provides evidence to find out whether these theories are sufficient or not (Tufan & Sarıçiçek, 2013, p. 159).

Behavioural finance focuses on the psychological mechanisms of the capital market to find out the phenomenon of the market. The main purpose of behavioural finance is to identify, explain and predict the systematic anomalies in financial markets (Ostaszewski, 2010, p. 43). It has developed a crucial approach to anomalies, which started to give an opportunity for investors to exceed average returns. Thus, most of the researchers rely on the behavioural finance models to explain the anomalies in the stock market (Thaler, 2005).

Emergence of Behavioural Finance

According to the efficient market hypothesis advocated by Malkiel (1962) and Fama (1965), the price of an asset traded on the market requires the rapid reflection of information about the asset or the changing market in the price of the asset.

In October 1987, Dow Jones losing about 22% of its value in a month, the crisis in Asia in 1997, and the collapse of financial markets before 2001 in many countries, particularly in the USA, influenced investors' confidence in the markets in a negative way. Did the stock prices valued in October 1987, in 1997 in Asia or in 2001 in the USA accurately reflect all the valid information on stocks and the economy? Is it possible that information related to the economic situation and the companies in the exchanges can cause such a rapid decline? Such questions have led to discussions about the reliability of the efficient market theory and other general financial theories and have started new searches (Malkiel, 2007, p. 258; Hardie, 1988, p. 25; Shostak, 1997, p. 38).

Due to the crises, interest in approaches dealing with movements in the financial markets and the decision-making habits of investors has increased. As a result of these searches, the number of studies in this field is increasing (Korkmaz & Ceylan, 2010, p. 605).

The Purpose of Behavioural Finance

One of the basic assumptions of traditional asset pricing models is that all the investors in the market are acting rationally. However, when these investors are examined it has been found that they are not rational and even they make some psychologically emotional decisions in some cases. Investors sometimes can trade according to rumours instead of official information, or they give too much or less attention to some information in the market. As these psychological behaviours are observed in more people and this has an impact on the financial markets, these behaviours have become an important issue to be investigated (Canbaş & Kandır, 2007, p. 5).

In such cases, financial theories cannot fully explain the price of the stock in the market or the reason for the gap between the stock price and its required value. These theories are insufficient to explain the anomalies and fluctuations in the financial markets as well. According to researches, markets are not effective and stock market prices are not evaluated in the way these theories have explained. The ineffective functions in financial markets and the unexplained anomalies in financial markets caused attention to be paid to human psychology and behaviour in financial and economic analysis and for behavioural finance to emerge and gain importance.

Behavioural finance both advocates that people are not always rational and gives some examples from psychology, which are generally about illusion in perception, to support this claim. To give an example of these illusions, although both of the lines are of the same length in Figure 1, the bottom line is perceived to be longer (Nofsinger, 2001, p. 5).

Figure 2-1. Optical Illusion (Nofsinger, 2001, p. 5)
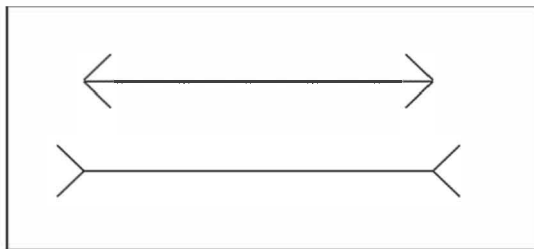
Behavioural finance tries to explain how the psychology which directs human behaviours affects the movement and formation of stock prices.

The criteria that behavioural finance practices should be subject to are indicated as follows:

- The behaviour of investors is based on empirical assumptions,
- Concise but comprehensive anomaly findings on a model, and
- Can be tested and verified out of the sample.

These features are known as the features that should be in behavioural finance (Hong & Stein, 1999, p. 2169). Behavioural finance assumptions suggest that the effective market theorem is not valid. Many empirical studies have been published on this subject in the last decade. These studies focus on three models.

These models are as follows (Barak, 2008, p. 175):

1. The representative agent model by Barberis, Shleifer and Vishny (1998),
2. Models based on two psychological findings; overconfidence and solitary devotion by Daniel, Hirshleifer and Subrahmanyam (1998) and
3. The models based on the interactive relationship between heterogeneous investors by Hong and Stein (1999).

Anomalies

The concept of "anomaly" is defined as deviations from the generally accepted rules (Thaler, 1987, p. 197). If it is hard to rationalize an empirical finding in a theoretical framework or if it is necessary to make some unreasonable assumptions to explain this finding, the finding in question is thought to be an anomaly.

"Anomaly" has become the most important word to express a growing discourse recently being talked about. The concept of anomalies, which is mostly used in finance and economy, refers to the Efficient Market Hypothesis by Fama (1965, 1970); and the Capital Asset Pricing Model by Lintner (1965), Sharpe (1964) giving some evidence against empirical validity. In a more recent article, Fama (1998) claims that what is known as Behavioural Finance today is in fact an "abnormalities literature".

Emerging by violating the Efficient Market Hypothesis and asset pricing models, the word "anomaly" has become one of the important issues discussed in the financial literature in recent years to make sense of price changes.

Anomalies are seen in various areas in life, but different examples of anomalies may occur in social, cultural, political and financial life. With respect to the financial markets, plenty of financial anomalies are encountered in contradiction to the Efficient Market Hypothesis and various researches have been carried out to make sense of these anomalies.

It is observed that the researches done in this framework are dealt with as Periodic Anomalies, Cross-sectional Anomalies and Price Anomalies.

Periodic Anomalies

Periodic anomalies have different names in the literature like calendric anomalies or seasonal anomalies. Periodic anomalies have been studied to prove whether the stock returns in the market have a higher or lower performance than other days or times on a certain day, week, month, period or year.

In accordance with the conventional finance models, no issues affecting the stock market prices other than information affecting the stock price markets, rationality and companies can be talked about; there is a kind of universality (Schramm & Nielsen, 2001, p. 405). However, studies show that at different time periods the stock price, and hence the returns, has some negative or positive changes at different periods. These changes, called seasonal anomalies, have led to a discussion of the validity of the traditional models. When studies on this issue are examined, it is seen that periodic anomalies are classified under three subheadings: anomalies related to days, anomalies related to months and anomalies related to holidays (Barak, 2008, pp. 126-127).

Anomalies Related to Days

According to the Efficient Market Hypothesis (Fama, 1965, 1970), stock returns are not expected to differ according to time and the return of a day should not differ significantly from the other day returns. However, it is observed that this is not the case.

It has been shown that due to different reasons, the stock prices provide higher or lower returns on some weekdays compared to others (Rogalski, 1984; Lakonishok & Maberly, 1990; Agrawal & Tandon, 1995).

Anomalies Related to Months

Anomalies are analyzed related to months whether stock prices are at a higher level in a month compared to the other months, or whether they show different characteristics. In other words, the increase or decrease of the stock returns in any month of the year is expressed as the anomalies of the months (Rozeff & Kinney, 1976).

In relation to this, investigations have been made as to whether there is any effect during the months, the first and second parts of the months, the end of the month or the beginning or the end of the years. Studies have shown that some months provide higher or lower returns than other months (Cheung & Coutts, 1999; McConnell & Xu, 2006).

In this respect, as mentioned in the literature review section, among the studies the ones related to the months and particularly the studies related to the anomalies in January are noteworthy. In these studies, it is observed that stock returns are higher in January than in the other months (Ege, Topaloğlu & Coşkun, 2012; Balaban, 1995).

Anomalies Related to Holidays

In many countries, stock returns provide investors with more profit than an average return on their trading days before holidays. Anomalies related to holidays include the weekend holidays of the stock exchange and religious and official holidays as pre-holiday and post-holiday periods. The first study on holiday anomalies was conducted by Fields (1934). In terms of the size of companies, it has been determined that the holiday effect is very important; pre-holiday gains are significant for small companies while post-holiday gains are important for big companies, and post-holiday gains are very high regardless of a specific day of the week (Pettengill & Jordan, 1988, p. 50).

When the studies in the literature are examined, it is observed that the changes in the stock price movements when the stock market is closed due to any extraordinary reason have not been included in the anomalies related to the holidays. In other words, the situation related to price movements of the stock prices in the unplanned holiday periods is not included in the anomalies related to the holidays (Barak, 2006, pp. 147-148).

Cross-sectional Anomalies

Cross-sectional anomalies are the type of anomalies revealed by the financial ratios of publicly traded companies. Accordingly, the relative comparability of some financial ratios of publicly traded companies shows that the company's stocks provide higher returns than expected.

When the studies in the literature are examined, it is observed that studies mostly focus on the following issues (Ünal & Akbey, 2016):

- the price/returns ratio effect,
- the market value/book value ratio effect,
- the company size effect,
- the price/sale ratio effect,
- the price/cash flow effect,
- the winning announcements (winner-loser) effect, and
- the effect of dividend yield.

Price Anomalies

The anomalies that emerged from the violation of the Effective Market Hypothesis and asset pricing models have become one of the crucial issues being discussed in the recent finance literature.

In the studies it is observed that price anomalies are dealt with in two ways as an extreme reaction anomaly and a low reaction anomaly (Barberis, Shleifer &Vishny, 1998, p. 307).

Extreme Reaction Anomaly

There are many factors affecting the changes in stock prices. Studies show that human psychology has a significant effect on these price movements. In some cases, people can overreact or underreact more than expected. At this point, stock investors can show more or less reaction than expected to news in the market. This overreaction of investors to positive or negative news in the market is called an overreaction response (Korkmaz & Ceylan, 2010, p. 614).

Investors' overreaction to a stock causes stock prices to rise more than normal, or decrease from the normal, along with the stock markets' own control mechanism, which allows the stock prices to remain at normal price levels (Hong, Lim & Stein, 2000, p. 294).

Low Reaction Anomaly

The shares are not always traded at the price level in the markets in which they are traded; sometimes they are traded higher or lower than they should be. The main reason for this stems from the investors' psychological structure. The investor psychology, in other words their psychological anomalies, can result in different price levels from the price of the stock.

The case in which the stock market does not show the increase that is expected thanks to positive news about a share or a company that has stock is called the missing reaction anomaly. When the situation is just the opposite, that is to say when some negative news about the share or the company does not result in a decrease in stock, the same term, missing reaction anomaly, is used as well. In cases where a missing reaction occurs, investors do not react to the new situation about the market or the share immediately. Yet this situation improves in a longer period. After a certain period of time, the stock price sees the value that the information requires and allows the stock prices to increase (Barberis et al., 1998, p. 311).

When the stock investors are examining the companies, it is observed that they behave far from rationality and analyze with the effects of emotional factors and give an investment decision which is directed by these factors afterwards. Investors may show a slower reaction to negative news about companies or they may behave slower or more cautiously towards positive news like period profit, dividend distribution, a new bid or new agreements. For this reason, the reflection period of the new information about the companies is increasing rapidly. In short, the low reaction anomaly is observed when investors show a low level reaction to this news and when stock investors cannot get returns in the short term, and when the markets reach the price they are expected to have in the future which results in more gains than the market average (Chan, Jegadeesh & Lakonishok, 1996, p. 1681).

Literature Review

One of the studies that rejected the effective market hypothesis from an empirical side is the study by Shiller (1981), which claims that the fluctuation in stock prices cannot be explained only by new information provided to the market. In his study, he created the most yielding and the most losing portfolios annually and examined their performances after their creation. As a result, he found that the most yielding portfolio created

loss in the following years and the portfolio consisting of the most losing shares gained in the future. This showed that immediate changes in stock prices can be overreaction. This situation cannot be explained by the efficient market hypothesis (De Bondt & Thaler, 1985).

The assumption related to the effective market hypothesis, that prices in the market are staggering and that the market return cannot be exceeded, has always been the subject of criticism since the date it was put forward by Fama (1970) and Malkiel (1962). Researchers have begun to search for information to prove the possibility of a return on the market in order to make sense of the stock prices which emerged during the crisis and later periods.

In this respect Cho and Taylor (1987), Muratoğlu and Oktay (1993), Agraval and Tandon (1994), Karan (1994), Dağlı (1996), Ozmen (1997), Arsad and Coutts (1997), Bildik (2000), and Ege, Topaloğlu and Coşkun (2012) found that there was a higher return in January compared to other months; which is explained as an anomaly related to these months in the literature.

Similar studies related to months in stock markets have also been carried out on whether any day of the week will provide a higher return than the other days. According to studies by Jaffe and Westerfield (1985), Muratoğlu and Oktay (1993), Karan (1994), Dağlı (1996), Özmen (1997), Bildik (2000), Karan (2003) and Akyol (2006) it has been observed that, in general, stock returns increased towards the weekends.

In addition, in some studies changes in stock prices during the day have been investigated. Wood, McInish and Ord (1985) have determined that there was a significant difference between the return ratio of the NYSE's first 30 minutes from the opening time and the ratio of its closing time and return ratio of other times. Bildik (2001) revealed that the prices in the stock markets in the BIST are getting higher in the first 15 minutes in the opening and closing moments and the last 15 minutes. Temizel (2008) found that due to the double session in the BIST, stock prices first decreased then were fluctuating up and down (W) and this movement was found to be the best time for returns.

The effect which assumes that significant returns may occur in the first period of each month compared to the second period is called the in-month effect (Bildik, 2000). First Ariel (1987), then Jaffe and Westerfield (1989), Arsad and Coutts (1997), Ozmen (1997) and Bildik (2000) obtained some evidence for this effect.

Lakonishok and Smidt (1988) in their research of the Dow Jones Industrial Index between the years 1986-1987 found that the first three days of the month return averages were 7 times higher than the average of

all the other days. Cadsby and Ratner (1992) found some data about the effect of the month-return in their research which included 10 countries' stock markets; the USA, Germany, Canada, Switzerland, England and Australia, while there is not such an effect in Japan, Hong Kong, Italy and France. Özmen (1997), Bildik (2000) and Akyol (2006) reported on the existence of this effect in the studies conducted on the BIST.

Another factor affecting the stock prices is the holiday effect. The holiday effect is so-called when stock returns are higher on the days before the holiday ends compared to other days. It was also observed that this issue is not only related to the weekend holidays but also for other public holidays. As a consequence, in the literature the day effect of the week was also examined in addition to the holiday effect.

Fosback (1976), Lakonishok and Smidt (1988), Ariel (1987), Arsad and Coutts (1997), Yen and Shyy (1993), Agrawal and Tandon (1994), and Kim and Park (1994) have found some data which showed that there were holiday anomalies as described in the literature. While Özmen (1997) found that there was the holiday effect in the studies carried out on the shares of companies in the BIST, Kıyılar and Karakaş (2005) found this anomaly in the stock exchange for the weekends within the period 1988-2003 but no anomalies could be seen for other holidays.

Likewise, Abdioğlu and Değirmenci (2013) did not reach any findings confirming the holiday effect in their study conducted in the 2003-2012 period. As it is proved in many studies that seasonal effects have an impact on stock returns, company features like the F/K ratio, the F/S ratio, company size, and PD/DD which are called cross-sectional anomalies can have an effect on stock returns.

When the studies in the BIST are observed, Baştürk (2004), Öztürkatalay (2005), and Nargelecekenler (2011) cannot reach any findings which prove the existence of the F/K anomaly; Karan (1996), and Aydoğan and Güney (1997) have found that it is possible to get high returns by investing in the stocks including a low F/K ratio. It was also investigated whether the portfolios with F/S ratios have higher returns than the portfolios with higher F/S ratios. As a result, instead of investing in high F/S ratio stocks, investing in lower ones resulted in higher returns. This situation is called the F/S anomaly in the literature.

In some studies, the S/F ratio has been used as the inverse of the F/S ratio. Although the ratios are different from each other, they represent the same relationship. Karan (1996b), Erken (1998), and Karatepe and Erken Çelik (2007) have revealed that similar to the international markets, this ratio can be used to predict the future prices of stocks traded in the BIST.

In his study, Banz (1981) observed that stocks of low market value companies in AMEX and New York stock exchanges yielded a higher abnormal return compared to stocks with high market values. In this way, the company size anomaly has entered the literature.

In the studies examining the company size effect in the BIST, Bildik and Gülay (2002), Aksu and Önder (2000) and Yıldırım (2005) found that there are anomalies. However, Gönenç and Karan (2001) have observed the reverse of this; large company shares have shown a better performance than the small company shares.

Another anomaly examined is the PD/DD ratio anomalies. As in the F/K ratio anomaly, there has been an attempt to find a certain ratio between two values. The market value is the value that arises depending on the supply and demand of stocks in the market. The value found in the company's accounting records and the value found by dividing the total value of the equity of the company by the number of shares in the market is called the book value. According to the anomaly, a higher return will be obtained from a portfolio consisting of stocks with a lower PD/DD ratio, compared to the portfolios with a higher PD/DD ratio (Akkoç, 2003). Keim (1983), Pinfold, Qilson and Li (2001), and Park and Lee (2003) revealed that by using the PD/DD ratio in the selection of stock, abnormal returns can be obtained. Yıldırım (2005), Şamiloğlu (2006) and Canbaş, Kandır and Erişmiş (2007) found that via the DD/PD ratio, higher returns compared to the market return can be obtained as well.

In a nutshell, it can be said that an abnormal return can be achieved with the information which differs in different markets.

Conclusion

There are many options for investors who want to utilize their savings in the most profitable way. The important and highly preferred investment option is stock investments. The stock exchange is an important centre for investors and some account-owners as countries' important corporate companies are traded there, they are reliable, and trading transactions are easy and quick to make.

Different investors of different sizes trade in the stock market. Investors use different methods to choose the stocks that will yield the most return on their purchases. Most of these methods argue that investors are rational and behave rationally in their investment decisions. However, as mentioned in the literature review section, studies revealed that the price formations of stocks are valued contrary to the Efficient Market Hypothesis (Fama, 1965, 1970) and the Capital Asset Pricing Model

(1965) (Sharpe, 1964); in other words, investors are acting on the assumption that they behave rationally and the pricing of shares is evaluated in this way. Since all stock market investors are human beings it is normal that they have feelings and different psychology and therefore they may behave differently.

In order to investigate the effects of these characteristics, which affect investment decisions, and behavioural finance and the effects of these non-rational behaviours of the investors on the stock prices, some anomalies have occurred and some important points that need attention are mentioned in order to make investors have higher returns. This research is a study on the definition of behavioural finance, its history, development, anomaly concept and its types. Besides, there is a literature review of studies on behavioural finance and anomalies.

References

Aggrawal, A., & Tandon, K. (1994). Anomalies or illusions? Evidence from stock markets in eighteen countries. *Journal of International Money and Finance*, 13, 83–106.

Akkoç, S. (2003). Overreaction hypothesis and an empirical study on the Istanbul exchange (Master's thesis). University of Osmangazi, Eskişehir, Turkey.

Aksu, H., & Onder, T. (2000). The size and book-to-market effects and their role as risk proxies in the Istanbul stock exchange. *EFMA 2000 Athens; Koc University, Graduate School of Business, 2000-2004.*

Akyol, A. (2006). Calender anomalies in the Istanbul stock exchange: Are they still there? Working paper, The University of Alabama Department of Economics, Finance and Legal Studies.

Ariel, R. (1987). A monthly effect in stock returns. *Journal and Financial Economics*, 18, 1611–1626.

Arsad, Z., & Coutts, J. A. (1997). Security price anomalies in the London international stock exchange: A 60 year perspective. *Applied Financial Economics*, 7, 455–464.

Balaban, E. (1995). January impact on the Istanbul Stock Exchange. *Business and Finance Journal*, 113.

Banz, R. F. (1981). The relation between return and market value of common stocks. *Journal of Financial Economics*, 9, 3–18.

Barak, O. (2008). Assessment of the excessive reaction anomaly and behavioral finance models in ISE. *Gazi Journal of Faculty of Economics and Administrative Sciences*, 10(1).

Barak, O. (2008). *Behavioral finance: Theory and practice.* Ankara: Gazi Bookstore.

Barberis, N., Shleifer, A., & Vishny, R. (1998). A model of investor sentiment. *Journal of Financial Economics*, 49, 307–343.

Baştürk, F. H. (2004). P/I ratio and firm size anomalies are handled together to create a portfolio and an application example. *Eskişehir Anatolia Publishing*, No. 822.

Bildik, R. (2001). Intra-day seasonalities on stock returns: Evidence from the Turkish stock market. *Emerging Markets Review*, 2, 387.

Cadsby, B., & Ratner, B. (1992). Turn of month and pre holiday effect on stock returns: some international evidence. *Journal of Banking and Finance*, 16, 497–509.

Canbaş, S., & Kandır, S. Y. (2007). Effect of investor sensitivity on ISE sector returns. *Nine September University Journal of Economics and Administrative Sciences*, 22(2), 222.

Canbaş, S., Kandır, S. Y., & Erişmiş, A. (2007). Testing of some company characteristics affecting the stock in ISE companies. *Financial Political & Economic Interpretations*, 44(512), 15–27.

Cheung, K. C., & Coutts, J. A. (1999). The January effect and monthly seasonality in the Hang Seng Index: 1985-1997. *Applied Economics Letters*, 6, 121–123.

Cho, D., & Taylor, M. (1987). The seasonal stability of the factor structure of stock returns. *The Journal of Finance*, 42(5), 1195–211.

Dağlı, H. (1996). *Calendar effects of the Turkish stock market: Day of the week and month effects.* Istanbul: Capital Markets Board Publication.

De Bondt, W. F. M., & Thaler, R. (1985). Does the stock market overreact? *Journal of Finance*, 40(3), 793–805.

Ege, I., Topaloğlu, E. E., & Coşkun, D. (2012). Behavioral finance and anomalies: Testing the January anomaly on the ISE. *Journal of Accounting and Finance*, 56, 175–190.

Fama, E. F. (1965). The behavior of stock market prices. *Journal of Business*, 38, 34–105.

Fama, E. F. (1970). Efficient capital markets: a review of theory and empirical work. *Journal of Finance*, 25(2), 383–417.

Fama, E. F. (1998). Market efficiency, long-term returns, and behavioral finance. *Journal of Financial Economics*, 49, 283–306.

Gönenç, H., & Karan, M. B. (2001). Do value stocks earn higher returns than growth stocks in an emerging market? Evidence from the Istanbul Stock Exchange. *Journal of International Financial Management & Accounting*, 14(1), 1–25.

Hardie, A. (1988). The efficient market hypothesis and the stock market crash: A random walk with an occasional surprise. *Economic Affairs*, 8(5), 23–26.

Hong, H., Lim, T., & Stein, J. C. (2000). Bad News travels slowly: size, analyst coverage, and the profitability of momentum strategies. *The Journal of Finance*, 55(1), 265–295.

Jaffe, J., & Randolj Westerfield. (1985). The weekend effect in common stock returns the international evidence. *Journal of Finance*, 40, 433–454.

Karan, B. (1994). Weekend impact on the Istanbul Stock Exchange. *Approach*, 20, 99–109.

Korkmaz, T., & Ceylan, A. (2010). *Capital market and securities analysis*. Bursa: Ekin Publishing House.

Lakonishok, J., & Smidt, S. (1988). Are seasonal anomalies real? A ninety year perspective. *Review of Financial Studies*, 1, 404-425.

Lakonishok, J., & Maberly, E. (1990). The weekend effect: trading patterns of individual and institutional investors. *The Journal of Finance*, 45(1), 231–243.

Lintner, J. (1965). The valuation of risk assets and the selection of risky investments in stock portfolios and capital budgets. *Review of Economics and Statistics*, 47, 13–37.

Malkiel, B. G. (2007). *Random looking at the stock market*, translated by I. Seyrek, C. Feyyat, & N. Domaniç. Istanbul: Scala Publishing.

McConnell, J., & Xu, W. (2006). Equity returns at the turn of the month: trading strategies and implications for investors and managers. Krannert School of Management, Working Paper.

Muratoğlu, G., & Oktay, T. (1993). Poor activity in the Turkish stock market: Calendar anomalies. *Hacettepe University Faculty of Economics and Administrative Sciences Journal*, 11, 51–62.

Nofsinger, J. R. (2001). Investment madness: How psychology affects your investing. And what to do about it. *Pearson Education*, 5.

Ostaszewski, J. (2010). *Finance*. Warszawa: Difin.

Ozmen, T. (1997). *An experiment on anomalies and stock markets on the Istanbul Stock Exchange* (1st ed.). Ankara: Capital Market Publications, No: 61.

Oztürk Atalay, M. V. (2005). *Cross-sectional anomalies in stock markets: A survey for ISE*. Istanbul: Istanbul Stock Exchange Publications.

Park, S. Y., and Lee, J. J. (2003). An empirical study on the relevance of applying relative valuation models to investment strategies in the Japanese stock market. *Japan and the World Economy*, 15, 331–339.

Pettengill, G. N., & Jordan, B. D. (1988). Comprehensive Examination of Volume Effects and Seasonality in Daily Security Returns. *Journal of Financial Research*, 5(2), 57–70.

Pinfold, J. F., Wilson W. R., & Li, Q. (2001). Book-to-market and size as determinants of returns in small liquid markets: The New Zealand case. *Financial Services Review*, 10, 291–302.

Rogalski, R. J. (1984). A Further Investigation of the Weekend Effect in Stock Returns: Discussion. *Journal of Finance* (39), 835–837.

Rozeff, M. S., & Kinney, W. R. (1976). Capital market seasonality, *Journal of Financial Economics*.

Sarfati, M., & Karabulut, G. (2004). Rational Expectations Theory. *Economics Journal*, 453, 64.

Sharpe, W. F. (1964). Capital asset prices: A theory of market equilibrium under condition of risk. *Journal of Finance*, 19, 425–442.

Shiller, R. J. (1981). Do stock prices move too much to be justified by subsequent changes in dividends? *American Economic Review*, 71(3), 421–436.

Shostak, F. (1997). In Defense of fundamental analysis: a critique of the efficient market hypothesis. *Review of Austrian Economics*, 10(2), 27–45.

Schramm-Nielsen, J. (2001). Cultural dimensions of decision making: Denmark and France compared. *Journal of Managerial Psychology*, 16(6), 404–423.

Sönmez, T. (2010). *Behavioral finance approach: A research study on the hypothesis of overreaction in the ISE*. Unpublished PhD Thesis, Hacettepe University Institute of Social Sciences, Ankara.

Statman, M. (2010). What is behavioral finance? In A. Wood (ed.), *Behavioral finance and investment management*. Research Foundation of the CFA Institute.

Şamiloğlu, F. (2006). Company size, book value/market value and average yields: an empirical review on the Istanbul stock exchange. *Journal of Mufad*, 32.

Temizel, F. (2008). Intraday structures in the Istanbul Stock Exchange stock prices. *Ataturk University Journal of Economics and Administrative Sciences,* 22, 1.

Thaler, R. H. (1987). Anomalies: The January effect. *Journal of Economic Perspectives*, 97–201.

Thaler, R. H. (ed.). (2005). *Advances in behavioral finance* (Vol. 2). Princeton, NJ: Princeton University Press.

The Stan Clack Financial Team. (2003). An excerpt from Perspectives. Retrieved from http://www.cibcwg.com/web/stan -clark/the-stan-clark-financial-team.

Tufan, C., & Sarıçiçek, R. (2013). Behavioral finance models, effective market hypothesis and anomalies. *Trakya University Journal of Social Sciences*, 15(2), 159–182.

Unal, S., & Akbey, F. (2016). Investigation of firm size and market value/book value anomalies: BİST sample. *Celal Bayar University Journal of Social Sciences*, 14(2), 257–282.

Wood, R. A., Mcinish, T. H., & Ord, J. K. (1985). An investigation of transactions data for NYSE Stocks. *The Journal of Finance, Papers and Proceedings of the Forty-third Annual Meeting of the American Finance Association*, 48(3), 723.

Yıldırım, N. (2005). *Firm size and book value/market value effects: ISE example*. ISE Review, 8.

CHAPTER THREE

AN INVESTIGATION OF SMARTPHONE BUYING BEHAVIOUR WITHIN THE FRAME OF THE THEORY OF PLANNED BEHAVIOUR: THE CASE OF RIZE

ONDER DILEK

Introduction

According to the theory of planned behaviour (TPB), the behaviours of people are rooted in certain causes and they emerge in a planned way. According to Ajzen (1991), in order for a behaviour to emerge firstly, intention should be formed. Intention is affected by variables such as attitudes towards the behaviour (ATB), subjective norms (SN) and perceived behavioural control (PBC). This relationship is demonstrated in Figure 1. The model is based on the assumption that individuals usually behave in a reasonable way and assess the potential outcomes of their behaviours taking the currently available information into consideration. In addition, Intention is stated as the most significant factor that assigns Actual Behaviour (Mathieson, 1991; Ajzen, 2005).

Attitudes towards the Behaviour (ATB), according to Fishbein (2001), express individuals' feelings and positive and negative dispositions towards objects, behaviours or events. This is shaped by the previous experience or the information obtained from the environment (Kocagöz, 2010, p. 21). In various studies undertaken on the TPB, attitudes were seen as the most significant factor that affects intention (Korkmaz & Sertoğlu, 2013, p. 147).

Subjective Norms (SN) state that in predicting an individual's intentions subjective norms may vary depending on behaviours and context (Ajzen, 1991). The expectations of the groups around an individual have a significant role in the way an individual behaves (Eyler, 2016, p. 85). If an

individual thinks that the groups that s/he takes seriously expect him or her to do a behaviour, s/he feels a social pressure on himself or herself. However, if s/he believes in the opposite, s/he feels a social pressure on himself or herself not to do a specific behaviour (Albayrak, 2008, p. 61). Briefly, it is the social pressure an individual feels while deciding on whether or not to do an action (Ajzen, 2005). The firms that come to recognize the significance of subjective norms in consumer decisions are observed to use this factor successfully (Goldstein and Cialdini, 2009).

Perceived Behavioural Control (PBC) is an individual's belief regarding the degree of hardship for showing a specific behaviour (Erten, 2002, p. 202). Namely, it is an individual's perception of whether showing a behaviour is in his/her control or not (Küçük, 2011, p. 148). Individuals who have a positive life and who do not expect to meet hardships tend to have more intention for realizing a behaviour (Baltaş, 2000, p. 41). PBC affects behaviour in two ways. The first one is directly and the second one is indirectly through Intention. Individuals who believe they have the ability and resources to realize a behaviour form a strong PBC while the ones who do not think that they have the abilities and resources form a weaker PBC (Albayrak, 2008, p. 62). In other words, out of the individuals who have the same intention, while realizing a behaviour, the individuals who trust in their abilities more are more likely to be successful (George, 2004, pp. 199-200).

Intention, according to Ajzen (2014), is determined through the Intention (I) to realize a behaviour, Attitudes towards Behaviour (ATB), Subjective Norms (SN) and Perceived Behavioural Control (PBC). Yüzüak (2017) describes Intention as the most significant factor that leads to the emergence or performing of human behaviours. On the other hand, Kocagöz (2010) expresses it as an individual's inclinations for performing or not performing a behaviour.

In the literature TPB is used in various different fields. Dilek (2018) studied the buying behaviour on special days and the study concluded that the variable Attitudes towards Behaviour had the most significant effect on the buying intention. Öztürk et al. (2015) studied how customers perceived the term halal and their buying behaviour regarding halal products. The study concluded that the attitudes developed by the customers were the most effective factor on intention while intentions were the most effective factor on actual behaviour. Çakır (2014) studied customers' online buying behaviour in the light of consumption culture and TPB. The study revealed that shopping online or forming an intention to behave in this way is dependent on the beliefs the customers have and this is in line with these factors. In explaining university students' intention to buy sustainable food

products, Korkmaz and Sertoğlu (2013) detected a positive correlation between attitudes, social norms and perceived customer activity, and the dependent variable intention. Moreover, the study concluded that the variable attitudes are a significant indicator of buying sustainable products.

Turan (2011) undertook a study to find the psychological and cognitive reasons that affect preferences for shopping online or not shopping online. An individual's attitudes towards shopping online are affected by the individual having a positive attitude and the views of those whom the individual respects regarding shopping online. In the study that aims to understand the use of mobile data services, Kim (2010) concluded that subjective norms and perceived behavioural control had a significant effect on intention. Kocagöz (2010) studied working women's cosmetics buying behaviour through the TPB. The study demonstrated that in the emergence of buying behaviour, perceived behavioural control and intentions had a significant effect and intentions were explained by attitudes and subjective norms. Arvola et al. (2008) studied the integration of emotional and moral attitude measurements into the TPB to estimate organic food buying intentions. They concluded that the variables changed according to countries. In England and Italy moral attitudes were found to be more effective than subjective norms. Hansen et al. (2004) studied behavioural intention in relation to online shopping in the framework of the rationalist action theory and the theory of planned behaviour. In the initial study, they found that perceived behavioural control is not meaningful in explaining intention. In the study undertaken one year later it was observed to account for intention and also, attitudes were found to be the most significant variable that explained intention in both studies. Bamberg et al. (2003) studied students' transportation preferences in their two-stage study. They found that Attitudes, Subjective Norms and Perceived Behavioural Control affect their choices of transportation to go to the campus. Kalafatis et al. (1999) studied consumers' environmentally-friendly product-buying intention in Greece and the UK in the framework of the TPB. They concluded that in the UK as a result of the existence of social structures such as Greenpeace, social norms have a direct effect on environmentally-friendly product-buying while perceived behavioural control had a direct effect on intention in Greece which has fewer social groups that can give encouragement in this context.

Some other studies that were undertaken in the literature regarding smartphones will be reviewed in the following sentences. Shabrin et al. (2017) studied the relationship between buying behaviour and the factors that affect it. The social effect, the properties of the products and the image of the brand were found to have a significant effect on buying

behaviour while comfort, addiction, price and social needs were found to have no effect. Yusufoğlu (2017) undertook a study to understand if smartphones cause a waste of time as a leisure time activity. The study results demonstrated that a really high amount of time is spent on smartphones and individuals could not reach the socialization level they expected to reach. Çakır and Demir (2014) undertook a study to unearth the factors that affect university students' smartphone buying preferences. The study concluded that the properties of the product, the brand and advertisement efforts had a significant effect on buying preferences. Ada and Tatlı (2012) did a study to find out the factors that affect smartphone use and to what extent these factors affect smartphone use. They concluded that board level support, the size of the company and the skill of entrepreneurship positively affected mobile communication sector workers' smartphone use. Osman et al. (2012) studied the smartphone use behaviours of the customers. They found that customers perceived factors such as design, connection and performance as more important compared to price. Lane and Manne (2011) undertook a study to identify the effect of personal characteristics on smartphone ownership and use. Extravert individuals were found to be more likely to have a smartphone. In addition, they concluded that women were less likely to own a smartphone compared to men, and women were found to give less importance to messaging and e-mails. Gökaliler et al. (2011) did a study to unearth how iPhone smartphones were perceived by university students as a status of consumption. They found that for the participants iPhone smartphones had an image and attractiveness that evoked admiration.

The smartphone industry is a market which has fast-changing competition and big novelties. As a result of these novelties and competition, new smartphones that make life easier enter the market (Tatlı, 2015, p. 550). In the modern world, communication technologies develop and the life of a communication tool may be very short. Especially in the smartphone market, changes in the market shares are the indicators of this situation. According to the data of the Gartner company, one of the leading research companies in the world, in the first quarter of 2017 Samsung sold 78.78 million smartphones, but it sold 78.56 million smartphones in the same period in this year and its share shrank by 0.3%. As for Apple, it achieved a 4% growth rate in one year and increased its sales from 51.99 million to 54.06 million. For the first quarter in 2018 the shares of the companies are as follows: Samsung: 20.5%, Apple: 14.1%, Huawei: 10.5%, Xiaomi: 7.4% and Oppo: 7.3% (https://www.gartner.com, accessed on: 15.09.2018). Thanks to the opportunity to access the internet all the time, social networks have become the indispensable parts of our lives and

the applications on entertainment habits, shopping and banking have increased. Consequently, mobile phones are used for different purposes compared to their traditional role which included talking and SMS. In this study, smartphone buying behaviour was studied in the framework of the TPB and the properties which were taken into consideration while buying a smartphone were analyzed. The study also analyzed for which purposes these properties were used.

Figure 3-1. The Theory of Planned Behaviour (Ajzen, 1991)
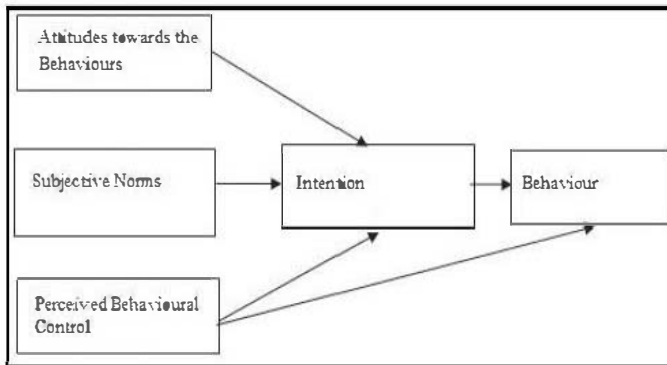
Methodology

This study was undertaken to investigate smartphone buying behaviour in the framework of the TPB. Rize, which forms the context of this study has a population of 331.048. The participant ratio that samples the main body of people is at a 5% significance level and it is detected as 384 with a 5% margin of error. However, thinking that there may be wrong or incomplete submissions, 764 questionnaires were implemented and after the inconsistent ones were discarded, the remaining 720 were taken into analysis. The questionnaire which consisted of three sections and 63 questions was implemented face to face. In the first part there are statements that are designed to evaluate the variables in the research design of the TPB. In the second part there are statements to measure which properties individuals consider as significant and also the other properties that affect individuals' buying behaviour. As for the third and final part, there are statements regarding individuals' demographics. While identifying the statements in the questionnaire, scales that were empirically implemented and checked for validity and reliability previously were used.

For the variables Attitudes towards Behaviour, Subjective Norms, Perceived Behavioural Control and Intention, the scales of Beck and Ajzen (1991), Madden et al. (1992), Netemeyer et al. (1993), Taylor and Todd (1995), Venkatesh and Davis (2000), Ajzen (2006), Lee, Qu and Kim (2007), Albayrak (2008), Kocagöz (2010), Turan (2011), Teng, Wu and Liu (2013), Akıncı and Kıymalıoğlu (2015), Öztürk et al. (2015), Yay (2015), Eyler (2016) and Dilek (2018) were utilized. Considering the model in Figure 1, the validity of the hypotheses below was checked.

H$_1$: There is a positive correlation between Attitudes towards Behaviour (ATB) and smartphone buying Intention (I).

H$_2$: There is a positive correlation between Subjective Norms (SN) and smartphone buying Intention (I).

H$_3$: There is a positive correlation between Perceived Behavioural Control (PDC) and smartphone buying Intention (I).

H$_4$: There is a positive correlation between Perceived Behavioural Control (PDC) and Behaviour (B).

H$_5$: There is a positive correlation between smartphone buying Intention (I) and Behaviour (B).

The scale of *Attitudes towards Behaviour* consists of seven statements, the scale of *Subjective Norms* consists of nine statements, the scale of *Perceived Behavioural Control* consists of five statements and the scale of *Intention* consists of three statements. They were evaluated through a Likert type scale that consists of definitions such as "1 = I do not agree at all … 5 = I definitely agree". The data were analyzed regarding reliability, factors and regression analysis through the SPSS program. In unearthing the reliability of the scales, Cronbach's Alpha (α) coefficient was used. The value of Cronbach's Alpha which is the reliability coefficient takes values that vary between 0 and 1 and the closer this value gets to 1 the more reliable is the scale. Exploratory factor analysis (EFA) was undertaken for the data obtained from the independent variables of the model which are attitudes towards behaviour, subjective norms, perceived behavioural control and intention. Before undertaking exploratory factor analysis, the Kaiser-Meyer-Olkin (KMO) test was implemented to test the adequacy of the sample. While commenting on the KMO value, the values below 0,5 cannot be accepted. 0,5 to 0,7 are weak and average, 0,7 to 0,8 are medium and the values above 0,8 are high values (Coşkun et al., 2015). Finally, in the study the hypotheses in the TPB model were tested through regression analysis.

Findings

In this section, the findings obtained from the analysis will be presented. Table 3-1 presents the participants' demographic information.

Table 3-1. Basic Demographic Information

Variables		Count	%	Variables		Cnt	%
Gender	Male	298	41,4	**Marital Status**	Married	279	38,8
	Female	472	58,6		Single	441	61,2
	Total	**720**	**100**		**Total**	**720**	**100**
Age	18-25	209	29,0	**Level of Education**	Primary	168	23,3
	26-35	265	36,8		High school	183	25,4
	36-45	117	16,3		Undergrad.	282	39,2
	46-55	111	15,4		Graduate	87	12,1
	56+	18	25		**Total**	**720**	**100**
	Total	**720**	**100**	**Profession**	Civil Servant	161	22,4
Income	1500 and below	213	29,6		Student	106	14,7
	1501-3000	246	34,2		Private Sec.	98	13,6
	3001-4500	169	23,5		Tradesman	85	11,8
	4501-6000	50	6,9		Worker	78	10,8
	6001 +	42	5,8		Housewife	56	7,8
	Total	**720**	**100**		Freelancer	46	6,4

According to Table 3-1, 41,4% of the participants are male and 58,6% are female. 29% of them are between the ages of 18 and 25, 36,8% are between 26 and 35, 16,3% are between 36 and 45, 15,4% are between 46 and 55 and 2,5% are 56 and above. 38,8% of them are married while 61,2% are single people. 29,6% of them earn 1500 TL and less, 34,2% earn between 1501 and 3000 TL, 23,5% earn between 3001 and 4500 TL, 6,9% earn between 4501 and 6000 TL and 5,8% of them earn 6001 TL and more. 23,3% of the participants have a primary school degree, 25,4% of them have a high school degree, 39,2% of them have an undergraduate degree and 12,1% of them have a graduate degree. 22,4% of the participants are civil servants, while 14,7% of them are students and 3,5% of them are farmers. The results of the reliability and factor analysis of the variables are presented in Table 3-2.

Table 3-2. The Results of the Reliability and Factor Analysis of the Variables

Statement	DYT	SN	ADK	N
Buying a smartphone is an indicator of prestige	,593			
Buying a smartphone is a wise behaviour	,654			
Buying a smartphone is a good behaviour	,627			
Buying a smartphone is a good idea	,723			
Buying a smartphone is an indicator of richness	,668			
Buying a smartphone excites me	,715			
Buying a smartphone makes me happy	,585			
My family thinks that I need to buy a smartphone		,517		
My friends think that I need to buy a smartphone		,679		
Other people whose views I value think that I need to buy a smartphone		,722		
The people I take seriously encourage me to buy a smartphone as I need one		,718		
Seeing that I am appreciated by the people around me when I buy a smartphone makes me happy		,625		
I encourage my acquaintances to buy a smartphone		,586		
Most of my family members buy a smartphone		,665		
Most of my friends buy a smartphone		,805		
Most of the other people whose views I value buy smartphones		,545		
I have enough time to buy a smartphone			,565	
I know how to access a smartphone			,625	
In the process of buying a smartphone I decide which one to buy			,880	
Sales and discounts affect my buying			,715	
I am well-off for buying a smartphone			,648	
I intend to buy a smartphone in the future				,628
I will make an effort to buy it in the future				,730
I am ready to spend more money to buy a smartphone				,715
Accounted Variance	17,41	17,29	13,09	10,39
Cronbach's Alpha (α)	0,879	0,876	0,781	0,724
KMO: 0,915 Sum of the variance accounted for: % 58,110				
Bartlett's Test of Sphericity: 0,00				

The results of the analysis undertaken to test the relationship between the dependent and independent variables are presented in Table 3-3 and Table 3-4.

Table 3-3. The Results of the Regression Analysis Belonging to the First Model

Independent Variables	β	t	p	VIF
Attitudes towards the Behaviour	0,311	8,154	0,000	1,992
Subjective Norms	0,256	6,862	0,000	1,852
Perceived Behavioural Control	0,140	4,569	0,000	1,460

(The Dependent variable: Intention) $R = 0,690$ $R^2 = 0,551$ $F = 125,100$ $p = 0,000$

The F test results of the study ($F = 156,071$ and $p = 0,000$) demonstrated that the model is valid as a whole. Whether there is multicollinearity or not was checked through Variance Inflation Factors (VIF) and the results showed that there is no multicollinearity (VIF<10). The hypothesis H_1 is accepted ($P = 0,000<0,05$) and the analysis concluded that there is a positive correlation between ATB and the Intention of buying a smartphone. When the exploratory power of the independent variables was analyzed, ATB was observed to provide the most contribution to smartphone buying behaviour. Namely, the change in Intention was detected to be created through ATB ($b = 0.311$) primarily. The factor that has the second most effect contribution to buying Intention is SN ($β = 0.256$). In other words, the H_2 hypothesis was accepted and a positive correlation between SN and smartphone buying Intention was detected. Just like the other two hypotheses, the hypothesis H_3 was also confirmed and the study concluded that there is a positive relationship between PBC and smartphone buying Intention. PBC ($β = 0.140$) is the third most effective variable in affecting Intention.

According to the TPB, Actual Behaviour is affected by Intention and Perceived Behavioural Control. For this reason, a second regression analysis was undertaken to analyze the relationship between Actual Behaviour, the main dependent variable in the research model, and Perceived Behavioural Control and Intention.

Table 3-4. The Results of the Regression Analysis Belonging to the Second Model

Independent Variables	β	t	p	VIF
Perceived Behavioural Control	0,230	6,4559	0,000	1,562
Intention	0,345	,669	0,000	1,562

(The Dependent variable: Actual Behaviour)
R– 0,570 R²– 0,437 F – 111,400 p – 0,000

When Table 3-4 was analyzed, it was observed that the H₅ hypothesis was accepted and there is a positive correlation between Intention and Actual Behaviour (β – 0.345). In addition, the variable Intention was found to have more explanatory power (β – 0.345). The direct effect of PBC on Actual Behaviour was detected as (β – 0.230). The H₄ hypothesis was accepted and a positive correlation was detected between PBC and Actual Behaviour. To conclude, all the hypotheses were accepted and according to the findings obtained through both of the analyses, the relationships between the dependent variable and the independent variables were found to be in a positive correlation. The entire findings are summarized in Figure 3-2.

Figure 3-2. The Results of the Analysis
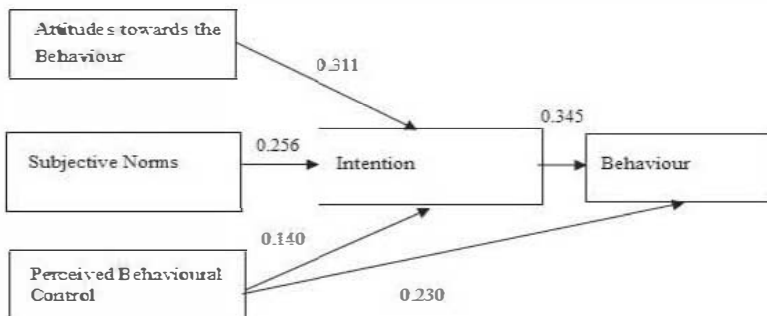
The properties taken into consideration while buying a smartphone were analyzed and the results are presented in Table 3-5.

Table 3-5. The Properties Taken into Consideration While Buying a Smartphone

Variables	Averages
Being under Warranty	2,833
Camera Resolution	2,809
Quality	2,755
Price	2,688
Aesthetic Look	2,672
Battery Life	2,548
Service Roll-out	2,493
Memory	2,479
Being a Well-known Brand	2,411
Screen Resolution	2,375
Being the Latest Version	2,337
Processor	2,284
Locally/Nationally Made	2,002
Being an Imported Product	1,741

While considering buying a smartphone, the first factor is being under warranty with an average of 2,833. The other factors are respectively camera resolution, quality, price, aesthetic look, battery life, service roll-out, memory, being a well-known brand, screen resolution, being the latest version, processor, locally/nationally made, and being an imported product.

The applications that are used in smartphones except for talking were analyzed and the results are presented in Table 3-6.

Table 3-6. The Applications Used in Smartphones

Variables	Average
Capturing-Watching Photos-Videos	4,203
Messaging (WhatsApp and so on)	4,038
Surfing (other)	3,945
Social Networks	3,836
Sending-Receiving E-mails	3,820
Playing Games	3,740
Banking Transactions	3,688
News (newspapers, etc.)	3,429
Messaging (Traditional SMS)	3,284
Maps-Navigation	3,262
Education-Information	3,041
Watching Movies-Series	2,725

When the purposes of smartphone use were analyzed, the most frequent three were capturing-watching photos-videos (4,203), WhatsApp and so on (4,038) and surfing (3,945). After these purposes, the others were surfing in social media (3,836), receiving/sending emails (3,820), playing games (3,740), banking transactions (3,688), news (3,429), SMS (3,284), maps-navigation (3,262), education-information (3,041) and watching movies-series (2,725) respectively.

Conclusion and Suggestions

Until 15 years ago, studies in the literature were more likely to be on owning a mobile phone. However, today almost everyone has a phone (even more than one). After phones acquired the property of being "smart", the opportunities they provided for an individual made them an indispensable part of life. People lives are dependent on smartphones almost 24/7 and new phobias such as running out of battery or internet package, disconnection of his/her phone network signals or forgetting his/her phone at home or work have emerged. Symptoms such as panicking or despairing when a person is away from his/her phone, not being able to focus on the conversations or work and controlling the phone continuously are the fundamental indicators of the problem named "nomophobia". The studies in the literature demonstrated that smartphone use does not lead to only psychological problems but also physical problems. According to a study undertaken in Saarbrücken University in Germany, 95% of the people using smartphones hold the phone in a wrong way. Holding a phone wrongly leads to numbness in hands and arms as a result of the constriction of the muscles and this causes discomfort in the neck and back.

Despite all these negative effects, any scientific study that is undertaken on the widely used smartphones is expected to be beneficial. In this study smartphone buying behaviours were analyzed within the scope of the TPB; the specifications buyers pay attention to and the reasons (specifications) buyers use them were studied. Accordingly, a questionnaire consisting of 3 parts and 63 questions was implemented in Rize province. 41,4% of the participants were male and 58,6% were female. 29% of the participants were between the ages of 18 and 25, 36,8% were between 26 and 35, 16,3% were between 36 and 45, 15,4% were between 46 and 55 and 2,5% were 56 and above. 38,8% of the participants were married while 61,2% were single. 29,6% of them earned 1500 TL or less, 34,2% earned between 1501 and 3000, 23,5% earned between 3001 and 4500, 6,9% earned between 4501 and 6000 and 5,8% earned 6001 TL and more.

23,3% of the participants are primary school graduates, 25,4% are high school graduates, 39,2% hold an undergraduate degree and 12,1% hold a graduate degree. 22,4% of the participants are civil servants while 14,7% are students and 3,5% are farmers.

In a smartphone the most significant characteristics were observed to be *being under warranty, camera resolution, being qualified, aesthetic look and battery life*. It may be suggested that the companies that aim to have the upper hand in competition in the market should prioritize these properties. Moreover, smartphones are most frequently used for capturing (watching) photos/videos, messaging (WhatsApp and so on), roaming, social media and receiving and sending e-mails. These findings show the significant place the internet holds in smartphones. In the light of these results, it is suggested that the smartphone producers that aim to increase their selling rates should consider the benefits of forming promotions and tariffs together with telecommunication companies.

This study concluded that there is a positive correlation between Intention and Attitudes towards the Behaviour, Subjective Norms and Perceived Behavioural Control (the hypotheses H_1, H_2 and H_3 were confirmed). As in most of the studies in the literature, this study detected that the change in Intention is initially created by the Attitude towards the Behaviour. As for the second analysis, a positive correlation was found between the dependent variable Buying Behaviour and the independent variables Perceived Behavioural Control and Intention (Hypotheses H_4 and H_5 were confirmed). In addition, this study deduced that Intention is the primary variable that determines the Buying Behaviour.

Attitudes are determined by factors such as negative or positive inclinations or experiences regarding an object, a behaviour or an event and in this sense, its significant effect on buying intention should be taken into consideration by firms and companies. From the production stage to marketing, sales and post sales services, the firms that make a positive impression on a customer's heart and mind will have more advantages.

It is estimated that the specifications that are seen as important for choosing a smartphone may vary according to demographic information (gender, age, income, occupation and so on). In addition, the study is restricted to the Rize province. For this reason, expanding this study to include the region or the whole country and even undertaking the study on people that have different demographics will help unearth more valid findings.

References

Ada, S., & Tatlı, H. S. (2012). A research study on factors affecting smartphone use. Retrieved from https://ab.org.tr/ab13/bildiri/74.pdf.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179–211.

Ajzen, I. (2005). *Attitudes, personality and behaviour* (2nd ed.). McGraw-Hill: Open University Press.

Ajzen, I. (2006). Constructing a tpb questionnaire: conceptual and methodological considerations. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?. Doi: 10.1.1.601.956&rep=rep1 &type=pdf.

Akıncı, S., & Kıymalıoglu, A. (2015). Marketing theories (planned behavior theory), edited by M. I. Yağcı and Serap Çabuk. MediaCat.

Albayrak, T. (2008). The effect of environmental policy on consumer attitudes and behaviours. Unpublished PhD thesis, Akdeniz University Institute of Social Sciences, Antalya.

Arvola, A., Vassola, M., Dean, M., Lampila, P., Saba, A., Lähteenmäki, L., & Shepherd, R. (2007). Predicting intentions to purchase organic food: The role of affective and moral attitudes in the theory of planned behaviour. *Appetite*, 50, 443–454.

Baltaş, Z. (2000). *Health psychology, behavioral sciences in public health*. Istanbul: Remzi Bookstore.

Bamberg, S., Ajzen, I., & Schmidt, P. (2003). Choice of travel mode in the theory of planned behavior: The roles of past behavior, habit, and reasoned action. *Basic and Applied Social Psychology,* 25(3), 175–187.

Beck, L., & Ajzen, I. (1991). Predicting dishonest actions using the theory of planned behavior. *Journal of Research in Personality*, 25(3), 285–301.

Coşkun, R., Altunışık, R., Bayraktaroğlu, S., & Yıldırım, E. (2015). *Research methods in social sciences: Spss applied* (8th ed.). Sakarya: Sakarya Bookstore.

Çakır, F., & Demir, N. (2014). A study on determining university students' choices for buying a smart phone. *Dokuz Eylül University Journal of the Faculty of Economics and Administrative Sciences*, 29(1), 213–243.

Çakır, T. M. (2014). Postmodem consumption and changing characteristics of consumers: Investigation of attitudes towards online purchasing within the framework of discrete planned behavior theory. Unpublished PhD Thesis, Maltepe University Institute of Social Sciences, Istanbul.

Çakır, F., & Demir, N. (2014). A research study for determining university students' choices for smart phone buying. *Dokuz Eylül University*

Journal of the Faculty of Economics and Administrative Sciences, 29(1), 213–243.

Dilek, N. (2018). Investigation of special behavioral behaviors in the context of planned behavior theory: The case of Rize. Unpublished Master's thesis, Eurasian University Social Sciences Institute, Trabzon.

Erten, S. (2002). Applied teaching method with planned behavior theory. *Hacettepe University Literature Journal,* 19(2), 217–233.

Eyler, N. (2016). A research study on determining the intentions of individuals over 50 to travel in health within the scope of planned behavior; Ankara case. Unpublished PhD Thesis, Gazi University, Institute of Social Sciences, Ankara.

Fishbein, M. (2001). Intentional Behaviour. In Charles D.Spielberger (ed.), *Encyclopedia of applied psychology,* 329–334. Oxford, Boston: Elsevier Academic Press.

George, F. J. (2004). The theory of planned behaviour and internet purchasing. *Internet Research,* 14(3), 198–212.

Goldstein, N. J., & Cialdini, R. B. (2009). Normative influences on consumption and conservation behaviors. In M. Wanke (ed.), *Social psychology of consumer behavior,* 273–296. New York: Psychology Press.

Gökaliler, E., Aybar, A., & Göker, G. (2011). A research study on university students: the perception of the iphone branded smartphone as a status consumption indicator. *Selçuk Communication,* 7(1), 36–48.

Hansen, T., Jensen, J. M., & Solgaard, H. S. (2004). Predicting online grocery buying intention: A comparison of the theory of reasoned action and the theory of planned behavior. *International Journal of Information Management,* 24, 539–550.

Kalafatis, Stavros P., East, R., Pollard, M., & Tsogas, M. H (1999). Green marketing and Ajzen's theory of planned behaviour: A cross-market examination. *Journal of Consumer Marketing,* 16(5), 441–460.

Kim, B. (2010). An empirical investigation of mobile data service continuance: Incorporating the theory of planned behaviour into the expectation–confirmation model. *Expert Systems with Applications,* 37(10), 7033–7039.

Kocagöz, E. S. (2010). Investigation of women's behavioral behaviours: an application of planned behaviour theory. Unpublished PhD thesis, Erciyes University, Institute of Social Sciences, Kayseri, Turkey.

Korkmaz, S., & Sertoğlu, A. E. (2013). Discussion of sustainable food consumption behaviour of young consumers in the context of planned behavior theory based on trust and values. *Hacettepe University*

Faculty of Economics and Administrative Sciences Journal, 31(1), 127–152.

Küçük, E. (2011). Analysis of the Factors Underwriting the Purpose of Becoming a Certified Public Accountant within the Context of Planned

Behaviour Theory. *Zonguldak Karaelmas University Institute Association,* 7(14), 145–162.

Lane, W., & Manner, C. (2011). The impact of personality traits on smartphone ownership and use. *International Journal of Business and Social Science,* 2(17), 22–28.

Lee, H. Y., Qu, H., & Kim, Y. S. (2007). A study of the impact of personal innovativeness on online travel shopping behaviour – a case study of Korean travelers. *Tourism Management, 28,* 886–897.

Madden, T. J., Ellen, P. S., & Ajzen, I. (1992). A comparison of the theory of planned behavior and the theory of reasoned action. *Personality and Social Psychology Bulletin,* 18(1), 3–9.

Matheieson, K. (1991). Predicting user intentions: Comparing the technology acceptance model with the theory of planned behaviour. *Information Systems Research,* 2(3), 173–191.

Netemeyer, R. G., Andrews, J. C., & Durvasnia, S. (1993). A comparison of three behavioral intention models: the case of Valentine's day gift-giving. *Advances in Consumer Research, 20,* 135–141.

Osman, M. A., Talib, A. Z., Sanusi, Z. A., Yen, T. S. & Alwi, A. S. (2012). A study of the trend of the smartphone and its usage behavior in Malaysia. *International Journal on New Computer Architectures and Their Applications,* 2(1), 275–286.

Öztürk, A., Nart, S., & Altunışık, R. (2015). Determinants of the halal consumption behaviour of consumers: A research study in the context of planned behaviour. *International Journal of Islamic Economics and Finance Studies,* 1(2), 141–160.

Shabrin, N., Khandaker, S., Abul Kashem, S. B., Kit Hie, C., & Susila, T. (2017). Factors Affecting Smartphone Purchase Decisions of Generation-Y. *The Journal of Contemporary Issues in Business and Government,* 23(1), 47–65.

Tatlı, H. (2015). Determinants of smart phone selection: An application on university students. *Çankırı Karatekin University Journal of the Faculty of Economics and Administrative Sciences,* 5(2), 549–567.

Taylor, S., & Todd, P. (1995). Decomposition and crossover effects in the theory of planned behavior: A study of consumer adoption intentions. *International Journal of Research in Marketing,* 12(2), 137–155.

Teng, Y. M., Wu, K. S., & Liu, H. H. (2013). Patronage intention of a green hotel integrating altruism and the theory of planned behavior to predict. *Journal of Hospitality & Tourism Research,* 1–17.

Turan, A. H. (2011). Internet shopping factors that determine consumer behavior: An empirical test with the theory of planned behaviour. *Doğuş University Journal,* 12(1), 128–143.

Venkatesh, V., and Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science,* 46(2), 186–204.

Yay, Ö. (2015). Investigation of eating behaviour in the environmentalist hotel restaurant in the context of planned behavior theory. Unpublished master's thesis, Akdeniz University Institute of Social Sciences, Antalya.

Yusufoğlu, Ö. Ş. (2017). Effects on smart phones and social life as leisure activities: A research study on university students. *Journal of Humanities and Social Sciences Research,* 6(5), 2414–2434.

Yüzüak, A. V. (2017). Evaluation of sustainable behaviors of science teachers on the basis of planned behavior theory. Unpublished PhD thesis, Hacettepe University, Institute of Social Sciences, Ankara.

Bayalan, Y. (2018). *What is nomofobi (smartphone addiction)? What are the symptoms?* Retrieved from https://yusufbayalan.com/nomofobi.

Milliyet Newspaper. (2018). Retrieved October 15, 2017, from http://www.milliyet.com.tr/cep-telefonu-bagimliligi-korkutuyor-pembenar-detay-saglik-2125450/.

CHAPTER FOUR

PURCHASING BEHAVIOURS OF READY-TO-WEAR SECTOR CUSTOMERS

ONUR KOPRULU, MITHAT TURHAN AND ILTER HELVACI

Introduction

Globalization and an increased competitiveness environment have blazed the trail for companies to find solutions to survive. In other words, they have started to explore various ways to create more added value and increase their share in the market to survive and gain competitive advantage against other competitor firms.

Consumers' purchasing behaviour has been one of the most important research areas that companies have focused on. In other words, attracting consumers' attention depends on how successful companies are in overcoming customers' needs and expectations to gain competitive advantage. Therefore, the determination of consumers' decision-making structures according to demographic factors such as psychological, sociological and economic backgrounds plays a very important role for firms. In addition to textile products' functionality, factors regarding the brand design, logo and brand image also play a key role in the purchasing process.

Marketing activities start with the introduction of new goods to customers. Thus, they will realize that there is a necessity to buy these goods or services. The next phase is the decision-making process among various sellers and various goods. Advertisement activities are vital and may be identified as the most significant marketing activities if used efficiently for attracting customers' attention to increase the sales of enterprises.

There are numerous media tools such as social network sites, digital marketing applications, messages, newspapers, magazines, television,

cinema and many more marketing strategies containing advertisement activities to reach large masses of customers. The increasing usage of the Internet among customers in particular has drawn attention to mobile marketing activities via mobile phones and tablets. Customers prefer mobile devices for gathering information about new trends of goods and services. In addition, they also pick up the latest news on trends of goods and services, their prices in different markets, payment options, after-sales implementations, warranty options and many other pieces of information.

The textile and ready-to-wear sector is of great importance for Turkey in terms of its share in Turkey's overall exports and its contribution to the level of employment. Regarding their various product groups, companies differentiate their brands and prices in order to create potential customers who act according to their budgets. Reaching a higher share in the ready-to-wear sector mostly depends on developing an efficient marketing strategy while providing good quality and a rational pricing policy for customer loyalty.

Categorizing consumers in the ready-to-wear sector according to various demographic factors such as age, gender, nationality, income level, education level, etc., in this sector constitutes the framework of this chapter. Consumers' behaviours in the market place against goods or services are the focal point of the research. In other words, the ready-to-wear sector and its target groups' purchasing behaviours are examined in this chapter according to the research results gathered by a survey applied to 100 ready-to-wear consumers. Brand preferences of consumers have been identified in different scales by various researchers. Brand trust and personality have been chosen as two scales for defining consumer preferences in this chapter.

Consumer purchasing behaviour has been identified by many researchers in different ways. The term "customer behaviour" has been defined by Arpacı (1992) as the "usage of company resources to maximize the satisfaction of customers' needs". It has also been identified by the American Marketing Association as "the behaviour of the consumer or decision maker in the market place of products and services". Additionally, Ball and Tasaki (1992) emphasized that "A central issue from a consumer behaviour perspective is the extent to which an owned object serves the functions of defining and maintaining the self-concept or identity of a consumer". The ignorance of the cultural impact on consumer behaviour by many companies that resulted in declining profitability has also been figured out by Mooji and Hofstede (2002). Furthermore, the role of emotions as another research area was examined by Laros and Steenkamp (2005); in connection with "The Hierarchical Approach".

Moreover, it is not only the buying or not buying process of decision-making that researchers are excited to investigate but also the different dimensions of consumer behaviour such as environment and political infrastructure which have been attracting attention as new areas to be examined. In this context, the environmentally significant measure of household consumer behaviour has been examined by Gatersleben, Steg and Vlek (2010).

Method

This study aims to determine the purchasing behaviours of ready-to-wear sector customers in Silifke. Consumer preferences in this research have been examined by two scales: the "Brand trust scale" of Bagozzi, Batra and Ahuvia (2013) which was utilized by Turgut (2014) and consisted of 10 questions and "the big five personality traits" scale (openness, conscientiousness, agreeableness, extraversion, and neuroticism) addressed by McCrae and Costa (1992) which was used in this research during the determination of scale and their dimensions as the basis of the questionnaire. On the other hand, dimensions of the personality scale that consisted of 48 questions used by Çınar (2011) were also utilized in this research.

Research Questions

As mentioned above, the aim of this study is to investigate in order to analyze the purchasing behaviours of the ready-to-wear-sector customers in Silifke. Therefore, the following research questions are the focal point of the study:

1. Is there a relationship between brand trust and openness?
2. Is there a relationship between brand trust and conscientiousness?
3. Is there a relationship between brand trust and agreeableness?
4. Is there a relationship between brand trust and extraversion?
5. Is there a relationship between brand trust and neuroticism?

Research Design

The questionnaire was used for the survey as a data collection method. Also, the Pearson Correlation Coefficient, Cronbach's Alpha values and descriptive statistics were the main statistical indicators in the scope of this study. Research hypotheses were also determined as follows:

H₁: There is a relationship between brand trust and openness.
H₂: There is a relationship between brand trust and conscientiousness.
H₃: There is a relationship between brand trust and agreeableness.
H₄: There is a relationship between brand trust and extraversion.
H₅: There is a relationship between brand trust and neuroticism.

Sampling

Research data were collected from 100 participants in 2018 in Silifke district, Mersin which is located in the Mediterranean Region of Turkey. Moreover, the convenience sampling method was chosen as the data collection method. The main constraints of this research can be identified as limited time and other expenditures. Therefore, this method was used to collect data in our survey.

Findings

The demographic indicators are shown in Table 1 below. It is observed that 63% of the participants are women while 37% of them are men. The majority of the participants (56%) graduated from a university. Moreover, 75% of the participants are unemployed.

As indicated in Table 1, 39% of the participants spent 51-100 Turkish Liras for ready-to-wear sector products. In addition, 34% of the participants expressed that they visited a ready-to-wear shop once a month. Finally, 19% of the participants declared that they live in a metropolitan city.

Table 4-1. Demographic Features of Ready-to-wear Sector Consumers

Demographic Features		Count (%)
Gender	Women	63
	Men	37
Education	High School	31
	Associate Degree	13
	Graduate Degree	56
Employment	Employed	25
	Unemployed	75
Monthly Income (Turkish Liras)	Less than 500TL	51
	500-1000 TL	23
	More than 1000 TL	26

Monthly Shopping Budget (Turkish Liras)	Less than 50 TL	21
	50-100 TL	39
	101-200 TL	19
	201-250 TL	9
	251-300 TL	4
	More than 300 TL	8
Frequency of Monthly Shopping	Once a week	27
	Once in 2 weeks	24
	Once a month	34
	Once in a season	14
	Once a year	1
Accommodation	Metropolitan city	19
	Province	13
	District	59
	Village	9

Reliability analysis test results of the scales used in our research according to Cronbach's Alpha values are also shown in Table 2 below. Both the results of Cronbach's Alpha values of "Personality" (0,788) and "Brand Trust" (0,812) can be accepted as reliable in terms of the scales used.

Table 4-2. Cronbach's Alpha Values and Reliability Analyses

Scales	Cronbach's Alpha	N
Personality	0,82	48
Brand Trust	0,80	10

Table 4-3. Results of Pearson Correlation Analyses among Brand Trust and Dimensions of Personality

Correlation		Brand Trust
Openness	Pearson Correlation	0,302 (**)
	Sig. (2-tailed)	0,002
	N	100
Conscientiousness	Pearson Correlation	0,270 (**)
	Sig (2-tailed)	0,007
	N	100
Agreeableness	Pearson Correlation	0,299 (**)
	Sig (2-tailed)	0,003
	N	100

Extraversion	Pearson Correlation	0,120
	Sig (2-tailed)	0,233
	N	100
Neuroticism	Pearson Correlation	-0,005
	Sig (2-tailed)	0,963
	N	100

Table 4-3 above, indicates the relationship among dimensions of personality and brand trust. H_1, H_2 and H_3 hypotheses are accepted with significance values of (0,002), (0,007) and (0,003). In other words, there is a significant relationship between brand trust and openness. That is to say, there is also a significant relationship between brand trust and conscientiousness. Finally, there is a significant relationship between brand trust and agreeableness. On the other hand, H4 and H5 hypotheses which correspond to a significant relationship between brand trust and extraversion and a significant relationship between brand trust and neuroticism are rejected. In other words, there is no significant statistical relationship between brand trust and extraversion and no significant statistical relationship between brand trust and neuroticism.

Findings and Conclusion

Consumers' behaviours in the market place against goods or services are the focal point of this chapter. In other words, the ready-to-ready wear and its target groups' purchasing behaviours have been examined in this chapter according to the research results gathered by a survey applied to 100 ready-to-wear consumers. Consumer preferences in this research have been examined by two scales: "brand trust" and "personality". Research results indicate that there is a significant relationship between brand trust and openness.

In addition, there is also a significant relationship between brand trust and conscientiousness. Moreover, there is a significant relationship between brand trust and agreeableness. On the other hand, there is no significant statistical relationship between brand trust and extraversion and no significant statistical relationship between brand trust and neuroticism.

Finally, the personality characteristics of ready-to-wear consumers and brand trust are related in some dimensions of personality. Companies should take these significant dimensions into consideration to gain competitive advantage.

References

American Marketing Association. (2018). *Definition of consumer behaviour*. Retrieved from https://www.ama.org/resources/Pages/Dictionary.aspx.

Arpacı, T., Ayhan, D. Y., Böge, E., Tuncer, D., & Uner, M. M. (1992). Pazarlama (1st ed.). *Marketing*. Ankara: Gazi Publishing.

Bagozzi, R. P., Batra, R., & Ahuvia, A. C. (2013). Brand love: Development of an operational scale and answers to unaddressed questions. Working Paper, University of Michigan, Ann Arbor.

Ball, D., & Tasaki, L. H. (1992). The role of measurement of attachment in consumer behavior. *Journal of Consumer Psychology*, 1(2), 155–172.

Çınar, H. (2011). Internet use in education and internet ethics: A research study with the five-factor personality model on office management and secretarial program students. *International Journal of Economic and Administrative Studies,* 3(6).

Gatersleben, B., Steg, L., & Vlek, C. (2010). Measurement and determinants of environmentally significant consumer behaviour. *Environment and Behaviour*, 34(3), 335–362.

Laros, F., & Steenkamp, J. (2005). Emotions in consumer behaviour: A hierarchical approach. *Journal of Business Research,* 1437–1445.

McCrae, R. R., & Costa, P. T. (1991). Adding liebe und arbeit: The full five-factor model and well-being. *Personality and Social Psychology Bulletin*, 17(2), 227–232.

Mooji, M., & Hofstede, G. (2002). Convergence and divergence in consumer behaviour, implications for international retailing. *Journal of Retailing*, 78, 61–69.

Turgut, M. (2014). Investigation of brand love within the framework of brand confidence, resistance to negative information and the intention to buy again. Master's thesis, Hacettepe University, Department of Business and Administration, Ankara.

CHAPTER FIVE

AN INVESTIGATION INTO THE GENERAL SHOPPING TRENDS OF WOMEN AND MEN

HANDE GUNES

Introduction

The phenomenon of shopping taking place in every field of our daily life has different meanings for everyone. Shopping is meeting their needs for some people, entertainment for some, a leisure time activity for some, and reward or therapy for others. Although both women and men are labelled as ordinary consumers, they show differences in shopping. The gender factor, which is accepted to be one of the most important factors determining consumers' buying tendencies, plays an important role in the shopping behaviour of individuals.

Although the male and female brains are similar in terms of basic functions, many scientific studies have been conducted that reveal that they are different from each other. According to the scarming results performed in many different studies, it has been observed that the female brain has much more blood flow and a more folded structure than the male brain and as a consequence, it has been revealed that women are more hypercritical than men. Additionally, the region in which the emotions are formed in the female brain is larger than that in the male brain, and therefore, women show more emotional reactions than men. Another difference is that women are much more capable of dealing with multiple jobs at the same time than men because of the intimate connection between the right and left brain in women. How are these differences of men and women reflected in their shopping behaviour?

Although they are different, both women and men are insatiable in terms of their needs. Both groups have a tendency to ask for goods and services that can meet their needs, and as a result, they are both labelled as consumers.

A consumer is an individual using financial goods and services by purchasing them in exchange for a certain price (Altumşık et al., 2004, p. 67). Several studies have been conducted indicating that women and men differ in terms of consumption behaviour. While women prefer products that make them feel emotionally better, which they assume symbolize their relationships in their social lives, men are observed to give priority to products which are designed for more practical use and are activity related, which they think help them to express themselves (Orhan, 2002, pp. 25-26). Women are considered to enjoy shopping while men are thought not to enjoy shopping. Women are more liable to shop than men. Women walk slowly in the stores, examine the products, compare the products and prices, chat with the sales people, test the products, and buy what they want at the end (Underhill, 2002, p. 96). It was found that the ratio of male clients buying a tried-on garment was 65%, while the ratio was 25% for female customers (Underhill, 2002, p. 97).

Men, even though they don't like shopping, do more shopping compared to the past. According to the marketers, the shopping passions of men will increase in time. Men are now considered to have changed today due to such reasons as marrying at a later age, staying single for a longer time, and being married to working women in general.

According to many studies, women often prefer to shop with their friends (Underhill, 2002, p. 100). Besides, when women go on shopping trips with their friends, they do more shopping than they do on their own. Generally, unplanned shopping is much more usual when shopping with friends. In a study conducted at a branch of a common chain of home stores, the shopping times are as follows (Underhill, 2002, p. 100):

*The woman with her female friend: 8 minutes and 15 seconds,
*The woman with her children: 7 minutes and 19 seconds,
*The woman alone: 5 minutes and 2 seconds,
*The woman with a man: 4 minutes and 41 seconds.

When two women go shopping together, they consult with each other, offer suggestions and stay in the store for a long time. The man who comes shopping with a woman signals that he is bored, angry and can walk away at any time. In a research study, for the question "Do you like shopping?", 45% of the men answered yes whereas 99% of the women gave this answer (Laçinel, 2005).

Even though males and females are consumers, the difference between them is reflected in their shopping behaviours. Nowadays, women make

most of the purchasing decisions. Women should be placed in a different position in terms of marketing.

Method

"Why do we do shopping?" Everyone will give different answers to this question since shopping has different meanings for everyone. One of the most interesting aspects of the studies on consumer behaviour is the analysis of women and men in shopping. Shopping has different meanings for different ages and different income groups as well as different meanings for men and women.

Purpose of the study

This study aims to determine the role of the gender factor in the perception of shopping behaviours and to reveal what kinds of differences there are between men and women in the perspective of shopping.

Method of study

In the study, a questionnaire was applied to 520 people and answers to our questions were sought. The survey was conducted in Istanbul and Sakarya. Accordingly, the results were analyzed and interpreted by using SPSS. We attempted to answer our research questions.

Research Questions

How are women's behaviours defined in shopping?
How are men's behaviours defined in shopping?

The demographic characteristics of the 520 people are exhibited in Table 5-1. Accordingly, 54.1% of the participants were female and 45.8% of them were male. Single people accounted for 65.7% of the participants and 34.3% of the participants are married. The participants are between 21 and 30 years old. University graduates are the majority.

Findings

Table 5-1. Demographic Characteristics of the Participants

Feature	Frequency	%
Gender		
Male	238	45.8
Female	282	54.1
Marital Status		
Single	341	65.7
Married	178	34.3
Age		
16-20	77	14.8
21-25	202	38.8
26-30	107	20.6
31-35	54	10.4
36-40	33	6.3
41-45	14	2.7
46 and above	33	6.3
Education		
Primary school	20	3.8
Secondary school	32	6.2
High school	191	36.7
University	260	50
Graduate	17	3.3

Table 5-2. How Can You Define the General Behaviours of Women in Shopping? (You can choose more than one)

Features	Frequency	Percentage
Selective-Researcher	202	38.8
Careful-Hypercritical	195	37.4
Perfectionist	161	30.9
Curious	134	25.7
Indecisive	131	25.1
Extravagant	114	21.9
Knowing what you are looking for	106	20.3
Unplanned	68	13.1
Successful	63	12.1
Practical-Fast	56	10.7
Planned	42	8.1
Rational-Smart	31	6
Failed	22	4.3
Easy decision-maker	19	3.6
Bored	13	2.5

For the question "How can you define the general behaviours of women in shopping?, 38.8% of participants think that women are selective-researchers, 37.4% of them assume women are careful-hypercritical, and 30.9% of them think women are perfectionists. The least thought features for women are boredom with a ratio of 2.5%, an easy decision-maker with a ratio of 3.6% and a failure with a ratio of 4.2%.

Table 5-3. How Can You Define the General Behaviours of Women in Shopping?

Features	Male		Female	
	f	**%**	**f**	**%**
Selective	87	36.6	114	40.4
Careful.	74	31.1	120	42.6
Perfection	64	26.9	97	34.4
Curious	70	29.4	64	22.7
Indecisive	65	27.3	66	23.4
Extravag.	66	27.7	48	17
Knowing.	41	17.2	65	23
Unplan.	37	15.5	31	11
Successful	23	9.7	40	14.2
Practical-Fast	20	8.4	36	12.8
Planned	18	7.6	24	8.5
Rational-Smart	7	2.9	24	8.5
Failed	18	7.6	4	1.4
Easydec.	6	2.5	13	4.6
Bored	6	2.5	7	2.5

As can be seen from the table, both men and women think that the most important feature of women is the selective-researcher feature. The women's careful-hypercritical and perfectionist features are intensely thought about by both men and women. While men see women as more extravagant and less rational, the least selected feature for women seems to be boredom.

Table 5-4. How Can You Define the General Behaviours of Men in Shopping?

Features	Frequency	%
Bored	221	42.7
Lazy	160	30.9
Indifferent	136	26.3
Easy decision-maker	118	22.8
Practical-Fast	117	22.6
Planned	98	18.9
Good bargainer	93	18
Knowing what you are looking for	91	17.6
Easily deceived	82	15.8
Rational-Smart	44	8.5
Careful-Hypercritical	35	6.8
Successful	33	6.4
Indecisive	33	6.4
Unplanned	31	6
Extravagant	16	3.1

For the question "How can you define the general behaviours of men in shopping?", 42.7% of the participants see men as bored, 30.9% of them think men are lazy, 26.3% of them see men as indifferent, and 22.8% of them think that men are easy decision-makers. The least thought feature

for men is being extravagant with a ratio of 3.1%, unplanned with a ratio of 6% and indecisive with a ratio of 6.4%.

Table 5-5. How Can You Define the General Behaviours of Men in Shopping?

Features	Male		Female	
	f	**%**	**f**	**%**
Bored	84	35.4	136	48.6
Lazy	51	21.5	108	38.6
Indifferent	40	16.9	96	34.3
Easy decision maker	48	20.3	70	25
Practical-Fast	65	27.4	51	18.2
Planned	58	24.5	40	14.3
Good bargainer	59	24.9	34	12.1
Knowing	57	24.1	34	12.1
Easily decive	23	9.7	59	21.1
Rational-Smart	34	14.3	10	3.6
Careful	20	8.4	15	5.4
Successful	25	10.5	8	2.9
Indecisive	18	7.6	15	5.4
Unplanned	11	4.6	20	7.1
Extravagant	4	1.7	12	4.3

When the general shopping behaviours of men are evaluated in terms of gender differences, it can be seen in the table that whereas men see themselves as bored, practical-fast, good bargainers and lazy in shopping, women think that men are bored, lazy, indecisive and easy decision makers. Women think that men are much more easy decision makers and easily deceived compared to men.

Table 5-6. Distribution of Women's Shopping Habits

How do you define yourselves as a consumer?	Frequency	%
Shops based on their needs	224	43.3
Planned shopping and thinks about the budget	173	33.5
Conscious and controlled consumer	143	27.7
Shop lovers	104	20.1
Not shop lovers	71	13.7
Shopaholic	64	12.4
Shopping for pleasure and more than their needs	62	12
Extravagant	46	8.9

For the question "How do you define yourselves as a consumer?", while 43.3% of the participants consider that they do shopping based on their needs, the ratio of those doing planned shopping and taking into consideration their budget is 33.5%. The ratio of the participants who gave a conscious and controlled consumer response is 27.7%. The ratio of shop lovers is 20.1% and the ratio of not shop lovers is 13.7%. The ratio of shopaholics is 12.4% and the ratio of the participants doing shopping for more than their needs is 12%. The ratio of the participants who consider themselves as extravagant is 8.9%.

Table 5-7. Distribution of Shopping Habits based on Gender

Shopping habits	Male		Female	
	f	**%**	**f**	**%**
Shopping based on their needs	116	48.9	108	38.7
Planned shopping and thinks about the budget	88	37.1	84	30.1
Conscious and controlled consumer	68	26.5	74	28.7
Shop lovers	19	8	85	30.5
Not shop lover	45	9	26	9.3
Shopaholic	13	5.5	51	18.3
Shopping for pleasure and more than their needs	17	7.2	45	16.1
Extravagant	24	10,1	22	7,9

When the above table is examined, it is seen that both women and men define themselves as shoppers primarily based on their needs. While 48.9% of the women stated that they do their shopping based on their needs, this ratio for men is 38.7%. 30.1% of the women do planned shopping and take into consideration their budget. The ratio of shop lovers is 8% for men and 30.5% for females. In terms of gender distribution, while 9.3% of the women stated that they did not like shopping, 19% of the men stated that they did not like shopping. While the ratio of the men who do shopping for more than their needs is 7.2%, this ratio for the women is 16.1%. Whereas 10.1% of the men see themselves as extravagant, 7.9% of the women see themselves as extravagant.

Table 5-8. Distribution of the Meaning of Shopping in terms of the Participants

What does shopping mean to you?	f	%
Meeting my needs	364	70.3
Pleasure and entertainment time	140	27
Opportunity to get around	110	21.2
Therapy method when unhappy	87	16.8
Opportunity to reward myself	85	16.4
Freedom	57	11
Leisure time activity	54	10.4
Opportunity for socialization	44	8.5
Activity peculiar to women	38	7.3
Time to horse around	32	6.2
Ordinary job	29	5.6
Boring activity	27	5.2
Excuse for leaving the house	26	5
Waste of time	12	2.3

While 70.3% of the participants see shopping as an opportunity to meet their needs, 27% of them see shopping as pleasure and entertainment time. 21.2% of the participants see shopping as an opportunity to get around. The ratio of the participants who see shopping as an opportunity to reward themselves is 16.8%.

The ratio of the participants who consider shopping as a boring activity is 5.2%. While the ratio of the participants who see shopping as an excuse for leaving the house is 5%, the ratio of the participants who consider shopping as a waste of time is 2.3%.

Table 5-9. Meaning of Shopping Based on Gender Differences, Both Women and Men

What does shopping mean to you?	Male		Female	
	f	%	f	%
Meeting my needs	172	72.6	191	68.2
Pleasure and entertainment time	46	19.4	94	33.6
Opportunity to get around	48	20.3	62	22.1
Therapy method whe unhappy	13	5.5	74	26.4
Opportunity to reward myself	28	11.8	57	20.4
Freedom	18	7.6	39	13.9
Leisure time activity	21	8.9	33	11.8
Opportunity for socialization	20	8.4	24	8.6
Activity peculiar to women	21	8.9	17	6.1
Time to horse around	12	5.1	20	7.1
Ordinary job	20	8.4	9	3.2
Boring activity	13	5.5	14	5
Excuse for leaving the house	13	5.5	13	4,6
Waste of time	7	3	5	1.8

When looking at the distribution of the meaning of shopping based on gender differences, both women and men see the meaning of shopping as primarily meeting their needs. Women evaluate shopping as pleasure and entertainment time, a therapy method when unhappy, the opportunity to get around and to reward themselves.

Conclusion

"Why do we buy?" Everyone answers this question differently because shopping has different meanings for everyone. One of the most interesting

results in the studies on consumers' behaviours is the analysis of males and females in shopping. Besides, consumer's behaviours can change in respect of their age and profile. The purpose of this study is to determine the role of gender in the perception of shopping behaviours and to state what they consider while they are shopping. In this way, the research questions of this study are:

1. How do women evaluate themselves and men in shopping?
2. How do men evaluate themselves and men in shopping?

The method of inquiry used while these questions were answered was to determine the points of view from the perspective of males and females in shopping. In the inquiry, questions were asked which related to the and the opposite sex's behaviours. Additionally, the demographic characteristics of age, profession and consumer profile are analyzed. As a result of the inquiry, it is clearly seen that women are an indispensable part of shopping because it is decided usually by them. The most important factor in this result is that the female's role in society is changing positively and slowly. Therefore, the result of the inquiry clearly shows that women don't give up buying although their standards of life change. Women should be considered differently in terms of marketing and experts should evaluate them in different segmentations.

References

Altıntaş, M. H. (2000). *Consumer behaviour from customer satisfaction to customer value* (1st ed.). Istanbul: Alfa Publications.

Altunışık, R., Ozdemir, Ş., & Torlak, O. (2004). *Modern marketing*. Sakarya/Turkey: Change Publishing.

Cüceloğlu, D. (2000). *Human behaviour*. Istanbul: Remzi Bookstore.

Orhan, I. (2002). Analysis of emotions on purchased products in terms of gender and gender roles. Unpublished Master's Thesis, Ankara University, Institute of Social Sciences, Department of Psychology, Ankara.

Odabaşı, Y., & Barış. G. (2002). *Consumer behaviour* (2nd ed.). Istanbul: Mediacat Academy Publishing.

Penpeçe, D. (2006). Factors determining consumer behaviour, the impact of culture on consumer behaviour. Unpublished Master's Thesis, Sütçü Imam University, Institute of Social Sciences, Department of Business Administration, Kahramanmaraş.

Underhill, P. (2002). *Science of shopping*. Istanbul: Soysal Publishing.
Marketing. (2007). Retrieved February 10, 2007 from:
    http://www. marketingturkey.com/informationbak/detay/?no=383.

SECTION II:

INNOVATIVE AND PROACTIVE BEHAVIOUR IN THE NEW ECONOMY

CHAPTER SIX

THE IMPACT OF ECO-INNOVATION ON BRAND IMAGE AND PURCHASE INTENTION: AN APPLICATION ON WHITE GOODS USERS

SALIH YILDIZ

Introduction

Parallel to the development of technology, businesses have begun to cause environmental problems on a global scale, with serious damage to the environment (Panwar et al., 2011, p.1514; Qi et al., 2010, p. 1359). For this reason, interest in eco-innovation has begun to increase both in theory and practice (Hojnik, 2017, p. 6). Eco-innovation has an important role in improving environmental technologies that detect pollution. Furthermore, it is an opportunity for business because it reduces costs, leads to new opportunities and increases image in front of customers. In addition to this, eco-innovation offers businesses the opportunity to incorporate environmental concepts into their strategies to achieve competitive advantage (Calza et al., 2017).

There are many definitions of eco-innovation, which is a new concept and encompasses many innovations such as new processes, new products, and new services (Jo et al., 2015). While Rennigs (2002) refers to eco-innovation as an innovation that provides environmental sustainability (Triguero et al., 2013, p. 25), Kemp and Pearson (2008, p. 7) defined it as:

> The production, assimilation or exploitation of a product, production process, service or management or business method that is novel to the organization (developing or adopting it) and which results, throughout its life cycle, in a reduction of environmental risk, pollution and other negative impacts of resources use (including energy use) compared to relevant alternatives.

Also according to another definition, the Europa Innova panel concludes that:

> Eco-innovation means the creation of novel and competitively priced goods, processes, systems, services, and procedures that can satisfy human needs and bring quality of life to all people with a life-cycle-wide minimal use of natural resources (material including energy carriers, and surface area) per unit output, and a minimal release of toxic substances. (Reid and Miedzinski, 2008, p. 7)

When looking at other definitions in the literature on eco-innovation, it is possible to find many different uses such as eco/ecological, green and environmental innovation. Some of these definitions are in Table 6-1.

Table 6-1. Definitions of Eco-innovation (Hojnik, 2017, pp. 29-31)

Author	Definition of Eco-innovation
Rennings et al. (2004, p. 8)	Environmental innovations consist of new or modified processes, techniques, practices, systems and products to avoid or reduce environmental harms. Environmental innovations may be developed with or without the explicit aim of reducing environmental harm. They may be motivated by the usual business goals such as reducing costs or enhancing product quality. Many environmental innovations combine an environmental benefit with a benefit for the company or user.
Ottman et al. (2006, p. 24)	Although no consumer product has a zero impact on the environment, in business, the terms 'green products' or 'environmental product' are used commonly to describe those that strive to protect or enhance the natural environment by conserving energy and/or resources and reducing or eliminating the use of toxic agents, pollution, and waste.
Huppes & Ishikawa (2009,p.1698)	Eco-innovation is a change in economic activities that improves both the economic performance and the environmental performance of society.
Kammerer (2009, p.2286)	Environmental innovations are all innovations that have a beneficial effect on the natural environment regardless of whether this was the main objective of the innovation.
Oltra and Saint Jean (2009, p.567)	Environmental innovations can be defined as innovations that consist of new or modified processes, practices, systems and products, which benefit the environment and so contribute to environmental sustainability.

Rave et al. (2011, p. 12)	Environmental innovation is defined as a sub-group of general innovations that contribute to an improvement of environmental quality or the use of fewer natural resources. This includes the advancement of existing or the development and market introduction of new environmentally friendly products or environmental improvements through the modification or replacement of existing processes (addon or integrated technologies). Environmental improvements may not be directly intended (i.e., they may only be a side effect of the innovation).
Dong et al. (2013, p. 2)	From a theoretical perspective, eco-innovation has become an interdisciplinary concept; as a research field, it is established on the principles of innovation theories and environmental science. Eco-innovation is studied as an aspect of innovation and thus is compared to the general innovation measures, even though it specifically aims to improve firms' long-term ecological performance, rather than to promote business operational efficiencies and/or profitability per se. Eco-innovation focuses on reducing the negative effects of excessive natural resource exploitation, environmental pollutant emissions, and ecological risks that emerge along the lifecycle of specific products and/or services.
Wilts et al. (2013, p. 824)	Eco-innovation can be a new good or service, process, organizational change, or marketing method in a company, but also a wider change with systemic implications for economy and society (e.g. new production consumption models based on services).
Weng et al. (2015, p. 5000)	Green innovation is the new or modified products and processes, including technology, managerial, and organizational innovations, which help sustain the surrounding environment.

Literature and Research Model

Eco-innovation, green innovation and environmental innovation have become important in recent years. Especially, interest in these topics is increasing in the literature. As seen in Figure 6-1, eco-innovation papers have been escalating especially since 2009.

Figure 6-1. Articles per Year (Garcia et al., 2015)
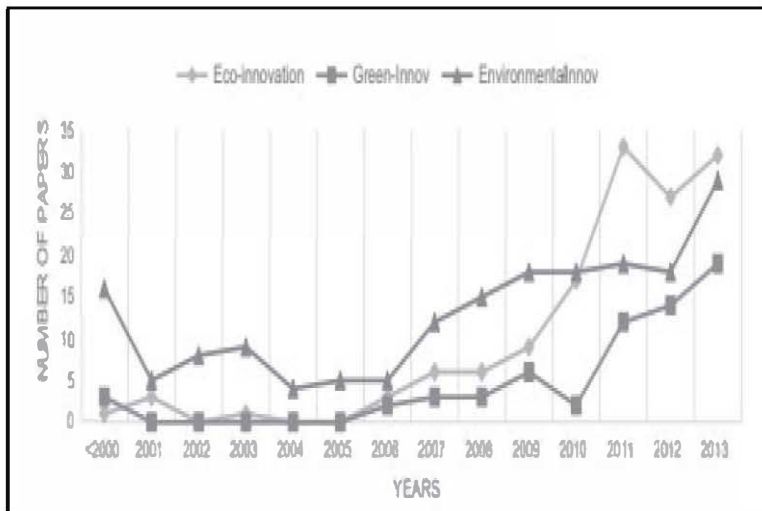
Eco-Innovation-Brand Image

In relation to the literature for eco-innovation, Tidd et al. (1997) and Francis and Bessant (2005) stated that innovation and brand are important for firms to survive. In support of this expression Shiau (2014) found that innovation has a positive effect on brand image. Hanaysha et al. (2014) determined that product innovation has a significant relationship with brand image.

Based on the above statements the H_1 hypothesis is as follows:

H_1: Eco-innovation has a positive effect on brand image.

Brand Image-Purchase Intention

In the literature many researchers examined the relationship between image and purchase intention (Lin, 2013; Aberdeen et al., 2016; Arslan and Zaman, 2014; Chao and Liao, 2016; Doszhanov and Ahmad, 2015; Erdil, 2015; Hsieh, 2016; Li, 2017; Lin and Lin, 2007; Petrauskaite, 2014; Prabandari et al., 2018; Soltani et al., 2016; Tekin et al., 2016; Wang and Tsai, 2014). Wang and Tsai (2014) mentioned that brand image has an effect on purchase intention. In other words, brand image increases the consumer's purchase intention. Lin (2013) studied the catering industry

and found that brand image affects purchase intention positively. Similarly, in many studies it is stated that a favourable brand image is an important factor for purchase intention (Shen & Chou, 2006; Jo et al., 2003; Keller, 1993).

Based on the above statements the H_2 hypothesis is as follows:

H_2: Brand image has a positive effect on purchase intention.

Eco-Innovation-Purchase Intention

Zhang and Tang (2017), Shiau (2014), Seng and Ping (2016), Larsson and Khan (2012), Kumar and Anand (2015), Wu and Chen (2014) and Wu and Ho (2014) found that innovation will influence purchase intention. Joshi and Rehman (2015) determined that consumers are more inclined to buy eco-labelled products. Hartmann and Apaolaza-Ibáñez (2012) stated that concerns about the environment positively influence the intention to buy green branded energy. Hamdani (2015) found that consumers' intentions to purchase organic products are influenced by green innovation. Similarly, Jansson et al. (2010) believe that concerns for the natural environment are related positively to the adoption of eco-innovation. Boyd and Mason (1999) found that the attraction of innovation influenced purchase intention. Seng and Ping (2016) determined that product innovation has a positive effect on purchase intention. Based on the above statements the H_3 hypothesis is as follows:

H_3: Eco-innovation has a positive effect on purchase intention.

Based on the statements, the research model is illustrated in Figure 6-2. The research model was designed based on the models of Hanaysha et al. (2014); Wu and Chen (2014); Shiau (2014); Elsharnouby (2014); Seng and Ping (2016); Lin (2007); and Wang and Tsai (2014).

Figure 6-2. Research Model
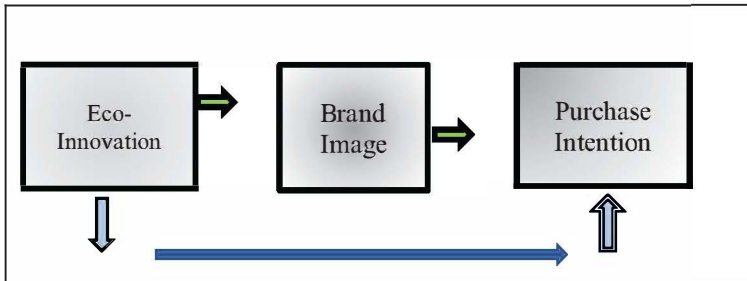
Methodology

Research Aim

It is aimed to examine the effects of eco-innovation on brand image and purchase intention. To test the hypotheses, a field survey using a questionnaire was conducted.

Sample and Data Collection, Variables

The White Goods sector has been selected for the survey and analysis. The proposed hypotheses aim to present the effects of eco-innovation on brand image and purchase intention. The first part of the questionnaire includes factors (eco-innovation, brand image, and purchase intention) in the research model. The 5-point Likert scale was used: "1: Strongly disagree, 2: Disagree, 3: Neutral, 4: Agree, 5: Strongly agree". The second part of the questionnaire consists of demographics such as age, gender, education, income, occupation and marital status. In the scope of the study 600 copies of the questionnaire were distributed and 572 copies were collected, with 556 valid copies.

The scales based on previous research on the topics were respectively eco-innovation (Wu & Chen, 2014), brand image (Nigam & Kaushik, 2011) and purchase intention (Dodds et al., 1991).

Findings

Table 6-2. Demographic Characteristics of Consumers

Gender	f	%	Marital Status	f	%
Male	259	46,6	Married	330	59,4
Female	297	53,4	Single	226	40,6
Total	556	100	Total	556	100
Age	f	%	Occupation	f	%
18 -25	45	8,1	Public Employee	140	25,2
26-30	169	30,4	Private Sector Employee	125	22,5
31-35	156	28,1	Retired	87	15,6
36-40	99	17,8	Housewife	104	18,7
41 and older	87	15,6	Student	71	12,8
Total	556	100	Other	29	5,2
Income	f	%	Total	556	100
1500 TL and below	131	23,6	Education	f	%
1501-3000 TL	113	20,3	Primary Education	97	17,5
3001-4500 TL	179	32,2	Secondary Education	217	39
4501-6000 TL	91	16,4	University	189	34
6001 TL and above	42	7,5	Master/PhD	53	9,5
Total	556	100	Total	556	100

As seen in Table 6-2, 297 of the white goods users are female and 259 of them are male. 169 participants are 26-30 years old; 156 of them are 31-35 years old; 99 of them are 36-40 years old; 87 of them are 41 years old and above and 45 of them are 18-25 years old. When looking at marital status, it is clear that 330 participants are married and 226 are single. Nearly half (47.7%) of the participants are public and private sector employees. At the same time, most of the participants have a secondary education (217 persons) and a university degree (189 persons). According to income distribution, 179 of the participants have a 3001-4500 TL income level; 131 of them have a 1500 TL and below income level; 113 of them have a 1501-3000 TL income level; 91 of them have 4501-6000 TL and 42 of them have a 6001 TL and above income level.

Table 6-3. Reliability Analysis Results of Research Scales

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if item Deleted
ECOI1	28,5755	50,537	,710	,915
ECOI2	28,5396	50,526	,718	,914
ECOI3	28,5647	53,104	,610	,922
ECOI4	28,3237	51,981	,684	,917
ECOI5	28,3651	49,580	,820	,906
ECOI6	28,4838	49,288	,764	,910
ECOI7	28,4047	49,996	,773	,910
ECOI8	28,3561	49,325	,838	,905
a: .923 N: 556				
BIMG1	11,7356	17,989	,706	,842
BIMG2	12,0701	19,002	,616	,863
BIMG3	11,5198	17,320	,808	,816
BIMG4	11,5306	18,044	,762	,829
BIMG5	11,3022	19,036	,602	,867
a: .871 N: 556				
PINT1	13,5540	17,109	,705	,815
PINT2	13,9892	17,020	,634	,834
PINT3	13,7986	16,230	,740	,805
PINT4	13,3129	18,075	,589	,844
PINT5	13,7554	16,762	,675	,823
a: .854 N: 556				

Cronbach's Alpha was used to test the reliability. As seen in Table 6-3, the general Alpha of scales for eco-innovation is (a = .923), the general alpha for brand image is (a = .871) and the general alpha for purchase intention is (a = .854). There is no need to remove any item from the scale.

Table 6-4. Validity Analysis Results of Research Scales

Item	Initial Eigenvalues (%)			Extraction Sums of Squared (%)			Std. Load.
	Total	Variance	Total	Total	Variance	Cumulative	
ECOI1	5,25	65,190	65,190	5,215	65,190	65,190	,775
ECOI2	,862	10,777	75,967				,781
ECOI3	,508	6,356	82,323				,686
ECOI4	,452	5,644	87,967				,762
ECOI5	,348	4,353	92,320				,877
ECOI6	,238	2,976	95,296				,828
ECOI7	,229	2,862	98,158				,840
ECOI8	,147	1,842	100,00				,891
KMO: 0,913				**Bartlett's Test: 3224,783 p: 0,000**			
BIM1	3,321	66,429	66,429	3,321	66,429		66,429
BIMG2	,648	12,951	79,380				
BIMG3	,444	8,879	88,258				
BIMG4	,351	7,025	95,283				
BIMG5	,236	4,717	100,00				
KMO: 0,852				**Bartlett's Test: 1401,772 p: 0,000**			
PINT1	3,169	63,380	63,380	3,169	63,380	63,380	
PINT2	,586	11,722	75,102				
PINT3	,491	9,817	84,919				
PINT4	,440	8,808	93,726				
PINT5	,314	6,274	100,00				
KMO: 0,856				**Bartlett's Test: 1144,777 p: 0,000**			

Factor analysis was used to test the validity and as seen in Table 6-4, there is no need to remove any item from the scale.

Table 6-5. Structural Equation Model Fits

	Recommended	Model
x^2/df	<0,3	2,847
NFI	>0,9	94,2
RFI	>0,9	93,2
IFI	>0,9	96,2
TLI	>0,9	95,5
CFI	>0,9	96,2
RMSEA	<0,8	0,58

According to the goodness of fit indexes in Table 6-5, it can be said that the model is a high degree of conformity as a whole. The results of the hypotheses for the research model are given in Table 6-6.

Table 6-6. Hypothesis Test Results

Hypotheses	β	Standard Error	p	Result
H₁: Eco-innovation-Brand Image	0,134	0,036	0,001	Accepted
H₂: Brand Image-Purchase Intention	0,771	0,061	0,001	Accepted
H₃: Eco-innovation-Purchase Intention	0,070	0,029	0,018	Accepted

Conclusion

In recent years, the concept of green industry has become very popular and production to protect the environment has become more important because of conscious consumers. Consequently, industries have begun to seek alternatives to reduce or prevent the harm to the environment caused by their activities. At this point, the concept of eco-innovation arises. Innovation in green products provides companies the chance to be different from their competitors and also allows for more sales opportunities. Therefore, it can be seen as an important factor for growth.

In this study the impact of eco-innovation on brand image and purchase intention was examined. In the scope of the study, the demographic distribution of the participants is presented; 297 of the white goods users are female and 259 of them are male. 169 participants are 26-30 years old; 156 of them are 31-35 years old; 99 of them are 36-40 years old; 87 of them are 41 years old and above and 45 of them are 18-25 years old. When looking at marital status, it is understood that 330 participants are married and 226 are single. Nearly half (47.7%) of the participants are public and private sector employees. At the same time, most of the participants have a secondary education (217 people) and a university degree (189 people). According to income distribution, 179 of the participants have a 3001-4500 TL income level; 131 of them have a 1500 TL and below income level; 113 of them have a 1501-3000 TL income level; 91 of them have 4501-6000 TL and 42 of them have a 6001 TL and above income level.

The validity and reliability of scales were calculated. The validity analysis results were presented for ECOI (KMO: 0,913, Bartlett's: 3224,783 p: 0,000), for BIMG (KMO: 0,852, Bartlett's: 1401,772 p: 0,000) and for PINT (KMO: 0,856, Bartlett's: 1144,777 p: 0,000). The reliability analysis results show that the general alpha for purchase intention is α = .854. There is no need to remove any item from the scale based on the validity and reliability results.

Following the reliability and validity analysis, the research hypotheses were tested. The results indicate that eco-innovation has a significant and positive effect on brand image. It means that the more that white goods firms become open to innovation, the more the brand images will increase. As a result, the H_1 hypothesis is accepted. Additionally, it is found that brand image and eco-innovation affect positively purchase intention. That is, innovations designed to protect the environment in white goods increase brand image in the eye of the consumer and purchase intention. As a consequence, the H_2 and H_3 hypotheses are accepted. Findings of the study are in accordance with the literature (Shiau, 2014; Hanaysha et al., 2014; Wang & Tsai, 2014; Lin, 2013; Shen & Chou, 2006; Jo et al., 2003; Keller, 1993; Hartmann & Apaolaza-Ibáñez, 2012; Hamdani, 2015).

In this context, it can be said that white goods firms should focus on innovations that do not harm the environment or cause less harm, in order to raise brand image and to be more preferred among competing brands. In future studies the effect of eco-innovation on image and purchase intention can be examined in different sectors, also the research model can be expanded by adding different variables.

References

Aberdeen, Naufal I., Syamsun, M., & Najib, M. (2016). The effect of brand awareness and image on consumer perceived quality and purchase intention a study case of a carbonated drink brand at Bogor city. *International Journal of Scientific and Research Publications*, 6(8), 441-446.

Arslan, M., & Zaman, R. (2014). Impact of brand image and service quality on consumer purchase intention: A study of a retail store in Pakistan. *Research on Humanities and Social Sciences*, 4(22), 98–105.

Boyd, T. C., & Mason, C. H. (1999). The link between the attractiveness of extra brand attributes and the adoption of innovations. *Journal of the Academy of Marketing Science,* 27, 306–319. Retrieved from http://dx.doi.org/10.1177/0092070399273002.

Calza, Francesco, Parmentola, A., & Tutore, Ilaria (2017). Types of green innovations: Ways of implementation in a non-green industry. *Sustainability,* **9,** 1–16.

Chao, R. F., & Liao, P. C. (2016). The impact of brand image and discounted price on purchase intention in an outlet mall: the consumer attitude as mediator. *The Journal of Global Business Management,* 12(2), 119–128.

Dodds, W. B., Monroe, K., & Grewal, D. (1991). Effects of price, brand, and store information on buyers' product evaluations. *Journal of Marketing Research,* 28, 307–319. Retrieved from http://dx.doi.org/10.2307/3172866.

Dong, Y., Wang, X., Jun, J., Yuanbo, Q., & Lei, S. (2013). Research on the effects of eco-innovation types and regulations on firms' ecological performance: Empirical evidence from China. *Journal of Engineering and Technology Management,* 1–19.

Doszhanov, A., & Ahmad, Z. A. (2015). Customers' intention to use green products: The impact of green brand dimensions and green perceived value. *SHS Web of Conference,* 18, 1–16.

Elshamouby, H. M. (2014). Increasing purchase intention of eco-innovation products through enhancing relationship quality: the moderating role of consumer innovativeness. *Proceedings of the Academy of Marketing,* 1–9.

Erdil, T. S. (2015). Effects of customer brand perceptions on store image and purchase intention: An application in apparel clothing. *Procedia – Social and Behavioral Sciences,* 207, 196–205.

Francis, D., & Bessant, J. (2005). Targeting innovation and implications for capability development. *Technovation,* 25(3), 171–183.

Garcia-Diaz, C., Moreno-Gonzalez, A., & Martinez-Saez, F. J. (2015). Eco-innovation: insights from a literature review. *Innovation: Management, Policy & Practice,* 17(1), 6–23.

Hanaysha, J., Hilman, H., & Abdul-Ghani, N. H. (2014). Direct and indirect effects of product innovation and product quality on brand image: Empirical evidence from the automotive industry. *International Journal of Scientific and Research Publications,* 4(11), 1–7.

Hamdani, D. (2015). The influence of green marketing and innovation green on purchase intention (study on consumers' organic vegetable purchasing at Yogya Riau junction department store in Bandung). *First International Conference on Economics and Banking (ICEB-15),* 80–87.

Hartmann, P., & Apaolaza-Ibáñez, V. (2012). Consumer attitude and purchase intention toward green energy brands: the roles of

psychological benefits and environmental concern. *Journal of Business Research,* 65(9), 1254–1263.

Hojnik, J. (2017). *In pursuit of eco-innovation: Drivers and consequences of eco-innovation at firm level.* Slovenia: University of Primorska Press.

Hsieh, His-Ying. (2016). The relationship among consumer value, brand image, perceived value and purchase intention a case of a tea chain store in Tainan city. *Proceedings of the Eighth Asia-Pacific Conference on Global Business, Economics, Finance and Banking (AP16 Singapore Conference)*, 1–10.

Jansson, J., Marell, A., & Nordlund, A. (2010). Green consumer behavior: determinants of curtailment and eco-innovation adoption. *Journal of Consumer Marketing*, 27(4), 358–370.

Huppes, G., & Masanobu, I. (2009). Eco-efficiency guiding micro-level actions towards sustainability: Ten basic steps for analysis. *Ecological Economics*, 68(6), 1687–1700.

Jo, M. S., Nakamoto, K., & Nelson, J. E. (2003). The shielding effects of brand image against lower quality countries-of-origin in global manufacturing. *Journal of Business Research,* 56(8), 637–646.

Jo, J. H., Roh, T. W., Kim, S., Youn, Y. C., Park, M. S., Han, K. J., & Jang, E. K. (2015). Eco-innovation for sustainability: Evidence from 49 countries in Asia and Europe. *Sustainability*, 7, 16820–16835.

Joshi, Y., & Rahman, Z. (2015). Factors affecting green purchase behaviour and future research directions. *International Strategic Management Review*, 3, 128–143.

Kammerer, D. (2009). The effects of customer benefit and regulation on environmental product innovation. *Ecological Economics*, 68(8-9), 2285–2295.

Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing,* 57(1), 1–22.

Kemp, R., & Pearson, P. (eds.) (2008). *Final report of the project measuring eco-innovation.* Netherlands: Maastricht. Retrieved from http://www.merit.unu.edu/MEI/index.php.

Kumar, P. K., & Anand, B. (2015). The impact of innovation, green advertising and perceived behavioral control on green consumer behavior. *Scholars Journal of Economics, Business and Management*, 2(2A), 182–190.

Larsson, S., & Khan, M. A. (2012). A study of factors that influence green purchase. Master's thesis, Umeå School of Business and Economics, Sweden.

Li, C. P. (2017). Effects of brand image, perceived price, perceived quality, and perceived value on the purchase intention towards sports and tourism products of the 2016 Taichung international travel fair. *The Journal of International Management Studies,* 12(2), 97-107.

Lin, C. H. (2013). The effects of brand images on purchase intention in the catering industry. *Pakistan Journal of Statics,* 29(5), 745–754.

Lin, N. H. (2007). The effect of brand image and product knowledge on purchase intention moderated by price discount. *Journal of International Management Studies*, 121–132.

Nigam, A., & Kaushik, R. (2011). Impact of brand equity on customer purchase decisions: An empirical investigation with special reference to hatchback car owners in central Haryana. *International Journal of Computational Engineering & Management,* 12, 121–128.

Oltra, Vanessa, & Maïder, Saint J. (2009). Sectoral systems of environmental innovation: An application to the French automotive industry. *Technological Forecasting and Social Change,* 76(4), 567–583.

Ottman, J. A., Edwim, R. S., & Hartman, C. L. (2006). Green Marketing Myopia. *Environment*, 48(5), 22–36.

Panwar, N. L., Kaushik, S. C., & Kothari, S. (2011). Role of renewable energy sources in environmental protection: A review. *Renewable and Sustainable Energy Reviews,* 15, 1513–1524.

Petrauskaite, E. (2014). Effect of brand image on consumer purchase behaviour: International footwear market comparison. Master's thesis, Aalborg University.

Porter, M. E., & Linde, C. V. D. (1995). Green and competitive: Ending the stalemate. *Harvard Business Review*, 73, 120–134.

Prabandari, P., Sukaatmadja, P. G., & Yasa, N. N. (2018). The role of brand image in mediating the influence of positive word of mouth on the consumer's purchase intention. *International Journal of Economics, Commerce and Management*, 6(2), 86–103.

Qi, G.Y., Shen, L.Y., Zeng, S. X., & Jorge, O. J. (2010). The drivers for contractors' green innovation: An industry perspective. *Journal of Cleaner Production*, 18, 1358–1365.

Rave, T., & Mario, L. (2011). The determinants of environmental innovations and patenting: Germany reconsidered. IFO Working Paper Series 97. Retrieved from http://www.econstor eu/bitstream. /10419/73719/1/IfoWorkingPaper-97.pdf.

Reid, A., & Miedzinski, M. (2008). *Eco-innovation final report for sectoral innovation watch*. Brussels: Technopolis Group.

Rennings, K., Bartolomeo, M., Kemp, R., Miles, I., & Arundel, A. (2004). The impact of clean production on employment in Europe *An Analysis using Surveys and Case Studies (IMPRESS)*. Retrieved from http://ec.europa.eu/research/social-sciences/pdf/impress_en.pdf.

Seng, L. C., & Ping, N. S. (2016). The influence of product innovation toward consumer purchase intention. *International Journal of Economics, Commerce and Management*, 4(4), 773–782.

Shen, C. C., & Chou, C. Y. (2006). A study of the relationship among the integrated marketing communication, tourism image, brand awareness, satisfaction, loyalty the case study of Gukeng Huashan coffee. J. *Sport and Recreation Res.,* 1(1), 1–24.

Shiau, H. C. (2014). The impact of product innovation on behavior intention: The measurement of the mediating effect of the brand image of Japanese anime dolls. *Anthropologist,* 17(3), 777-788.

Soltani, M., Esfidani, M. R., Jandaghi, G., & Soltaninejad, N. (2016). The effect of service quality on private brand image and purchase intention in the chain stores of ETKA. *World Scientific News*, 47(2), 202-216.

Tekin, G., Yıltay, S., & Ayaz, E. (2016). The effect of brand image on consumer behaviour: Case study of Louiss Vuitton-Moet Hennessy. *International Journal of Academic Value Studies*, 2(1), 1-24.

Tidd, J., Bessant, J., & Pavitt, K. (1997). *Managing innovation: integrating technological, market, and organizational change.* New York: John Wiley.

Triguero, A., Moreno-Mondejar, L., and Davia, M. A. (2013). Drivers of different types of eco-innovation in European SMEs. *Ecological Economics*, 92, 25–33.

Wang, Y. H., & Tsai, C. F. (2014). The relationship between brand image and purchase intention: Evidence from award winning mutual funds. *The International Journal of Business and Finance Research,* 8(2), 27–40.

Weng, H. H., Chen, J. S., & Chen, P. C. (2015). Effects of green innovation on environmental and corporate performance: A stakeholder perspective. *Sustainability*, 7, 4997-5026.

Wilts, H., Günter, D., Dirk, J., & Florian, K. (2013). Eco-innovations for waste prevention -best practices, drivers and barriers. *The Science of the Total Environment*, 823-829.

Wu, S. I., & Chen, Y. J. (2014). The impact of green marketing and perceived innovation on purchase intention for green products. *International Journal of Marketing Studies,* 6(5).

Wu, S. I., & Ho, L. P. (2014). The influence of perceived innovation and brand awareness on purchase intention of innovation product-An

example of iphone. *International Journal of Innovation and Technology Management,* 11(4).

Zhang, Y., & Tang, P. (2●17). The effects of product innovation locus on consumers' adoption of new products-based on regulatory focus and information processing fluency. *American Journal of Industrial and Business Management,* 7, 1●1–2●1.

Chapter Seven

Real Estate 4.0 and the Digital Marketing Age

Meltem Ozturk

Introduction

The recent slowdown in economic activity in the developed markets has created substantial investment interest in emerging economies, particularly in real estate markets. Despite this surge in interest, direct investors from developed countries, who are driven by the need to improve organizational efficiency are faced with the classical issue of misalignment in cross-border business processes and operations. Operations in real estate development firms vary substantially across the locations due to different regulatory and economic conditions (Das et. al, 2013; Vries et. al, 2008).

The fourth industrial revolution is set to change the way that we live, work and interact. As part of that, emerging technologies and digitalization are redefining the way that people use buildings, posing both an opportunity and a threat to those in the property industry. This chapter explores how occupiers of real estate are being disrupted by technological change and digital marketing techniques and what this means for the marketing strategies that they use. This chapter also provides some evidence from real world cases where such an approach has been already used as a strategic approach to enable the digital marketing of brands. It's undeniable that the world we live in is thriving unceasingly.

It is known that digital marketing efforts increase the productivity of companies on every scale, facilitate their operational processes and make them more competitive. Since the borders in the digital world have been lifted, a brand promise is valid for not only existing markets but also the target audience in today's world. It is necessary to try to increase the brand value by positioning it in accordance with the target audience in the global market.

Digital marketing is the use of the Internet and related digital technologies along with traditional communication methods to achieve marketing goals. The term digital media describes the different platforms used to achieve such objectives: interactive services, the internet, the web, mobile phones, interactive television, IPTV and digital signage design. In terms of real estate, it is necessary to understand and apply the innovations brought about by the digital age. Smart home and building systems, artificial learning, artificial intelligence, machine learning, the internet of things, industry 4.0, big data and management, 3D printers, E-CRM, digital advertising, programmatic advertising, VR/AR and blockchain, algorithm software, and marketing innovation are the major examples. Almost everything can be measured in the era of digital marketing and transformation, and each important decision for the organization and the brand can be supported by data and analytical application. This continuous data collection-called big data-will bring many innovations to both consumers' and firms' daily lives.

One of the locomotive sectors that has an area of application on this subject and is placed at the heart of everyday life is real estate. Superior buildings of the 21st century are located right at the centre of factors such as saving, comfort and safety. The objects include internet technology, improved security solutions, performance and convenience, the ability to respond immediately to the needs of residents, interactive services and other services, web-based interfaces for end users and operators; many examples of applications such as operational analytics, energy efficient HVAC solutions, integrated subsystems and control mechanisms have been evaluated for the real estate sector in order to avoid any problems that may arise. In this chapter, it is aimed to perform a descriptive analysis on the evaluation of brands within digital marketing in Real Estate sector 4.0 by providing new digital applications together with a case study and sectoral examples.

The purpose of this study is to define Real Estate 4.0 and to explain its importance with examples and to transfer it within the framework of digital marketing. Besides, we aim to offer suggestions by revealing the transformation that brands have gone through by following the technologyand to explain the transformation of a brand in the digital era by giving examples together with grounding by descriptive analysis and a literature review.

The Digital Marketing Age

Innovative activities are the introduction of new technologies, new business models and new communications approaches. For example Google innovates relentlessly. Its services have come a long way since 1998 with billions of pages now indexed and other services such as web mail, pay-per-click (PPC) adverts, analytics and social networking are all a part of its offerings.

The use of the Internet and other digital media and technologies to support "modern marketing" has given rise to a bewildering range of labels and jargon created by both academics and professionals. It has been called digital marketing, internet marketing, e-marketing and web marketing. In practice, digital marketing includes managing different forms of the online company presence, such as company websites and social media company pages in conjunction with online communications techniques; including search engine marketing, social media marketing, online advertising, email marketing, and partnership arrangements with other websites. These techniques are used to support the objectives of gaining new customers and providing services to existing customers which help the development of the customer relationship. However, for digital marketing to be successful there is still a necessity for the integration of these techniques with traditional media such as print, TV and direct mail as part of multichannel marketing communications (Chaffey & Chadwick, 2016).

Digital marketing includes the ability to interactively communicate with customers through electronic channels such as the web, e-mail, smart devices like phones and tablets, and mobile applications. Most methods are used, but the most recognized techniques of digital marketing are sociability, mobility, analytics, and e-commerce (Gartner, 2014).

Both technology and the way marketers were thinking about marketing were changing. There was an open development from mass communication to mutual communication. Marketers were then able to respond to customers in such a way that demonstrated that they had taken into account the customers' past history and expressed preferences. To do so they used marketing concepts such as personalization and customization. Personalization means that we use information about the customer such as their name, address, and other preferences in our communications with the customer. Customization refers to the idea that product is actually built for that customer based on their preferences. True customization is quite difficult to master. Think about a customized suit which requires measuring, crafting, and fitting to the individual. Mass customization, on the other hand, is quite easily handled by the technology used to facilitate

the internet. Mass customization allows the customer to select from certain pre-programmed or preset options to develop a product suited to their needs. An example of mass customization would be Nike.com, which allows the customer to create a shoe based on certain parameters, which is unique to them (Zahay, 2015; Belk, 2013).

It is unlikely that the evolution of digital marketing would have been possible without the development of communications and distribution channels. Technology meant that digital communications were increasingly possible, creating new methods of communication with the customer. Digital communication changes individual living conditions in many places such as houses or offices

Industry-era marketing principles have also changed the digital economy. In planning campaigns, marketers should consider three factors: (1) How to exchange information with their customers, with the consent of those customers; (2) How to make products available to customers wherever the customers may wish to find them; and (3) How to manage customers' perceptions of the company and its products across all media and customer contact points. The planning of marketing activities has traditionally relied upon the "four Ps" (product; place; price; and promotion). It is appropriate, now, to revisit, and re-evaluate the "four Ps" in the context of customer-centred marketing (Rowan, 2002; Kaman, 2017; Daradkeh et al., 2018).

Real estate is a promising setup to study e-commerce because it is an information-intensive and information-driven industry. The transactions are based on high value and asset-specificity with many market-intermediaries like agents and brokers who connect buyers and sellers rather than buying or selling themselves and experiencing on-going IT related changes. Kumar (2014) examines the effect of digital marketing and electronic commerce in the real estate sector by putting forward a model in his study. He would explore how e-commerce, the World Wide Web in particular, is distressing the real estate industry. In that paper he analyzed the real estate transaction to suggest where IT might change the process of selling or buying a house and he discussed several current ventures in this area. This analysis suggests that e-commerce is eroding the long-enjoyed information monopoly of real-estate agents and these applications have the potential to dramatically change current practices in the real-estate industry, including the elimination of agents.

The delivery of products and services thrives on rapidly exchanged information. In real-time environments, this fact changes the application and direction of marketing programmes. Sales, distribution and service functions will be more closely linked. In a short period, the altered

direction of marketing activity should feed back into product and service design. The quality of information that companies can draw from their online customers is very high. As a consequence, future products and services will be more likely to be designed with reference to the requirements of online customers (Rowan, 2002).

Today marks a momentous milestone for all digital things, with the new Digital in 2017 Global Overview report from "We Are Social and Hootsuite" revealing that more than half of the world's population now use the internet. Their findings offer exciting implications for businesses, governments, and society in general, but they're also testament to the speed with which digital connectivity is changing the lives of people all over the world. The headline numbers are (wearesocial.com):

3.77 billion global internet users in 2017, equaling 50% penetration;
2.80 billion global social media users in 2017, equaling 37% penetration;
4.92 billion global mobile users in 2017, equaling 66% penetration;
2.56 billion global mobile social media users in 2017, equaling 34% penetration;
1.61 billion global e-commerce users in 2017, equaling 22% penetration.

In recent years, the world has experienced very fast and important developments in artificial intelligence, robot technologies, and service automations. Artificial intelligence, algorithms and robot technologies have been used in many fields such as medicine and surgery, education, social services, transportation, military, agriculture, mining, telecommunications, construction, banking, and electronic retailing. Additionally the real estate industry is affected by all these developments.

The new digital universe affects businesses in every sector and it is not possible for brands to remain indifferent to this process. The real estate industry, which is a locomotive sector that affects more than 250 sectors in particular, is one of the most promising sectors in this regard. The digitalization rate of companies in Turkey rose to 61% in 2017 according to released data by the Accenture Digitalization Index. As a retailer brand that continues its digital investments, the Boyner Group has launched omnichannel shopping with its all-line retailing strategy (2016) and started selling on platforms such as Twitter, YouTube, etc. The e-commerce site Morhipo and the shopping application Hopi (digitalage, 2017) are also included within the increase. Real estate 4.0 includes applications developed by businesses for digital marketing. The essential word for this activity is innovations.

Real Estate 4.0

Real estate development is a complex process comprised of multiple steps and stages. Some steps are taken earlier and some are concurrent with others depending on the market. Because of the capital-intensive and risk-prone nature of real estate development, careful planning of the whole process is critical. Yet, it is challenging to be able to formulate an optimized process, especially when multiple parties are involved (such as engineers, architects, investors, and consultants). The selection and sequencing of the steps depend upon a step's relative importance to the developer (Peca, 2009).

When it comes to real estate, commercial (or corporate) real estate and housing come to mind. More specifically, the types of real estate products consist of: flats, residences, detached houses, villas, farmhouses, summer villas, cooperatives, gas stations, apartments, offices, stores and storehouses, manufacturing facilities, stores and shops, office blocks, land, buildings, timeshares, farms, and malls. This study will focus on explaining digital marketing applications by using examples of different types of real estate products and services.

The main developments in Real Estate 4.0 are 3D printing, virtual augmented reality, the Internet of Things (IoT) and big data management. These directly affect the real estate sector and its development. The pace of innovation adoption of the construction sector is increasing. With programs focusing on increased mobility and cloud access, it has become easier to communicate with the on-site teams (sales, etc.), share documents and solve problems immediately. Developments such as robot workers, helmets produced within the framework of wearable technologies, and warning systems for personnel against potential hazards have begun to be implemented. For example, in The Edge office building in Amsterdam, which has 28,000 sensors via specially designed lighting panels, it is possible to reserve a room for the next meeting using the application on the smartphone. In addition, smart building applications with lighting and heat adjustment, productivity-increasing background music to start playing automatically, the office espresso machine that knows how users drink coffee, take place in these offices (digitalage.com/10-2017; Kmpg report, 2017).

Real estate 4.0 includes examples of intelligent building and operating systems, as well as examples of brand communication and the use of media or other digital marketing tools and methods. The new digital era offers several technological and innovative applications. These can be carried out at every stage of marketing activities. It can be used not only in

customer discovery and retention, but also in the establishment of the business and in the process of controlling its activities.

Siemens will feature digital technologies that sustain and grow the medium- and long-term value of real estate under the motto "⦁n the Road to Real Estate Management 4.⦁." Siemens systems deliver transparent data on energy behaviour, occupancy and the utilization of real estate. At the same time, these systems consolidate technical and commercial data to give real estate managers a firm foundation for making decisions that sustain and increase the value of their real estate portfolio. Siemens has defined four relevant fields of activity: the energy management network, infrastructure and asset data, enterprise resource planning (ERP) and a data management ecosystem in which all these data are linked. In addition, the Siemens building management platform offers a wealth of surveillance, control, regulation and optimization systems for heating, ventilation, air conditioning, lighting, shading, security and fire safety. Furthermore, computer-aided facilities management (CAFM) delivers data from on going operations, especially with respect to technical maintenance costs. Real estate managers therefore have all the infrastructure and systems data at their fingertips. Siemens will introduce "Real Estate Management 4.⦁" at Expo Real using reference examples as well as presentations on digital technologies and advanced data analytics. Proprietary and partner-company solutions will vividly exhibit how to boost property efficiency and performance, thus making a significant contribution to the bottom line of real estate companies (siemens.com, 2⦁18).

Likewise, Geo-fences (geographic limitation) is another application that is becoming increasingly widespread. Shopping malls and retailers can create virtual spaces using GPS or Radio-Frequency Identification (RF⦁D) to identify customers entering these areas. Customers can receive notifications on their mobile devices about parking spaces, free Wi-Fi and special events in these areas (digitalage.com.tr, 2⦁17).

⦁ne of the most important developments leading to digital marketing is IoT (Internet of Things) technology. This technology is frequently used in the tourism sector. IoT appears at places such as hotels, airports, shopping malls in large areas or corporate facilities, parking facilities, etc. It is possible to perform activities such as finding lost suitcases, automatically performing operations such as parking/payment/edited transition, following aeroplane flight status, bearing, etc. (⦁hlhorst, 2⦁13). ⦁ne of the locomotives in the field of application is construction. Smart buildings, control of living spaces integrated with mobile technology, systems that fit into the palm of the user, and energy efficiency are the places that meet many needs.

The super buildings of the 21st century are at the heart of the savings, comfort and security factors. It is possible to define intelligent buildings as structures in which different systems can be operated from a single centre in an integrated marmer. One of the factors that make the buildings come alive and offer high performance comfort is the internet technology of objects. Improved security solutions, performance and convenience; the ability to respond immediately to the needs of the residents, interactive services and other services, web-based interfaces for end users and operators; operational analytics, energy efficient HVAC solutions, integrated subsystems and control mechanisms to prevent potential problems are all among the elements that make buildings intelligent and integrate with digitalization.

Emaar Square, for example, takes its place in the market as a real estate brand that leads to a digital transformation with the smart home systems it has implemented in Residences and Heights in 2017. In this context, the company working with the Interra smart home automation brand offers the opportunity to control everything remotely with its management panel and its mobile application in communication with this panel. In addition, Emaar Square Mall is providing one of the largest indoor digital media networks in Turkey with Wifi Analytics which can provide special services that understand where the customer spent time or what the customer's interests are. Another example is the use of Nurol-GYO-European algorithms for digital marketing and their slogan to market their new project is "what matters is what you see, not where you look" (digitalage journal, 2017; digitalage summit, 2017).

In addition, the use of CRM (customer relationship management) applications with a superior technology infrastructure together with services and features developed in accordance with the customer structures provides real estate brands which make a difference. Because the future is rapidly changing and companies need to adapt to this change.

The two major markets of real estate are the industrial and consumer markets. The property here can be classified as commercial and housing. Both require separate marketing efforts and strategies. Examples of commercial real estate are Retail, Office and logistics and alternative sub-dimensions will be useful.

Retail: Retail areas need to continue to be more flexible and connected in order for retailers to maintain the Internet. Property managers must think holistically to grow. Investors belonging to retail brands should determine how advanced their physical infrastructure and how appropriate they are to online interactions. One way to achieve that is through the

analysis of visitor data to help drive decisions around location, layout and tenant mix. They must also explore how to generate fresh revenue streams from communal spaces, pop-up stores, apps and visitor data (Peca, 2009; Peiser & Hamilton, 2012).

Office: Google is relocating to King's Cross, Facebook has purchased premises in Fitzrovia, and Apple is moving to Battersea Power Station. Office space needs to have high-tech capabilities to attract innovative capabilities and businesses. It is possible to explain the technologies that new office centres can have in three ways. *(1) Wireless warriors artificial intelligence (AI).* Robotic process automation, machine intelligence and software robots are used as the basis of an office environment. AI will also impact space requirements, with many roles highly susceptible to automation: KPMG estimates that 30% of corporate jobs could be carried out by robots by 2026. A further change that will impact the amount of floor space required is the growth in people working remotely, as highlighted in research by the cloud communication firm Fuze. *(2) Health for wealth.* A healthy employee is more productive than an unhealthy employee. Forward-looking developers and planners should be taking steps to promote wellbeing if they want their real estate to remain competitive. *(3) Adapt or expire.* Adaptability in office buildings will become increasingly important- as private and public companies look for innovative properties that allow them to quickly scale up or down depending on their needs. While some businesses will continue to look for fixed premises, as office space that reflects the brand helps businesses to attract talent and customers, there will still be a need for on-the-fly adaptability, from shifting desk space to the creation of collaboration space. Flexibility, mobility and adaptability are therefore the most pertinent design features for the future office space (Lindholm & Levainen, 2006; Pyle, 2017; Wehrmeyer, 2011; Noble, 2006).

Logistics: With the rise of online shopping and one-hour delivery services, the logistics real estate sector has undergone a period of transformation in recent years. While there has been a surge in take-up, many warehouses, particularly those with low ceilings, poor connectivity or awkward layouts, have become obsolete. More change lies ahead as the fourth industrial revolution transforms the manufacturing industry- through the integration of information technology- while autonomous vehicles and 3D printing alter existing distribution networks. Also, three important issues that affect logistics can be explained as follows (Pyle, 2017; Wehrmeyer, 2011; Lindholm & Levainen, 2006; Miles & Berens, 2007):

Warehouse Automation

Automation will play an ever greater role in the warehouse of the future, whereby robots will collect and deposit pallets and prepare them for shipping, before finally loading them into the back of a vehicle for delivery. Human-machine interaction is set to increase, with the International Federation of Robotics' prediction that global sales of industrial robots will have seen an annual growth of 15% by 2019.

Driverless Future

Given the pace of technological advancements in autonomous vehicles, the real estate sector is struggling to stay abreast of its potential impact. Given that the typical lifespan of a warehouse is now around 25 years, developers must be confident about the decisions they're making. With autonomous vehicles that are able to run all day and all night, without the need for breaks, firms will be less restricted by location and able to move to areas where labour or land is cheaper.

Changing Occupier Tastes

As part of their efforts to offer better value to consumers, retailers are employing predictive analytics to better manage stock and reduce wastage. Better inventory visibility also enables retailers with legacy infrastructure to use their shops to store click & collect stock, rather than investing in a new distribution network.

Furthermore, the use of 3D printing may reduce occupiers' need for space as parts can be printed on-site. This could have a significant impact on the demand for both retail and warehouse space, and the size of units required. It is therefore important to collaborate with technology and infrastructure firms.

Alternative: Alternative real estate understands the customer journey. Leading the charge when it comes to adding value through technology is the alternative real estate market, which includes student housing, build-to-rent apartments, co-working spaces and retirement homes. These operators have woken up to the potential of customer data to drive decisions and improve performance. Their ability to analyze this information is helping to promote seamless property management, find new customers and improve capital and operational expenditure. It also provides a closer relationship with customers. The knock-on effect is a newfound ability to shape events, activities and initiatives offered across

locations and then tailor them to offer maximum customer value (Hamilton & Peiser, 2012; Wehrmeyer, 2011; Pyle, 2017). For example; hotels, restaurants, museums and art galleries, airports, and railway stations are considered to be highly suitable areas for testing various robots and self-service technologies as semi-controlled areas (Ivanov & Webster, 2017). Robots and artificial intelligence applications, which are beginning to gain in importance and are being put into practice in many hotel chains, can keep a lot of information in their memories, automate multiple tasks and actions beyond what we can do, and help speed up check-in. The artificial intelligence practices can provide in-depth, detailed answers to all the questions of customers from all over the world (travelshift.com, 2017). By providing information, robots serving people in hospitals and hotel environments are integrated into the real world (Tung & Law, 2017, p. 2500). As a commercial real estate case, it is possible to give examples from some hotels (Kayıkçı & Bozkurt, 2018):

The Starwood Aloft Hotel has commissioned robot butler Boltr to provide comfort and help the hotel guests. The Royal Caribbean Hotel has set up a waitress team consisting of robots in the Bionic Bar section.

In Japan, a hotel with robot employees named the Hen-na Hotel was opened in Nagasaki in 2015. The Hen-na Hotel welcomes you with an Android service robot that looks like a normal woman at the reception, and tells you how to log into the hotel by answering simple questions.

Hilton businesses work with IBM for a robotic concierge. In addition, thanks to today's service delivery technologies, face recognition technologies, video images, and sound and touch sensors, robots can interact and communicate with customers, entertain them, and make themselves closer and friendlier to customers (Zalama et al., 2014).

Unlike humanoid robot applications; ProPILOT Park Ryokan is equipped with self-driving slippers, a cushion, table and remote control that can head to its own place. The intelligent travel platform, WayBlazer has created an application for the tourism industry by working with IBM's Watson artificial intelligence software. The application can make travel recommendations with regard to the data of the customers (dunya.com, 2017). Another example is Area of People. It is a community service app designed for a better life in residential areas. The company brings the best of two worlds together with its app; the familiarity of a village and the facilities of a city. Area of People acts as a local gateway for residents to meet and help each other, and get easy access to relevant services. Area of People helps real estate professionals to build and manage residential areas where multiple service partners are involved. As a partner the company works at achieving engaged and happy residents.

Conclusion

A brand needs to create a management that gives importance to visibility. Visibility and recognition create the perception that their brands are better than other companies. Following economic and social developments that direct consumer behaviour and speed/convenience services of digitalization according to changing consumer trends will contribute to the growth of brands. Companies that make their "job" a brand and increase consumer benefit will be able to establish the foundations of brand management more soundly.

Real estate 4.0 will change everything in the industry. Companies which do not implement this and do not adapt to the processes of the business will be left behind. Real estate and marketing, one of the most important sectors contributing to the development of the country's economy, will be a more technical and specialized field. Businesses will be able to make a difference at this point by realizing their innovation and digital marketing applications.It will be possible to look at the subject in more depth with a case study of digital marketing practices.

Case Study: IKEA

Several big brands have rolled out innovative store formats that dovetail with their online offering or adopted cutting-edge in-store tech. IKEA, for example, opened a store in Westfield that was built to merge on- and offline shopping last year. At 900 square metres, it's tiny compared to the IKEA template warehouse, which runs to around 37,000 square metres. The interaction percentages with the store during their path to purchase are: baby boomers with a ratio of 52%, for generation X with a ratio of 37%, for millennials with a ratio of 40% and for generation Z with a ratio of 50%. While generation X -perhaps time-poor with family and work commitments -has less time for stores, note that gen Z is back in the shops, almost to the level of the baby boomers. Physical stores are changing, but they're still a part of the e-commerce customer journey.

When you think of the future of real estate it is hard not to imagine the technologically advanced cityscapes seen in science fiction. While there is an element of truth in those depictions, we believe that the underlying driver behind real estate in the future will be the consumer.

Customer Experience

Real estate is no longer just about four walls and a roof. Property is a service and the tenant is a consumer - landlords need to adopt a customer-centric approach in order to remain competitive.

Adaptable Buildings

Many of today's new buildings will not be fit for purpose in twenty or even ten years' time. To avoid costly retrofitting and building obsolescence, developers should consider how their buildings can be adapted as occupier demand and needs change over time, and how to integrate emerging technologies.

Flexible Leases

Occupiers need the ability to scale up and down as their businesses evolve and transform. Landlords need to listen to their occupiers' demands and begin to change the way lease structures are implemented.

Convenience

With today's busy lifestyles, convenience is key. Whether this should be a location, tenant mix, facilities or additional services – buildings that offer convenience will be far more attractive to the modem time-poor consumer.

Data and Analytics

The ability to analyze big data enables firms to make informed decisions. They can be used to better understand your customer in order to provide a better service, as well as to drive decision factors around location or tenant.

Collaboration

The fourth industrial revolution is blurring the lines between traditional sectors. Real estate firms will need to collaborate with technology and infrastructure providers, as well as innovative PropTech high-growth firms.

Cyber Security and Data Protection

As buildings become more "online" and more customer data are collected, care needs to be given to protect against cyber attacks, and it should be ensured that customer data are protected and that firms are compliant with regulations such as the General Data Protection Regulation (GDPR).

Connectivity

It is now critical that buildings have reliable Wi-Fi throughout. As autonomous vehicles evolve, this is set to become more critical than traditional physical connectivity.

Alternative Revenue Streams

Real estate firms have an opportunity to branch into alternative revenue streams to extract the maximum value from their buildings whether for providing additional services and facilities or utilizing customer data.

Future perspective

Investors and developers should evaluate decisions through the lens of the next twenty years. They need to consider how emerging technologies such as artificial intelligence and autonomous vehicles will impact today's buildings and what the opportunities of the future will be.

(Source: Ryan, D., & Jones, C. (2009). *Understanding digital marketing: Marketing strategies for engaging the digital generation*. London: Kogan Page Limited).

References

Accenture Turkey Digitalization Index. (2016). *Accenture HBR report*. Retrieved from https://www.accenture.com/t20170202T045842Z__w__/tr-en/_acnmedia/PDF-42/Accenture-HBR Rapor-Vodafone.pdfla=en.

Belk, R. W. (2013). Extended self in a digital world. *Journal of Consumer Research*, 40(3), 477–500.

Chaffey, D., & Chadwick, F. E. (2016). *Digital marketing* (6th ed.). Harlow, UK: Pearson Education Publishing.

Connors, K. (2017). *Real estate marketing.* Retrieved from https://www.amazon.com/Real-Estate-Marketing-Become-Producing /dp/1548103799.

Daradkeh, Y. I., Gouvela, L. B., & Sen, S. (2018). Strategic thinking and brands move to the digital transformation. *Matter: International Journal of Science And Technology,* 4(1), 88–105.

Das, P., Sah, V., Sharma, D., Singh, V., & Galuppo, L. (2013). The real estate development process in India. *Journal of Real Estate Literature,* 21(2), 271–292.

Digitalage Journal. (2017). *Digital in real estate,* 10, 64. Retrieved from https://digitalage.com.tr/.

Digitalage Journal. (2017). *The effect of technology on the real estate sector,* 10, 62. Retrieved from https://digitalage.com.tr/.

Digitalage Summit. (2017). *Digital humanization.* Digitalage magazine attachment. Retrieved from https://digitalage.com.tr/.

Digital Report. (2017). Retrieved September 9, 2018 from https://wearesocial.com/special-reports/digital-in-2017-global-overview.

Digital Report. (2017). Retrieved March 5, 2018 from https://wearesocial.com/special-reports/digital-in-2017-global-overview.

Dodson, I. (2016). *The art of digital marketing: The definitive guide to creating strategic, targeted and measurable online campaigns.* Hoboken: Wiley Publishing.

Gartner. (2014). *Key findings from the U.S. digital marketing spending survey, 2013.* Gartner for marketing. Retrieved from http://www. gartner.com/technology/research/digital-marketing/digital-marketing-spend-report.jsp.

Grabel, G. (2012). *Wealth opportunities in commercial real estate.* New Jersey: John Wiley & Sons. Inc.

Ivanov, S., & Webster, C. (2017). Adoption of robots, artificial intelligence and service automation by travel, tourism and hospitality companies: a cost-benefit analysis. *International Scientific Conference Contemporary Tourism-Traditions and Innovations,* 19-21 October, Sofia University.

Kannan, P. K., & Li, H. A. (2017). Digital marketing: a framework, review and research agenda. *International Journal of Research in Marketing,* 34, 22-45.

Kayıkçı, Y. M., & Bozkurt, K. A. (2018). Z and alpha generation in the digital age, artificial intelligence applications and their reflections on tourism. *Texts of Social Sciences*, 1, 54-64.

Kpmg Report, Real estate in the digital age, June, 2017; Ryan, D. and

Jones, C. (2009). *Understanding Digital Marketing: Marketing Strategies for Engaging the Digital Generation*. Kogan Page Limited (Ikea Study).

Kumar, B. (2014). Impact of digital marketing and e-commerce on the real estate industry. *International Journal of Research in Business Management* (IMPACT: IJRBM), 2(7), 17-22.

Lindholm, A-L., & Levainen, K. I. (2006). A Framework for identifying and measuring value added by corporate real estate. *Journal of Corporate Real Estate,* 8(1), 38-46.

Miles, M. E., & Berens, G. L. (2007). *Real estate development: Principles and processes.* Washington D.C.: Urban Land Institute.

Murison, M. (2016). Are robots the future of the travel industry? Retrieved March 10, 2018 from http://travelshift.com/robots-travel-industry-future.

Noble, J. (2006). Branding: From a Commercial Perspective. *Brand Management*, 13(3).

Ohlhorst, F. (2013). *Big data analytics: Turning big data into big money.* Retrieved from https://www.researchgate.net/publication/publication/282281171_Big_Data_Challenges/download.

Peca, S. P. (2009). *Real estate development and investment: A comprehensive approach.* NYSE: John Wiley & Sons Inc.

Peiser, R. B., & Hamilton, D. (2012). *Professional real estate development: The ULI guide to business.* Washington D.C.: Urban Land Institute.

Pyle, A. (2017). *Real estate in the digital age.* KPMG Network Report.

Rowan, W. (2002). *Digital marketing: Using new technologies to get closer to your customers.* Retrieved March 10, 2018 from http://www.youblisher.com/p/1248467-Digital-Marketing-Using-New-Technologies-to-Get-Closer-to-your-Customers.

Ryan, D., & Jones, C. (2009). *Understanding digital marketing: Marketing strategies for engaging the digital generation.* London: Kogan Page Limited.

Siemens Press (n.d.). *Expo Real.* Retrieved September 10, 2018 from http:// siemens.com/press/PR2016090399BTEN.

Theturkey-to-digital-conversion-the-industrycompetence(n.d.). Retrieved March 25, 2018 from

http://cdn.endustri40from.com/file/997b726707494962941dc353aae22
fal/turkiye-nin-sanayide-dijital-donusum-yetkinligi.pdf.

Tung, V. W. S., & Law, R. (2017). The potential for tourism and
hospitality experience research in human-robot interactions. *International
Journal of Contemporary Hospitality Management, 29*(10), 2498–
2513.

Vries, J. C., Jonge, H., & Van der Voordt, T. J. M. (2008). Impact of real
estate interventions on organisational performance. *Journal of
Corporate Real Estate, 10*(3), 208–223.

Wehrmeyer, R. (2011). *The complete guide to developing commercial real
estate, the who, what, where, why and how principles of developing
commercial real estate*. Texas: Wehr Publishing.

Zahay, D. (2015). *Digital marketing management*. New York: Business
Expert Press.

Zalama, E., Garcia-Bermego, J. G., Marcos, S., Dominguez, S., Feliz, R.,
Pinillos, R., & Lopez, J. (2014). Sacarino, a service robot in a hotel
environment, advances in intelligent systems and computing. In:
Armada M., Sanfeliu A., and Ferre M. (eds.), *Robot 2013: First
Iberian Robotics Conference. Advances in Intelligent Systems and
Computing* (p. 253), 3-14. Springer, Cham.

World Journal. (n.d.). Retrieved March 10, 2018 from http://
dunya.com/ozel-dosya/yapay-zeka-akilli-pazarlama-devrini-baslatti-
haberi-334151.

CHAPTER EIGHT

EFFECTS OF LOGISTICS SERVICE QUALITY ON BEHAVIOURAL INTENTION: AN APPLICATION ON ELECTRONIC SERVICE CUSTOMERS

EMEL YILDIZ

Introduction

Electronic commerce (e-commerce) which emerged in the mid-1990s is growing rapidly all over the world. E-commerce can be described as the environment where all kinds of goods and services are sold. In this regard, e-commerce offers customers the opportunity to easily purchase the desired product and/or servicer. As in all other sectors, establishing long and strong relationships with customers in the e-commerce sector is very important. It is the fundamental goal of the business to ensure that customers speak positively about products and business and repurchase from the same business. With the development of e-commerce, the expectations of customers such as product variety and timely delivery have also started to increase. This has increased the importance of logistics in e-commerce (Wang, 2015, p. 275).

The concept of logistics, which is defined as inventory management, began to change after the 1990s, when both scholars and researchers began to analyze logistics skills in providing a quality service, satisfying customers and making them loyal (Mentzer et al., 2004; Richey et al., 2007). Now, logistics services have become important competitive tools for businesses (Mentzer et al., 2004, p. 15). Logistics services that can be expressed as a measure of the efficiency of the system in terms of providing products to the customer at the desired place and time (Sterling & Lambert, 1987), were seen as a cost dynamo at the beginning and customer perceptions were not considered (Kilibarda & Andrejic, 2016, p.

2). Later on, this perspective changed and logistics services have begun to measure customer perceptions (Su & Sampaio, 2012, p. 1). Stank et al. (1999) and Stank et al. (2003) developed the logistics service quality scale and expressed it as two dimensions; operational and relational logistic service quality.

Operational logistics service quality; can be stated as the perception of whether logistics activities are performed according to the needs of the customers (Stank et al., 1999, p. 432; Stank et al., 2003, p. 28). Operational logistics service quality includes physical characteristics such as the delivery of goods and/or services, order receipt, time and location.

Relational logistics service quality; is defined as the perception of logistics activities that enable product and service providers to create warmer and more sincere relationships with customers and to define their needs better (Stank et al, 1999, p. 432; Stank et al., 2003, p. 29). Contrary to operational logistics service quality, relational logistics service quality focuses on creating trust by providing enough information to customers and showing them that they are enthusiastic about serving.

Research Model and Hypothesis

In this study, to investigate the effects of logistics service quality on satisfaction and behavioural intention, the research model was constructed as follows.

Figure 8-1. Research Model
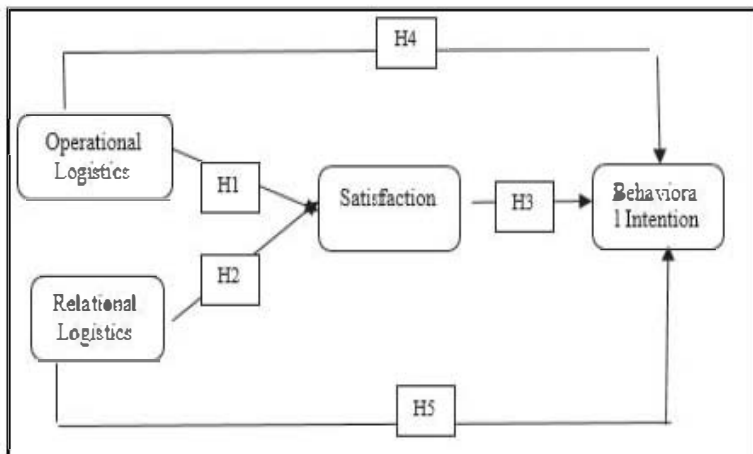
Logistics Service Quality and Satisfaction

When the literature on the quality of the logistics service is examined, many researchers (Micu et al., 2018, Davis, 2006, Saura et al., 2008, Kilibarda & Andrejic, 2016, Stank et al., 1999, Çağlar, 2014, Sampaio, 2012; Sun et al., 2016; Alemu, 2016) have examined the effect of logistics service quality on many factors such as customer satisfaction, brand trust, customer loyalty, and customer retention. Looking at the studies related to customer satisfaction, Chin et al. (2013) developed a research model to measure the effect of logistics service quality (operational and relational logistics service quality) on customer satisfaction. Kilibarda & Andrejic (2006) in their work on the Serbian market, found that logistics service quality increased customer satisfaction. Micu et al. (2018) examined e-commerce retail customers and determined that compared to the operational dimension, the relational dimension of logistics service quality is an important determinant of customer satisfaction. Saura et al. (2008) in their work on manufacturers, determined that logistics service quality offered at a high level increases satisfaction.

Based on the above statements the H_1 and H_2 hypotheses are as follow:

H_1: Operational logistics service quality has positive effects on satisfaction,

H_2: Relational logistics service quality has positive effects on satisfaction.

Satisfaction-Behavioural Intention

When the relevant literature is examined, it is possible to find many studies that investigated the relationship between satisfaction and behavioural intention (Baker & Crompton, 2000, White & Yu, 2005, Jin et al., 2015, Hutchinson et al., 2010, Joung et al., 2010, Dado et al., 2013). Baker & Crompton (2000) found that satisfaction has a positive effect on loyalty and the willingness to pay more which are the dimensions of behavioural intention. Similarly, White & Yu (2005) determined that customers' satisfaction effects behavioural intentions positively such as positive word-of-mouth and the willingness to pay more. In their research on water parks, Jin et al. (2015) determined that satisfaction has a significant and positive effect on behavioural intention. Hutchinson et al. (2010) conducted a survey on players going to the golf course and found that passengers are more likely to display word-of-mouth and re-visit behaviour in the case of satisfaction.

Based on the above statements, the H_3 hypothesis is as follows:

H_3: Satifaction has postive effects on behavioural intention.

Logistics Service Quality and Behavioural Intention

When literature related to the relationship between service quality and behavioural intention is examined, it is possible to find many studies to examine the direct and indirect effects of service quality on behavioural intention (Woodside, Frey & Daly, 1989; Zeithaml et al., 1996; Kuruuzum & Koksal, 2010, Pollard, 2010; Falk, Hammerschmidt & Schepers, 2010; Bou-Llusar et al., 2001; Tam, 1999). Many studies conducted in different areas such as health, banking, accommodation, higher education and the time industry have shown that service quality is a pioneer of behavioural intentions (Li, Huang & Yang, 2011; Boshoff & Gray, 2004; Bou-Llusar et al., 2001; Parasuraman et al., 1985, 1988; Zeithaml et al., 1996; Wu, Liu & Hsu, 2008; O'Connor, Trinh & Shewchuk, 2000; Baker & Crompton, 2000; Gooding, 1995; Dado et al., 2013). From these studies, Ladhari (2009) found that service quality has a direct and indirect influence on customers' behavioural intentions. In their research on the life insurance industry, Rehman et al. (2016) concluded that all other dimensions except for a single service quality dimension have an influence on the behavioural intention positively. Related to the effects of logistics service quality on behavioural intention Giovanis et al. (2013), in their survey on construction materials retailers operating in the Attica district of Greece, found that logistics service quality has significant effects on behavioural intention. Similarly, in another study, Filho and Souki (2007) found that logistics service quality in the soft drinks industry has positive effects on behavioural intention. Uzel and Tuna (2014) found that three of the logistics service quality dimensions, i.e. ease of ordering procedures, the tracking capability of the firm and order quality, have positive effects on post-purchase behavioural intention.

Based on the above statements, the H_4 and H_5 hypotheses are as follows:

H_4: Operational logistics service quality has positive effects on behavioural intention,

H_5: Relational logistics service quality has positive effects on behavioural intention.

Methodology

Purpose of the Research

The purpose of this study is to examine the effects of operational and relational logistics service quality, which are logistics service quality dimensions, on satisfaction and behavioural intention.

Variables

Within the scope of the research, scales based on previous research on the respective topics were logistics service quality (Stank et al.,1999; 2003; Mentzer et al. 2001; Bienstock et al. 1997), behavioural intention (Zeithaml et al., 1996) and satisfaction (Anderson & Sullivan, 1993; Fomel, 1992; Levesque & McDougall, 1996).

Sampling

For the purpose of the research, a questionnaire was applied to customers of an electronic commerce site which is one of the most visited online shopping sites located in Turkey. An electronic questionnaire prepared with the Google Drive Form application was sent to consumers using e-mail and various social media applications. The first part of the questionnaire includes factors in the research model. These factors are operational logistics service quality, relational logistics service quality, satisfaction and behavioural intention. A 5-point Likert scale was used: "1: Strongly disagree, 2: Disagree, 3: Neutral, 4: Agree, 5: Strongly agree." The second part of the questionnaire includes demographics such as age, gender, education, income, occupation and marital status.

The data obtained from 562 questionnaire forms were included in the analysis by eliminating 30 of the 592 survey forms because they were incomplete and incorrectly filled in.

Analysis of Data

The validity and reliability of the data obtained in the study were tested by the Cronbach Alpha method and Factor analysis. In the testing of the hypotheses, Structural Equation Model analysis was used.

Findings

Table 8-1. Demographics Distributions of Consumers

Gender	f	%	Marital Status	f	%
Female	254	45	Married	318	56,6
Male	308	55	Single	244	43,4
Total	562	100	Total	562	100
Age	f	%	*Occupation*	f	%
18-25	47	8,4	Public Employee	142	25,3
26-30	170	30,2	Private Sector Employee	131	23,3
31-35	181	32,2	Retired	67	11,9
36-40	89	15,8	Housewife	124	22,1
41 and older	75	13,4	Student	59	10,5
Total	562	100	Other	39	6,9
Income	f	%	Total	562	100
1500 TL and below	64	11,4	Education	f	%
1501-3000 TL	176	31,3	Primary Education	52	93
3001-4500 TL	195	34,7	Secondary Education	286	50,9
4501-6000 TL	93	16,6	University	148	6,3
6001 TL and above	34	6	Master/ PhD	76	13,5
Total	562	100	Total	562	100

As seen in Table 8-1, 254 of participants are male and 308 of them are female. 181 participants are 31-35 years old; 170 of them are 26-30; 89 of them are 36-40; 75 of them are 41 and older and 47 of them are 18-25 years old. Also, 142 participants are public employees and 131 of them are private sector employees, 124 of them are housewives, 67 of them are retired and 59 of them are students. At the same time, most of the participants are high school graduates (286 people) and university graduates (148 people). When looking at marital status, it is seen that 318 participants are married and 244 are single. According to income

distribution, 195 participants earn 3001-4500 TL; 176 of them earn 1501-3000 TL; 93 of them earn 4501-6000 TL; 64 of them earn under 1500 TLand 34 of them earn 6001 TL or over.

Validity and Reliability Analysis

The Cronbach Alpha method, one of the internal consistency analysis methods, was used to test the reliability of the scales in the research.

Table 8-2. Reliability Results of Research Scales

Item	Scale Meanif Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach Alpha if Item Deleted
OLSQ1	30,3648	58,139	,747	,929
OLSQ2	30,5427	58,284	,781	,927
OLSQ3	30,5427	57,489	,813	,925
OLSQ4	30,8363	57,663	,728	,930
OLSQ5	30,6904	57,444	,708	,932
OLSQ6	30,2313	58,392	,773	,928
OLSQ7	30,6068	58,435	,760	,928
OLSQ8	30,2473	58,654	,758	,928
OLSQ9	30,2722	58,177	,769	,928
a: .936 N: 562				
RLSQ1	12,0142	7,911	,636	,870
RLSQ2	12,1423	7,263	,751	,826
RLSQ3	12,2117	7,272	,750	,826
RLSQ4	12,1922	7,261	,769	,819
a: .872 N: 562				
SAT1	13,3594	3,354	,693	,872
SAT2	13,3434	3,285	,798	,833
SAT3	13,3541	3,252	,802	,831
SAT4	13,4199	3,160	,709	,869
a: . 884 N: 562				
BINT1	16,4466	9,207	,743	,855
BINT2	16,5302	9,130	,756	,852
BINT3	16,4413	9,124	,784	,846
BINT4	16,6192	9,741	,626	,882
BINT5	16,5605	9,110	,708	,864
a: . 885 N: 562				

As seen in Table 8-2, general alphas of scales are found to be (a = .936), (a = .872), (a = .884) and (a =. 885). When looking at the "scale mean if item deleted" column, it appears that no value is greater than the General Alpha. So there is no need to remove any item from the scale. Factor analysis was used to test the validity of scales. According to the results in Table 8-3, it seems that there is no need to remove any item from the scale.

Table 8-3. Validity Results of Research Scales

Item	Initial Eigenvalues (%)			Extraction Sums of Squared (%)			Std. Load
	Sum	Variance	Total	Total	Variance	Total	
OLSQ1	5,97	66,414	66,414				,806
OSLQ2	,844	9,378	75,793				,833
OLSQ3	,432	4,804	80,596	5,977	66,414	66,414	,856
OLSQ4	,412	4,575	85,171				,784
OLSQ5	,358	3,938	89,154				,768
OLSQ6	,321	3,562	92,717				,829
OLSQ7	,246	2,738	95,454				,814
OLSQ8	,224	2,489	97,943				,815
OLSQ9	,185	2,057	100,00				,827
KMO: 0,926				Bartlett's Test: 3819,153 p: 0,000			
RLSQ1	2,82	72,311	72,311				,784
RLSQ2	,524	13,099	85,410	2,892	72,311	72,311	,868
RLSQ3	,311	7,779	93,189				,868
RLSQ4	,272	6,811	100,00				,878
KMO: 0,810				Bartlett's Test: 1146,748 p: 0,000			
SAT1	2,98	74,695	74,695				,826
SAT2	,480	12,000	86,695	2,988	74,695	74,695	,895
SAT3	,301	7,535	94,230				,897
SAT4	,231	5,770	100,00				,837
KMO: 0,814				Bartlett's Test: 1288,082 p: 0,000			
PINT1	347	68,743	68,743				,849
PINT2	,609	12,188	80,931	3,437	68,743	68,743	,855
PINT3	,387	7,732	88,663				,875
PINT4	,319	6,389	95,052				,747
PINT5	,247	4,948	100,00				,814
KMO: 0,859				Bartlett's Test: 1535,251 p: 0,000			

After the validity and reliability of the scales were determined, research hypotheses were tested by Structural Equation Modelling.

Table 8-4. Structural Equation Model Fits

	Recommended	Model
x^2/df	<0,3	2,950
NFI	>0,9	93,7
RFI	>0,9	92,2
IFI	>0,9	95,7
TLI	>0,9	94,7
CFI	>0,9	95,7
RMSEA	<0,8	0,59

According to Table 8-4, it can be said that the model is a high degree of conformity as a whole. The results of the hypothesis for the research model are given in Table 8-5.

Table 8-5. Hypothesis Test Results

Hypothesis	β	Standard Error	p	Result
H1	0,066	0,026	0,012	Accepted
H2	0,121	0,028	0,001	Accepted
H3	0,926	0,080	0,001	Accepted
H4	0,101	0,033	0,002	Accepted
H5	0,071	0,035	0,042	Accepted

Conclusion

Parallel to the development in information and communication technologies, e-commerce has become very common in our country. In addition to the basic activities of the enterprises, the importance of logistics services which provide place and time benefits to the consumers has also increased. In this study, the effects of logistics service quality on satisfaction and behavioural intention were examined.

Frequency Analysis, Factor Analysis, Reliability Analysis and the Structural Equation Model were applied in the analysis and interpretation of the data obtained in the research. It is found that 254 of the participants are male and 308 of them are female. 181 participants are between the ages of 31 and 35; 170 of them are between 26 and 30; 89 of them are between 36 and 40; 75 of them are 41 and older and 47 of them are between 18 and 25. Also, 142 participants are public employees and 131 of them are private sector employees, 124 of them are housewives, 67 of

them are retired and 59 of them are students. At the same time, most of the participants are high school graduates (286 people) and university graduates (148 people). In terms of the participants' marital status, it is seen that 318 participants are married and 244 are single. According to income distribution, 195 of participants earn 3001-4500 TL; 176 of them earn 1501-3000 TL; 93 of them earn 4501-6000 TL; 64 of them earn 1501 TL or below and 34 of them earn 6001 or over. According to the relability analysis, the General Alphas of scales are found to be (.936), (.872), (.884) and (.885) and validity analysis results are, for OLSQ (KMO: 0,926, Bartlett's: 3819,153 p: 0,000); for RLSQ (KMO: 0,810, Bartlett's: 1146,748 p: 0,000), for SAT (KMO: 0,814, Bartlett's: 1288,082 p: 0,000) and for PINT (KMO: 0,859, Bartlett's: 1535,251 p: 0,000). Based on these results it can be said that there is no need to remove any item from the scale.

As a result of the Structural Equation Model analysis, it was determined that operational and relational logistics service quality effects satisfaction positively. These findings are in parallel with the findings in the literature (Kilibarda & Andrejic, 2006; Chin et al., 2013; Saura et al., 2008; Micu et al., 2018; Davis, 2006). Therefore, the H_1 hypothesis, "Operational logistics service quality has positive effects on satisfaction" and the H_2 hypothesis "Relational logistics service quality has positive effects on satisfaction" have been accepted. Based on this finding, it can be stated that businesses should attach importance to operational activities such as order taking, order delivery, and relational activities that involve warmer and more intimate relations with customers in order to meet customer needs. In the study, it was also determined that the operational and relational logistics service quality has significant and positive effects on behavioural intention. In other words, in enterprises where operational and relational activities are performed successfully, the behaviour of re-purchasing and word-of-mouth takes place more. In this direction, the H_4 hypothesis, "Operational logistics service quality has positive effects on behavioural intention" and the H_5 hypothesis "Relational logistics service quality has positive effects on behavioural intention" have been accepted. Finally, it was determined that the H_3 hypothesis "Satisfaction has positive effects on behavioural intention" has been accepted.

In this context, e-commerce enterprises should ensure that there are no interruptions in the process of order taking and delivery in terms of the behavioural response of the customers to the business. This can increase the level of reliability in the customers' eyes. While performing these activities, employees must show that they are enthusiastic and willing to

infallibly provide service to the customer and provide the information that the customer needs.

References

Alemu, H. (2016). Implication of Logistics Service Quality on Customer Satisfaction: The Case of Jumia Online Market. Master's Thesis, Addis Ababa University.

Anderson, E. W., & Sullivan, M. W. (1993). The Antecedents and Consequences of Customer Satisfaction for Firms. *Mark. Sci.*, 12, 125–143.

Baker, D., & Crompton, J. (2000). Quality, Satisfaction and Behavioral Intentions. *Annals of Tourism Research*, 27, 785–804. Doi: 10.1016/S0160-7383(99)00108-5.

Bienstock, C., Mentzer, C., John, T., & Bird, Monroe Murphy. (1997). Measuring Physical Distribution Service Quality. *Journal of the Academy of Marketing Science.*

Bou-Llusar, J. C., Camison-Zomoza, C., & Escrig-Tena, A. B. (2001). Measuring the Relationship between Firm Perceived Quality and Customer Satisfaction and its Influence on Purchase Intentions. *Total Quality Management & Business Excellence*, 12(6), 719–734. Doi: 10.1080/09544120120075334.

Boshoff, C., & Gray, B. (2004). The Relationships between Service Quality, Customer Satisfaction and Buying Intentions in the Private Hospital Industry. *South African Journal of Business Management*, 35(4), 27–37.

Chin, Sze H., Soh, Keng L., & Wong, Wai P. (2013). Impact of Switching Costs on the Tripartite Model – Third Party Logistics. *Management*, 3(2), 79–88.

Dado, J., Táborecká, P., Janka, R. D., & Rajıc, T. (2013). Linking Service Quality and Satisfaction to Behavioural Intentions in a Higher Education Setting. *Ekonomický Časopis*, 61(6), 578–596.

Davis, E. R. (2006). The Role of Logistics Service Quality in Creating Customer Loyalty. PhD Thesis, University of Tennessee.

Falk, T., Hammerschmidt, M., & Schepers, J. J. L. (2010). The Service Quality-Satisfaction Link Revisited: Exploring Asymmetries and Dynamics. *Journal of the Academy of Marketing Science*, 38, 288–302. Doi: 10.1007/s11747-009-0152-2.

Filho, Cid G., & Souki, Gustavo Q. (2007). Measuring the Logistic Services Quality and the Retailers' Behavioral Intentions: An Empirical Study of the Soft Drinks Industry. Retrieved from

https://www.pomsmeetings.org/confpapers/007/007-0117.pdf.

Fornell, C. (1992). A National Customer Satisfaction Barometer: The Swedish Experience. 56, 6–21.

Giovanis, A. N., Tomaras, P., & Zondiros, D. (2013). Suppliers Logistics Service Quality Performance and its Effect on Retailers' Behavioral Intentions. *Procedia – Social and Behavioral Sciences*, 73, 302–309.

Gooding, S. K. S. (1995). Quality, Sacrifice, and Value in Hospital Choice. *Journal of Health Care Marketing,* 15(4), 24–31.

Hutchinson, J., Wang, Y., & Lai, F. (2010). The Impact of Satisfaction Judgment on Behavioral Intentions: An Investigation of Golf Travelers. *Journal of Vacation Marketing*, 16(1), 45–59.

Jin, N., Lee, S., & Lee, H. (2015). The Effect of Experience Quality on Perceived Value, Satisfaction, Image and Behavioral Intention of Water Park Patrons: New versus Repeat Visitors. *International Journal of Tourism Research,* 17, 82–95.

Joung, H. W., Kim, H. S., Yuan, J. J., & Huffman, L. (2011). Service Quality, Satisfaction, and Behavioral Intention in the Home Delivered Meals Program. *Nutrition Research and Practice,* 5(2), 163–168.

Karadeniz, M., & Işık, Muhittin. (2014). Lojistik Hizmet Kalitesi İle Müşteri Memnuniyeti İlişkisi: E-Ticaret Üzerine Bir Araştırma. *İstanbul Journal of Social Sciences*, 7, 1–24.

Kilibarda, M., & Andrejic, M. (2016). Logistics Service Quality Impact on Customer Satisfaction and Loyalty. *2nd International Conference on Supply Chains,* 1–8.

Kuruuzum, A., & Koksal, C. D. (2010). The Impact of Service Quality on Behavioral Intention in the Hospitality Industry. *International Journal of Business and Management Studies,* 2(1), 9–15.

Ladhari, R. (2009). Service Quality, Emotional Satisfaction, and Behavioural Intentions: A Study in the Hotel Industry. *Managing Service Quality*, 19(3), 308–331.

Levesque, T., & McDougall, G. H. G. (1996). Determinants of Customer Satisfaction in Retail Banking. *Int. J. Bank. Mark.,* 14(7), 12–20.

Li, S. J., Huang, Y. Y., & Yang, M. M. (2011). How Satisfaction Modifies the Strength of the Influence of Perceived Service Quality on Behavioral Intentions. *Leadership in Health Services,* 24(2), 91–105. Doi:10.1108/17511871111125675.

Mentzer, J. T., Flint, D. J., & Hult, G. T. M. (2001). Logistics Service Quality as a Segment-customized Process. *Journal of Marketing Channels,* 65(4), 82–104.

Mentzer, J. T., Myers, M. B., & Cheung, M. S. (2004). Global Market Segmentation for Logistics Services. *Industrial Marketing Management*, .33, 15–20.

Micu, A., Aivaz, K., & Capatina, A. (2018). Implications of Logistic Service Quality on the Satisfaction Level and Retention Rate of an E-commerce Retailer's Customers. Retrieved from http://www.ecocyb.ase.ro/20132/Micu%20Adrian%20.pdf.

O'Connor, J. S., Trinh, H. Q., & Shewchuk, R. M. (2000). Perceptual Gaps in Understanding Patient Expectations for Health Care Service Quality. *Health Care Management Review*, 25(2), 7–23. Doi: 10.1097/00004010-200004000-00002.

Parasuraman, A., Zeithaml, V. A., & Berry, L. (1985). A conceptual Model of Service Quality and its Implications for Future Research. *Journal of Marketing*, 49(4), 44–48. Doi: 10.2307/1251430.

Parasuraman, A., Zeithaml, V. A., & Berry, L. (1988). Servqual: A Multiple-item Scale for Measuring Consumer Perceptions of Service Quality. *Journal of Retailing*, 64, 12–40.

Pollard, L. M. (2010). Perceived Service Quality's Impact on Behavioral Intentions in the Timeshare Industry. PhD Thesis, University of Central Florida.

Rehman, U. U., Ilyas, M., Aslam, U., & Imran, M. K. (2016). Service Quality Dimensions and Its Impact on Customer's Behavioral Intentions. *Pakistan Business Review*, 120–139.

Richey, R. G., Daugherty, P. J., & Roath, A. (2007). Firm Technological Readiness and Complementarity: Capabilities Impacting Logistics Service Competency and Performance. *Journal of Business Logistics*, 28(1), 195–228.

Saura, I. G., Molina, M. E. R., & Frances, D. S. (2008). Logistic Service Quality and Technology: A Comparison between Supplier–Retailer and Retailer–Consumer Relationships. *The International Review of Retail, Distribution and Consumer Research*, 18(5), 495–510. Doi: 10.1080/09593960802573385.

Saura, I. G., Frances, D. S., Contri, G. B., & Blasco, M. F. (2008). Logistics Service Quality: A New Way to Loyalty. *Industrial Management & Data Systems*, 108(5), 650–668.

Stank, T. P., Thomas, J. G., & Shawnee, K. V. (1999). Effect of Service Supplier Performance on Satisfaction and Loyalty of Store Managers in the Fast Food Industry. *Journal of Operations Management*, 17(4), 429–448.

Stank, T. P., Thomas, J. G., Shawnee, K. V., & Katrina, S. (2003). Logistics Service Performance: Estimating Its Influence on Market Share. *Journal of Business Logistics*, 4(1), 27–56.

Sterling, J. U., & Lambert, D. M. (1987). Establishing Customer Service Strategies within the Marketing Mix. *Journal of Business Logistics,* 8(1), 1–30.

Su, A. F. G., & Sampaio, M. (2012). The Impact of Logistics Service Performance on Customer Satisfaction and Loyalty in the Brazilian Chemical Industry. *International Conference on Industrial Engineering and Operations Management*, 1–6.

Tam, J. L. M. (1999). The Effects of Service Quality, Perceived Value and Customer Satisfaction on Behavioral Intentions. *Journal of Hospitality & Leisure Marketing,* 6(4), 31–43. Doi: 10.1300/J150v06n04_04.

Wang, L. (2015). Research on the Impact of E-commerce on the Logistics Economy: An Empirical Analysis based on Zhengzhou Airport Logistics. *International Journal of Security and Its Applications*, 9(10), 275–286.

White, C., & Yu, Yi-Ting. (2005). Satisfaction Emotions and Consumer Behavioral Intentions. *Journal of Services Marketing*, 19(6), 411–420.

Woodside, A., Frey, L., & Daly, R. (1989). Linking Service Quality, Customer Satisfaction and Behavioral Intention. *Journal of Health Care Marketing*, 9(4), 5–17.

Wu, H. L., Liu, C. H., & Hsu, W. H. (2008). An Integrative Model of Customers' Perceptions of Health Care Services in Taiwan. *The Service Industries Journal*, 28(9), 1307–1319. Doi: 10.1080/02642060802230130.

Uzel, E., & Tuna, O. (2014). The Effect of Logistics Service Quality on Post Purchase Behavioral Intention in On-Line Shopping. *Journal of Management, Marketing and Logistics*, 1(3), 241–258.

Zeithaml, V. A. and Berry, L. L., & Parasuraman, A. (1996). The Behavioral Consequences of Service Quality. *Journal of Marketing*, 60, 31–46.

DETERMINATION OF THE FINANCIAL LITERACY LEVELS AND PROACTIVE PERSONALITIES OF UNIVERSITY STUDENTS

SAADET ELA PELENK AND AKIF ZIYA BAYRAK

Introduction

Citizens should have the financial knowledge level and ability to evaluate in the first place in the countries that wish to overcome economic crises and achieve a growth trend. The citizen effectively managing the personal budget and taking the right financial decisions, thus increasing the level of welfare, depend on a high financial literacy level because individuals with knowledge of finance make more conscious decisions in terms of consumption and give support to community development (CBRT, 2015).

When looking at the definition of financial literacy, it is expressed as obtaining information about finance and making efficient decisions about the use and management of money by making a conscious evaluation (Noctor, Stoney & Stradling, 1992; Coben, Dawes & Lee, 2005). Although there is a variety of definitions in the literature, a financially literate person in general is the person who understands financial terms and can make connections among them, and can make an appropriate finance program and plan, thus determining financial need in the correct way (Remund, 2010).

According to the definition given by the OECD (Organization for Economic Cooperation and Development), financial literacy is the acquisition of financial knowledge, ability and self-confidence as a result of the ability of citizens to evaluate financial concepts and events by contributing to individual and social welfare in order to keep up with

economic life (●ECD, 2●14). In this context, being financially literate, in addition to getting equipped with information on financial products and concepts, enables individuals to make financial decisions and presents an opportunity for implementing those decisions in practice in light of the gained information (Bayram, 2●1●, p. 12).

The level of knowledge on financial practices and concepts can be divided into two: basic and advanced levels. In this context, risk management and diversification, inflation, and interest rates are accepted as the basic level of financial literacy; on the other hand, information on risk-return balance evaluation, bonds, stocks, and the structure and operation of investment funds is accepted as the advanced level of financial literacy (Lusardi, 2●●8, pp. 4-8). For example, an individual with a basic level of financial literacy starting work recently can manage his/her expenses and debts in the correct way and can save money by designing a retirement plan in the most appropriate way (Er, Temizel, Özdemir & Sönmez, 2●14). At this point, there are several indicators for an individual to be considered as financially literate:

- Creating a reasonable expenditure program by considering needs and comparing income and expenses,
- Knowing about the capital market and financial institutions,
- Keeping cash flow positive and developing cash flow,
- Knowing about risk management and determining which risk is worth taking,
- Becoming cautious against financial fraud,
- Choosing the basic investment products at the most appropriate time (taking into consideration the risk-return balance),
- Making an insurance plan against such situations as death, discomfort, etc.,
- Developing a pension plan or program strategy,
- Knowing about the savings authority, social rights and tax benefits as an employee,
- Developing accumulation and funds for emergencies.

Starting from the above-mentioned indicators, financial literacy has to obtain and use information that provides an efficient evaluation of its resources for the financial security of the individual (PACFL, 2●●8, pp. 35-37). The components of financial literacy and financial management based on financial planning, that enables people to spend and save consciously by balancing their needs and goals (Hayta, 2●11; Şarlak, 2●12) are as below:

* Knowledge of managing money at the basic level,
* Knowledge of savings and investments,
* Knowledge of expenditure and borrowing, and
* Knowledge of income and capital management (Tomaskova, Mohelska & Nemcova, 2011).

According to Sovics (2012), some of the indicators of financial literacy are choosing the most appropriate banking products, managing a family budget, balancing income-expenses, planning income and expenses or planning a fund allocation for expected or unexpected situations, and investing in the right financial products at the right time.

Financial knowledge is divided into two types: macro and micro. If financial knowledge indicates the general characteristics of a country's economy such as sectorial foreign trade data and a current account deficit, it is considered to be macro knowledge; on the other hand, it is micro knowledge if it is composed of the learned and investigated knowledge of current or potential financial situations that affect enterprises and households in the economy (Özdemir, 2011).

Financial literacy has implications for both consumers and the financial system, as well. The low level of financial literacy in terms of systemic perspective decreases the portfolio diversification (Guiso & Japelli, 2008). On the other hand, it may lead to problems such as debt, capital management or retirement planning problems for consumers (Lusardi and Tufano, 2009; Hogart, Beverly & Hilgert, 2003; Van Rooij, Lusardi & Alessie, 2011). At this point, financial planning can reduce the concerns of individuals or families (Gökmen, 2012, p. 12).

The importance of financial education is an undeniable fact for financial literacy to be understood by the society and to become widespread. The OECD (2005) foresees that financial education should be internalized by individuals in terms of financial concepts and products necessary to assess risks and opportunities. In this context, individuals gaining financial literacy education can take crucial decisions to their own benefit, and thus financial knowledge seems to be associated with financial behaviour (Hilgert, Hogarth & Beverly, 2003). Additionally, financial education provides a more effective and proactive use of scarce investment resources (investments of current customers) by banks (Basu, 2005).

Most employers providing financial training at work focus on retirement plans by selecting investment funds that include planning and basic recommendations. Besides, Employee Assistance Programs (EAP) offered to some employees are often helpful in addressing major financial

challenges and debt management and directing financial resources at the time of crisis. However, the current trend is towards taking the next step and training employers for such topics as debt management, etc., improving credit scores, preventing bankruptcy, purchasing a home and the employees volunteer to become proactive in basic financial management (PACFL, 2008, p. 27).

Proactivity, starting from today's conditions and data, is interpreting the future, and taking precautions by predicting possible needs and changes (Lumpkin & Dess, 1996, p. 147). A proactive personality is that which creates opportunities and embarks upon an enterprise as a pioneer. At this point, proactive individuals actively influence their environment by initiating change (Bateman & Crant, 1993, p. 107). Therefore, a proactive individual becomes successful in the construction of social capital and network communication (Thompson, 2005).

A proactive employee takes risks to develop existing situations and create new ones, begins to act and tries to achieve a meaningful result despite the obstacles (Robbins & Judge, 2013). The combination of financial decisions with entrepreneurship and foresight ability can bring profitable results. Proactive individuals get motivated by the financial return they receive at the rate of risk and responsibility (innogrow.org., 2018). Mandell and Klein (2007) found a significant relationship between financial literacy and motivation. At this point, the weak financial decisions of the employees decrease their efficiency motivationally (Garman, Leech & Grable, 1996). In this context, motivation, a sub-component of proactivity, is associated with financial literacy and financial behaviour (Mandell & Klein, 2007, p. 107).

The dimensions of proactivity can be shown as form, intended target, impact, timing, frequency and tactics. Tactics show how an action can be performed, and timing indicates the right time at which an action can be performed. Frequency, on the other hand, shows how often the action occurred, and the intended effect indicates whose behaviour is to be changed or influenced (Grant & Ashford, 2008).

A proactive personality is enterprising and behaves decisively until reaching their goal (Gupta & Bhawe, 2007, p.3) and a proactive personality is able to control and direct the situation (Bateman & Crant, 1993, p. 104). At this point, being proactive is critical for taking successful financial decisions about the future. In this process, the students who received financial education at the beginning of their career were found to have financial gains in the following years with self-regulation (Lusardi, Michaud & Mitchell, 2013).

According to Friedman (1994), proactivity, which includes the ability to foresee problems, brings "financial socialization" which is important for financial literacy. In this context, proactivity, the social aspect of finance, is taking responsibility for developing existing financial situations or creating new opportunities (Robbins & Judge, 2013).

Financial socialization is "the process of acquiring and developing values, attitudes, standards, norms, knowledge and behaviours that contribute to the life and welfare of the individual financially (Schuchardt et al., 2009).

Therefore, individuals exhibit proactive behaviours to accelerate the process of socialization and to promote their own experiences (Ashford & Black, 1996).

Since proactive behaviours are future-oriented (Frese & Fay, 2001), individuals have the ability to think, plan, calculate, and foresee future events before they take actions (Murray, 1938; Bandura, 2006). Financially literate individuals must also plan their future steps right now (PACFL, 2008) such as saving funds against possible future situations, investing in hopefully profitable areas considering the risk-return balance, and making pension plans through making the most appropriate investment decisions right now (PACFL, 2008).

Planning, a reflection of financial literacy, is also a key component of proactive behaviour. In this respect, employees with a proactive personality develop plans on how to implement their ideas and prepare when considering a particular mission, project, activity or action (Little, 1983).

There is a scarcity of research in the literature investigating the relationship between financial literacy and a proactive personality. However, relationships between the sub-dimensions of the concepts were found. For example, the motivation sub-dimension is closely related to both financial literacy and proactivity (Grant & Ashford, 2008; Mandell & Klein, 2007). Environmental proactivity is also effective on financial performance (Sen, Roy & Pal, 2015).

Financial literacy has been studied by researchers from various perspectives. Bayram (2015) found a low level of financial literacy among university students. Ansong and Gyensare (2012) noted that financial literacy was positively related to age and work experience and in their study they measured the financial literacy of university students.

Barmaki (2015) reported that male students' basic knowledge of money and income relating to the concepts was higher than that of female students and male students' knowledge level of income sources in general was high.

Mandell and Klein (2007) examined the relationship between motivation and financial literacy. Motivation is one of the sub-components of proactivity (Garman, Leech & Grable, 1996). According to the research, motivation increases financial literacy positively and significantly.

Bernheim, Garrett and Maki (2001) observed that trainees receiving a financial education had a higher level of literacy. Cude et al. (2006) emphasized the importance of families in individuals' financial socialization.

In the study of Baysa and Karaca (2016), the financial literacy level of bank segment customers is low, and the financial literacy level is lowest in the commercial segment customers and the agricultural segment customers.

Garman, Leech and Grable (1996) expressed that weak financial decisions weakened labour productivity. Sabri and Macdonald (2010) found that students with a high level of financial literacy have higher savings tendencies.

In Apan and Ercan's (2017) study of the effect of five-factor personality traits on financial literacy, the "extraversion", "responsibility" and "compatibility" dimensions had no effect on the "financial literacy" dimension. However, it was found that the "emotional instability" dimension had a negative and significant effect on the "financial literacy" dimension. It was determined that the "openness to experience" dimension had a positive and significant effect on the "financial literacy" dimension.

Alkaya and Yağlı (2015) reported that there is a significant relationship between financial behaviour and financial knowledge; financial attitude and financial knowledge; and financial attitude and financial behaviour. Lusardi and Mitcell (2006) investigated the relationship between retirement plans and financial literacy and acknowledged that people with high financial literacy carried out their retirement plans with better knowledge.

Temizel (2010), in the study surveying financial literacy levels among blue-collar employees, found that they need financial literacy by applying a survey to 1452 employees. Sezer and Demir (2015) in their study measured the relationship between cognitive ability and financial literacy and found that investors with a high cognitive ability level responded to the report about exports at a lower rate than investors with a low cognitive ability level. On the other hand, investors with a low cognitive ability level tended to have a higher rate of buying or overreaction. Therefore, it has been emphasized that psychological prejudices are widely used in investment decisions, regardless of cognitive abilities, and this situation supports the predictions of behavioural finance.

Method

The population of the study is composed of five hundred and forty-nine students studying at Recep Tayyip Erdoğan University, Fındıklı School of Applied Sciences. Table 9-1 presents the distribution of the students in the population based on their departments. The minimum sample to represent the population was calculated with a 95% confidence level and a 5% margin of error and two hundred and eighteen questionnaires were determined to be enough for the study. However, three hundred questionnaires were applied considering the fact that some of the surveys can be inconsistent and incomplete.

Table 9-1. The Distribution of the Students in the Population Based on the Departments

Department	The number of students
Banking and Finance	316
International Trade and Logistics	233
Total	549

From the results of the survey, it was aimed to determine the effects of a proactive personality on financial literacy by determining financial literacy levels, proactive personality levels, economic levels, demographic characteristics, credit card ownership and Internet banking usage levels. For this purpose, data were obtained via the face-to-face survey method.

Thirty-five questions were asked in regard to five different fields from the literature review in order to determine the students' financial literacy levels, which are composed of "basic money knowledge, income issue, money management, savings-investment knowledge, expenditure borrowing knowledge". Following this process, the wrong answers were scored as zero, and the correct answers were scored as one and the total score was between zero and thirty-five. The high score with regard to the answers of the questions indicates that the level of financial literacy is high. Scoring and levels are exhibited in Table 9-2.

Table 9-2. Score Distribution in Determining the Financial Literacy Level

Financial Literacy Level	Correct Range	Answer Score
High	70% and above	24.5 and above
Medium	50% -70%	17.5 and 24.5
Low	35% -50%	12.5 and 17.5
Very Low	35% and below	0 and 12.5

Table 9-2 shows that the students who responded correctly to more than 70% of the questions had a high level of financial literacy. The students who responded correctly to the questions between 50% and 70% were assumed to have a medium level of financial literacy. The students who responded correctly to the questions between 35% and 50% had a low level of financial literacy and lastly, the students who responded correctly to less than 35% of the questions had a very low level of financial literacy. In order to determine the proactive personality levels of the students, the proactive personality determination studies in the literature were scanned and a "proactive personality scale" which consists of thirteen items is available to determine financial literacy levels. There are thirteen statements in this scale. The students responded to each statement with a 5-point Likert scale ranging from "I totally do not agree" to "I totally agree". In the scale, "I totally agree" was counted as five points, "I agree" was calculated as four points, "Neither agree nor disagree" was counted as three points, "I disagree" was calculated as two points, and "I totally disagree" was calculated as one point. The total score in the scale ranged between thirteen and sixty-five. The high score in the scale shows that the level of proactive personality is high. Scoring and levels are given in Table 9-3.

Table 9-3: Score Distribution in Determining the Proactive Personality Level

Proactive Personality Level	Score
High	45 and above
Medium	Between 35 and 45
Low	Between 13 and 35

Table 9-3 indicates that the students with scores of forty-five and above were considered to have a high level of proactive personality, the students with scores between thirty-five and forty-five were considered to have a medium level of proactive personality, and the students with scores between thirteen and thirty-five were considered to have a low level of proactive personality. After students' financial literacy and proactive personality levels were determined, questions for the questionnaire were prepared to determine the economic levels, demographic characteristics, credit card ownership and Internet banking usage levels of the students. Then, the distribution of financial literacy and proactive personality levels was determined with regard to the economic attitude of the students.

The relationship between the financial literacy level, the proactive personality level and taking an economics course, credit card ownership status, and Internet banking usage status was analyzed with the chi-square test. The hypotheses regarding the existence of a significant relationship between the students' proactive personality level, financial literacy level and economic attitude are as follows:

H_{01}: There is no relationship between the financial literacy level and the proactive personality level.

H_{02}: There is no relationship between credit card ownership and the proactive personality level.

H_{03}: There is no relationship between Internet banking usage and the proactive personality level.

H_{04}: There is no relationship between taking an economics course and the proactive personality level.

H_{05}: There is no relationship between credit card ownership and the financial literacy level.

H_{06}: There is no relationship between Internet banking usage and the financial literacy level.

H_{07}: There is no relationship between taking an economics course and the financial literacy level.

Findings

As a result of examining the questionnaires applied to three hundred students within the scope of the research, the questionnaires of forty-nine students were not included in the analysis because they were incomplete. The results of the statistical analysis of the data obtained from the remaining two hundred and fifty-one students are presented in this section.

Demographic and Economic Characteristics of the Students

Variables, frequencies and percentages of the demographic and economic characteristics of the students are given separately in Table 9-4 and Table 9-5. In Table 9-4, there are the findings of the students according to their gender, age, class and education level of the head of the family and in Table 9-5, there are the findings of the students according to the total income of the student's family, the status of taking an economics course, Internet banking usage and credit card ownership.

As shown in Table 9-4, two hundred and fifty-one students participated in the survey of which 39.4% are male and 60.6% are female. 15.5% of the students are first grade students, 32.3% of them are second grade students, 31.3% of them are third grade students and 21.1% of them are fourth grade students. 51.4% of the students are between twenty-one and twenty-three years old, 39.4% of the students are between eighteen and twenty years old and 9.2% of the students are between twenty-four and twenty-six years old. The educational level of the head of the family is secondary school with a ratio of 65.7%, high school with a ratio of 24.3%, university with a ratio of 9.2%, and a master's degree with a ratio of 0.8%. As a result, it was observed that more than half of the students were female, their ages ranged between twenty-one and twenty-three, and the educational level of the head of the family is secondary school with a high ratio.

Table 9-4. Students' Demographic Characteristics

Variable (n: 251)		Frequency	%
Gender	Male	99	39.4
	Female	152	60.6
Age	18-20	99	39.4
	21-23	129	51.4
	24-26	23	9.2
Grade	1	39	15.5
	2	81	32.3
	3	78	31.3
	4	53	21.1
Educational Level of the head of the family	Secondary School	165	65.7
	High school	61	24.3
	University	23	9.2
	Master's degree	2	0.8

In Table 9-5, the total income of the families of the students in the survey is between 1000 TL and 1999 TL with a ratio of 39.4%, between 2000 TL and 2999 TL with a ratio of 21.1%, at 1000 TL and below with a ratio of 18.7%, between 3000 TL and 3999 TL with a ratio of 12%, between 4000 TL and 4999 TL with a ratio of 4.4% and at 5000 TL and above with a ratio of 4.4%. The ratio of students taking an economics course is 100%. The ratio of Internet banking usage is 88.4%, which is high. The credit card usage ratio is 59%. Consequently, the fact that the departments of the students comprise the field of economics, the widespread usage of Internet banking recently and the credit card sector has been an effective factor for these results.

Table 9-5. Students' Economic Status

Variable (n: 251)		Frequency	%
Total Income of the Families	1000 TL and below	47	18.7
	1000 TL to 1999 TL	99	39.4
	2000 TL to 2999 TL	53	21.1
	3000 TL to 3999 TL	30	12
	4000 TL to 4999 TL	11	4.4
	5000 TL and above	11	4.4
Economics Course	Taking	251	100
	Not taking	0	0
Internet Banking Usage	Yes	222	88.4
	No	29	11.6
Credit Card	Yes	148	59
	No	103	41

Financial Literacy and Proactive Personality Levels of the Students

The level, frequency and percentages of the findings related to the financial literacy and proactive personality levels of the students in the survey are illustrated in Table 9-6. As indicated in Table 9-6, the financial literacy levels of two hundred and fifty-one students are medium with a ratio of 60.6%, high with a ratio of 24.3%, low with a ratio of 13.5%, and very low with a ratio of 1.6%. According to these results, the number of students with a high level of financial literacy is sixty-one, while the medium level for financial literacy is the highest with a hundred and fifty-two students, which shows that students substantially have a medium level of financial literacy. The proactive personality levels of the students in the

survey are high with a ratio of 36.7%, medium with a ratio of 19.9%, and low with a ratio of 16.3%. In consequence, students have a high level of proactive personality.

Table 9-6. The Financial Literacy and Proactive Personality Levels of the Students

Variable (n: 251)		Frequency	%
Financial Literacy Level	Very Low	4	1.6
	Low	34	13.5
	Medium	152	60.6
	High	61	24.3
Proactive Personality Level	Low	41	16.3
	Medium	50	19.9
	High	160	63.7

Students' Financial Literacy and Proactive Personality Levels in Respect to the Economic Attitudes of the Students

Table 9-7 provides information about the average results of financial literacy and proactive personality levels in terms of taking an economics course, Internet banking usage and credit card ownership, which indicates the economic attitudes of the students in the survey. It is understood that all the students took an economics course and the students highly used Internet banking and more than half of the students used credit cards. The percentages of these students' correct answers to financial literacy questions and students' levels of proactive personality obtained from the responses to the proactive personality scale are presented in Table 9-7.

Table 9-7. Students' Financial Literacy and Proactive Personality Levels in Respect to the Economic Attitudes of the Students

Variable (n: 251)		Frequency	%	FL (%)	PPL
Economics Course	Taking	251	100	61.21	43.2
	Not taking	0	0	0	0
Internet Banking Usage	Yes	222	88.4	61.21	43.2
	No	29	11.6	61.09	43.2
Credit Card	Yes	148	59	61.28	43.2
	No	103	41	61.14	43.1

It is clear from Table 9-7 that all the students taking an economics course responded correctly to 61.21% of the financial literacy questions. Proactive personality levels of the same students are at a medium level with a point of 43.2. On that account, both the financial literacy levels and the proactive personality levels of the students taking an economics course were medium. It was observed that the students using Internet banking responded correctly to 61.21% of the financial literacy questions and the students who do not use Internet banking responded correctly to 61.09% of the financial literacy questions. Proactive personality levels of the same students were the same with a point of 43.2. The average of the correct responses of the students using credit cards is 61.28% whereas the average of the correct answers of the students who do not use credit cards is 61.14%. Proactive personality scores of the same students were 43.2 and 43.1 on average. Therefore, the average of the answers of the participants with regard to their economic attitude showed that they had a medium level of financial literacy and a proactive personality. Chi-square analysis results should be examined in order to interpret these variables more efficiently.

Economic Attitudes, Financial Literacy and Proactive Personality Levels of the Students

There is a significant relationship between credit card ownership and Internet banking usage, and between financial literacy and proactive personality levels from economic attitudes. These relationships are respectively given in the following tables. The relationship between credit card ownership and the financial literacy level of the students in the survey is demonstrated in Table 9-8. There is a significant relationship ($p < 0.05$).

Table 9-8. The Relationship between Credit Card Ownership and the Financial Literacy Level

p = 0.002		Financial Literacy Level				Total
		Very Low	Low	Medi.	High	
CreditCard Ownership	Yes	1.4%	6.8%	64.9%	27%	100%
	No	1.9%	23.3%	54.4%	0.4%	100%

It is obvious in Table 9-8 that 64.9% of the students with a credit card have a medium level of financial literacy. Students who do not use credit cards have lower levels of financial literacy. While 6.8% of the students using credit cards have a low level of financial literacy, 23.3% of the

students who do not use credit cards have a low level of financial literacy. Hence, the financial literacy levels of the majority of students with high credit card usage were at a medium or high level. The relationship between Internet banking usage and the financial literacy levels of the students is exhibited in Table 9-9. There is a very significant relationship ($p < 0.05$).

Table 9-9. The Relationship between Internet Banking Usage and the Financial Literacy Levels of the Students

p = 0,000		Financial Literacy Level				Total
		Very Low	Low	Medi.	High	
Internet Banking Usage	Yes	0.9%	10.8%	61.3%	27%	100%
	No	6.9%	34.5%	55.2%	3.4%	100%

It can be observed from Table 9-9 that 61.3% of the students using Internet banking have a medium level of financial literacy. Students who do not use Internet banking have lower levels of financial literacy. While 10.8% of the students using Internet banking have a low level of financial literacy, 34.5% of the students who do not use Internet banking have a low level of financial literacy. As a result, the majority of the students with a high level of Internet banking usage (88.3%) have a medium or high level of financial literacy. The relationship between credit card ownership and the proactive personality level of the students is shown in Table 9-10. There is a significant relationship ($p < 0.05$).

Table 9-10. The Relationship between Credit Card Ownership and the Proactive Personality Level of the Students

p = 0,005		Proactive Personality Level			Total
		Low	Medi.	High	
Credit Card Ownership	Yes	14.2%	14.2%	71.6%	100%
	No	19.4%	28.2%	52.4%	100%

It is understood from Table 9-10 that 71.6% of students with credit cards have a high proactive personality level. Students who do not use credit cards have a lower level of proactive personality. Whereas 14.2% of the students using credit cards have low levels of proactive personality, 19.4% of students who do not use credit cards have low levels of proactive personality. As a consequence, the majority of students with a high level

of credit card usage have a high level of proactive personality. The relationship between the financial literacy level and the proactive personality level of the students is demonstrated in Table 9-11. There is a significant relationship (p <0.05).

Table 9-11. The Relationship between the Financial Literacy Level and the Proactive Personality Level of the Students

p = 0.005		Proactive Personality Level			Total
		Low	Medi.	High	
Financial Literacy Level	Very Low	50%	25%	25%	100%
	Low	38.2%	20.6%	41.2%	100%
	Medium	12.5%	23%	64.5%	100%
	High	11.5%	11.5%	77%	100%

It can be easily seen in Table 9-11 that 77% of the students with a high level of financial literacy have a high level of proactive personality. It is observed that 50% of the students with a very low level of financial literacy have a low level of proactive personality. Therefore, it is understood that students with a high level of proactive personality will have a high or medium level of financial literacy. As a result, the fact that students with a high level of proactive personality have a high level of financial literacy indicates that students with a proactive personality are more successful at financial literacy. According to this relationship, the more the proactive personality level of the students increases, the more their financial literacy level increases.

Conclusion

Proactivity is to act before any possible changes in the future and their good or bad reflections. From a financial point of view, proactivity enables the individual to read the money movements in the market and evaluate possible economic opportunities by taking risks or preventing a crisis thanks to the individual's intuition and observation ability. At that point, it is important for an individual to understand and interpret financial indicators. Financial literacy is a function of financial knowledge, skills and behaviours for the individual to make economically correct decisions and to maintain their financial power. On that occasion, financial literacy mainly measures the individual's knowledge about economic concepts and demands such specific knowledge as the advanced risk-return balance, asset pricing, and investment fund characteristics.

In the first place, the financial literacy and proactive personality levels of the students at Recep Tayyip Erdoğan University, Fındıklı School of Applied Sciences were determined in the study. Subsequently, the relationship between these levels and lastly the relationship between these levels and the economic attitudes of the students were examined. The findings indicate that the majority of the students (64%) have a high level of proactive personality while financial literacy levels were at a medium level. At the same time, the more the proactivity levels of the students rise, the more their financial literacy levels rise. As a result, it has emerged that it is necessary to raise individuals with a proactive personality in order to increase financial literacy. It was found that the students taking an economics course had a medium level of financial literacy and a proactive personality in the study. The existence and expansion of economics courses will be an important contribution to reaching the targeted levels. At the same time, the average of the responses of the participants according to their economic attitudes showed that they have a medium level of financial literacy and a proactive personality.

Consequently, the financial literacy level of the students with a proactive personality who include reasoning and risk analysis in all their behaviours is at a high level. The contribution of the study to the literature is to highlight that the personality traits are also effective in the level of financial literacy for our country where financial literacy is aimed to be carried out at young ages. It has been revealed that personality traits should be developed primarily and later the essential training should be given in our country where it is aimed to increase financial literacy.

References

Alkaya, A., & Yağlı, I. (2015). Financial literacy-financial knowledge, behaviour and attitude: an application on the students of Nevşehir Hacı Bektaş Veli University faculty of economics and administrative sciences. *International Journal of Social Research*, 8(40), 585–599.

Ansong, A., & Gyensare, M. A. (2012). Determinants of university working-students' financial literacy at the University of Cape Coast, Ghana. *International Journal of Business and Management*, 7(9).

Apan, M., & Ercan, S. (2017). Determining the effect of five-factor personality traits on financial literacy: a research study on bachelor's degree students. *Bartin University Faculty of Economics and Administrative Sciences Journal*, 8(16), 177.

Ashford, S. J., & Black, J. S. (1996). Proactivity during organizational
    entry: antecedents, tactics, and outcomes. *Journal of Applied
    Psychology*, 81, 199–214.

Bandura, A. (2006). Toward a psychology of human agency. *Perspectives
    on Psychological Science,* 1, 164–180.

Barmaki, N. (2015). A research study for determining the financial literacy
    levels of university students: Hacettepe University. Doctoral thesis,
    Hacettepe University, Institute of Social Sciences, Family and
    Consumer Sciences, Ankara

Basu, S. (2005). *Financial literacy and the life cycle.* Washington, DC:
    Financial Planning Association.

Bayram, S. S. (2010). Financial literacy and money management
    behaviours: application on Anatolian university students. Unpublished
    Master's thesis, Anadolu University Institute of Social Sciences,
    Eskişehir.

Baysa, E., & Karaca, S. S. (2016, July). An application on financial
    literacy and bank customer segmentations. *Journal of Accounting and
    Finance.*

Bateman, T. S., & Crant, J. M. (1993). The proactive component of
    organizational behaviour: a measure and correlates. *Journal of
    Organizational Behaviour*, 14(2), 103–118.

Bernheim, B. D., Garrett, D. M., & Maki, D. M. (2001). Education and
    saving: The long-term effects of high school financial curriculum
    mandates. *Journal of Public Economics*, 80, 435–465.

Coben, D., Dawes, M., & Lee, N. (2005). *Research report: financial
    literacy education and skills for life.* London, UK: National Research
    and Development Centre for Adult Literacy and Numeracy.

Cude, J. B., Lawrance, C. F., Lyons, C. A., Metzger, K., Lejeune, E.,
    Marks, L., & Machtmes, K. (2006). College students and financial
    literacy: what they know and what we need to learn. *Eastern Family
    Economics and Resource Management Association,* 102–109.

Temizel, F., Ozdemir, A., & Sönmez, H. (2014). Investigation of the effect
    of literacy levels of undergraduate education programs: the case of
    Turkey. Anadolu University. *Journal of Social Sciences.* 14(4), 113–
    126.

Friedman, J. (1994). *Dictionary of business terms.* New York: Barron's.

Garman, E. T., Leech, I. E., & Grable, J. E. (1996). The Negative Impact
    of Employee Poor Personal Financial Behaviours on Employers.
    Financial Counseling and Planning, 7, 157–168.

Gökmen, H. (2012). *Financial Literacy.* Istanbul: Hiper link Publications.

Grant, A. M., & Ashford, S. J. (2008). The dynamics of proactivity at work. *Research in Organizational Behaviour, 28,* 3–34.

Gupta, V. K., & Bhawe, N. M. (2007). The influence of proactive personality and stereotype threat on women's entrepreneurial intentions. *Journal of Leadership and Organizational Studies,* 13, 73–85.

Hayta, A. B. (2011). *Family financial system relations.* Ankara: Gazi Bookstore.

Hilgert, M. A., Hogarth, J. M., & Beverly, S. G. (2003). Household financial management: The connection between knowledge and behaviour. *Fed. Res. Bull.,* 89, 309.

Innogrow. (2018). *Innovative-entrepreneur.* Retrieved, 10 October, 2017, from https://makroconsult.com.tr/wp-content/uploads/2016/05/01-Competency-Profile-of-an-Innovative-Entrepreneur_TR.pdf.

Little, B. R. (1983). Personal Projects: A Rationale and Method for investigation. *Environment and Behaviour*, 15, 273–309.

Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review,* 21(1), 135–172.

Lusardi, A., & Mitchell, O. S. (2006). Financial literacy and planning: implications for retirement wellbeing. Working Paper, Pension Research Council, Wharton School, University of Pennsylvania.

Lusardi, A. (2008). Financial literacy: an essential tool for informed consumer choice? *National Bureau of Economic Research*, 1–29.

Mandell, L., & Klein, L. S. (2007). Motivation and financial literacy. *Financial Services Review*, 16, 105–116.

Murray, H. (1938). *Explorations in personality.* New York: Oxford University Press.

Noctor, M., Stoney, S., & Stradling, R. (1992). *National Westminster Bank.* Retrieved from https://pdfs.semanticscholar.org/2f85/658e95cd3349765881afbaaec447e4b6ef27.pdf.

OECD. (2014). *PISA 2012 Results: Students and Money: Financial Literacy Skills for the 21st Century.* Paris.

Ozdemir, F. S. (2011). Evaluation of financial reporting systems in terms of eligibility of information needs: an application on the perspectives of financial failure estimates in ISE companies. Unpublished PhD thesis, Ankara University Institute of Social Sciences, Ankara.

President's advisory council on financial literacy annual report. (2008). Retrieved from https://www.treasury.gov/about/organizational-offices /DomesticFinance/Documents/ PACFL_Draft-AR-0109.pdf.

Remund, D. L. (2010). Financial literacy explicated: The case for a clearer definition in an increasingly complex economy. *Journal of Consumer Affairs*, 44(2), 276–295.

Robbins, S., & Judge, T. (2013). *Organisational behaviour* (13th ed.). Cape Town, South Africa: Pearson Holdings.

Sen, P., Roy, M., & Pal, P. (2015). Exploring the role of environmental proactivity in the financial performance of manufacturing enterprises: A structural modelling approach. *Journal of Cleaner Production*, 108.

Sezer, D., & Demir, S. (2015). The relationship of investors' financial literacy and cognitive ability levels with psychological illusions. *Journal of Accounting and Finance*, 77–80.

Sovics, P. (2012). *Quo vadis finančné vzdelávanie?* Retrieved from http://www.nbs.sk/_img/Documents/PUBLIK_NBS_FSR/Biatec/Rok 2012/1-2012/02 _Biatec12-1szovisc.Pdf.

Sherman, J., Tahira, D. H., Hira, K., Lyons, A. C., Palmer, L., & Xiao, J. J. (2009). Financial Literacy and Education Research Priorities. *Journal of Financial Counseling and Planning*, 20(1), 84–95.

Sabri, M. F., & MacDonald, M. (2010). Savings behaviour and financial problems among college students: The role of financial literacy in Malaysia. *Cross-cultural Communication*, 6(3), 103–110.

Şarlak, Z. (2012). *Family budget and resource management* (2nd ed.). Turkish Republic Ministry of Family and Social Policies General Directorate of Family and Community Services, Istanbul: Embroidery Offset.

Turkish Republic Central Bank. (2015). *Monthly bulletin*. Retrieved from http://www.tcmb.gov.tr/wps/wcm/connect.

Temizel, H. (2010). Public administration reforms and fundamental characteristics of reforms. *Journal of Social Economic Research,* 10(20), 115–144.

Thompson, J. A. (2005). Proactive personality and performance: A social capital perspective. *Journal of Applied Psychology,* 90, 1011–1017.

Tomaskova, H., Mohelska, H., & Nemcova, Z. (2011). Issues of Financial Literacy Education. *Procedia. Social and Behavioural Sciences,* 28, 365–369.

CONCLUSION

This edited book has set out to form a collection of chapters which focus on the methodologies, approaches and topics that are the focus of the current studies in Chosen Writings on Financial and Economic Behaviours in the New Economy. The nine chapters in this book have provided the readers with a chance to read about current topics and research methods by which they have an understanding of various topics and the applications of different methodologies.

The five chapters in the first section are about financial market conditions and consumption preferences in the new economy. Firstly, different consumption preferences in the new economy and the results of these anomalies, entrepreneurship and self-employment concepts, were introduced. The increase in the number of non-agricultural self-employed workers in industrialized countries is used to increase employment for the vitalization of static economies because the significance of the self-employed has always been distinct. According to firms, self-employed workers provide more flexibility in the way that firms perform their activities. In relation with the global financial crisis and the development of new technologies, there has been a serious rise in unemployment rates all over the world, particularly in developed countries. Entrepreneurship and self-employment are seen as important elements in the process of increasing employment.

In order to prevent unemployment, enterprises should have investment in a country and balanced consumption should be realized. At this point, it is mentioned that for the economic development of countries and enterprises, anomalies in financial markets must be found that need attention in order to make investors have higher returns. In this respect, investors use different methods to choose the stocks that will yield the most return on their purchases. Most of these methods argue that investors are rational or psychological. For example, people can plan their consumption. According to this behaviour, individuals usually behave in a reasonable way and assess the potential outcomes of their behaviours taking the currently available information into consideration. There is a positive correlation between intention and attitudes towards the behaviour, subjective norms and perceived behavioural control, as in a smartphone example. On the other hand, globalization and increased competitiveness

in the environment have blazed the trail for companies to find solutions to survive. In other words, they have started to explore various ways to create more added value and increase their share in the market to survive and gain competitive advantage against other competitor enterprises.

Consumers' purchasing behaviour has been one of the most important research areas that companies have focused on. So, attracting consumers' attention depends on how successful companies are in overcoming customers' needs and expectations to gain competitive advantage. The increasing usage of the internet by customers in particular has drawn attention to mobile marketing activities via mobile phones and tablets.

Customers prefer mobile devices for gathering information about the new trends of goods and services. At this point, a distinction can be made on consumption preferences for men and women. In the first part of the book, examples of related issues were presented. The four chapters of the second section on Innovative and Proactive Behaviour in the New Economy have introduced issues regarding the integration of technology with businesses' environmental problems (eco-innovation), marketing and logistics. Eco-innovation has an important role in improving environmental technologies that detect pollution. Furthermore, it is an opportunity for business because it reduces costs, leads to new opportunities and increases the company's image in front of customers. For the business image, Real Estate 4.0 and digital marketing are very important, too. So, occupiers of real estate are being disrupted by technological change and digital marketing techniques and what this means for the marketing strategies that they use. At this point, e-commerce

offers customers the opportunity to easily purchase the desired product and/or service and creates customer happiness. On the other hand the importance of logistics services which provide place and time benefits to the consumers has also increased. As a result of this, the financial behaviour and proactivity of consumers are so important for business profitability. So planning, a reflection of financial literacy, can also be a key component of proactive behaviour.

To conclude, this book has provided the readers with nine chapters from various fields focusing on different topics and methodologies. The topics "dependent self-employment, anomalies in finance, buying behaviour in terms of technological product, ready-to-wear and gender, in the new economy" are currently popular topics in the relevant fields. These chapters emphasize consumption patterns and financial behaviour in changing environmental, political and economic conditions. In the same vein, "eco-innovation, Real Estate 4.0 and digital marketing, logistics service quality and the effects of these on behavioural intention and

proactive personality" are also relevant to the current studies in the new economy.

I believe that this book will be a useful source for practitioners, graduate students and researchers who would like to read about some of the recent issues in financial behaviour and innovation; however, this collection has presented only nine studies in the fields of Financial and Economic Behaviours in the New Economy which have many subfields and branches. In this sense, comprising only nine chapters, this book is a representation of only a limited part of these fields and sectors. Accordingly, in future collections or books, focusing on more issues in order to represent most of the significant issues in these fields will be highly appreciated.

Contributors

Serpil Çiğdem

Serpil ÇIĞDEM holds an MA degree in Labour Economics and Industrial Relations from Kocaeli University in Kocaeli, Turkey and is currently doing her PhD in the same program at Sakarya University in Sakarya. She has published several academic papers on job insecurity, whistleblowing, the gig economy, the freelance workforce, and portfolio work. Her academic interests include the digital labour market, new employment relations, and precarious employment. She has been working as a Lecturer at Sakarya University, Vocational School of Sapanca since 2013 in Sakarya. She is currently teaching Human Resources Management, New Media, Public Relations and Management.

Emine Balcı

Emine BALCI, graduated from the Department of Public Administration at Hacettepe University in Ankara, Turkey and gained her master's degree from the Department of Political Science and Public Administration, Social Science Institute at Hacettepe University in 2011. She also completed her doctoral education at the same university in 2017. She has been working as a lecturer at Sakarya University Vocational School of Sapanca since 2013 in Sakarya, Turkey. She is currently lecturing on Political Communication and Lobbying, Public Relations in Public and Private Organizations, and Social Psychology. She has published several articles on Women's Labour, Women's Studies and Law Sociology.

Abdulmuttalip Pilatin

Abdulmuttalip Pilatin, received his MA degree in business finance from Recep Tayyip Erdogan University in Rize. He is a PhD student in Business Administration at Gümüşhane University. He is a lecturer in the Department of Banking and Finance at Recep Tayyip Erdoğan University. His academic interests include business, finance and banking.

Onder Dilek

Onder DILEK holds an MA and PhD degree in Economics from Atatürk University in Erzurum, Turkey. He has been working as an

academician in various universities for 10 years. He is currently an assistant professor at the Department of Banking and Finance at Recep Tayyip Erdoğan University, Turkey. His academic interests include the economy. He has published several book chapters, articles and papers on the Turkish Economy, revenue and expenditure and microeconomics.

Onur Köprülü

Onur KOPRULU completed his undergraduate degree at Hacettepe University, Faculty of Economics and Administrative Sciences, Department of Economics. Afterwards, he received his Master's Degree at Ondokuz Mayıs University, Faculty of Agricultural Sciences, Department of Agricultural Economics. Finally, he received his PhD degree at Tomas Bata University, Faculty of Management and Economics, Department of Management. He is still working as Assistant Professor at Mersin University, Applied Technology and Management School of Silifke.

Mithat Turhan

Mithat TURHAN completed his undergraduate degree at Çukurova University, Faculty of Economics and Administrative Sciences, Department of Management. Afterwards, he received his Master's and PhD degrees at Mersin University, Faculty of Economics and Administrative Sciences, Management Department. He is still working as Assistant Professor at Mersin University, Applied Technology and Management School of Silifke.

Ilter Helvacı

Ilter HELVACI completed his undergraduate degree at Uludağ University, Faculty of Economics and Administrative Sciences, Department of Public Administration. Afterwards, he received his Master's and PhD degrees at Mersin University, Medical Faculty, Department of Biostatistics. He is still working as Assistant Professor at Mersin University, Applied Technology and Management School of Silifke.

Hande Güneş

Hande GUNES, completed her undergraduate degree at Abant Izzet Baysal University, Faculty of Economy. Afterwards, she received her Master's and PhD degrees at Sakarya University Marketing Department. She is still working in Sakarya University.

Salih Yıldız

Salih YILDIZ, was born in Sürmene/TRABZON on 06.08.1982. He gained an undergraduate degree in Business Administration from Karadeniz Technical University in 2004 and an MA degree in Production Management and Marketing in 2007. Now, he works as an Associate Professor in the Business Administration department of Gümüşhane University. He has published several articles on marketing, brands, brand city, and innovation.

Meltem Öztürk

Meltem ÖZTURK, has been working as a lecturer in the Department of Marketing and Advertising at Pamukkale University, Turkey since 2007, after nearly ten years having a professional business life. She has a PhD degree in Business in the field of Marketing from Trakya University. Besides several national and international publications, a book entitled, *Housing Marketing and Brand* is also authored by Ozturk; she is currently studying in the fields of real estate marketing and brand management, and digital marketing.

Emel Yıldız

Emel YILDIZ, was born in Trabzon on 07.08.1984. She gained an undergraduate (Business Administration) degree from Karadeniz Technical University in 2006 and an MA degree (Production Management and Marketing) in 2009. Now, she works as an Assistant Professor in the Human Resources Management Department of Gümüşhane University. She has published articles on service marketing, word-of-mouth marketing and brands.

Saadet Ela Pelenk

Saadet Ela PELENK, was born in 1982 in Balıkesir, Turkey. She graduated from Kocaeli University, Turkey. She completed her master's (2008) and doctoral studies in the field of management and organization (2016). She works as a faculty member in the Department of Banking and Finance at Recep Tayyip Erdogan University. Her research interests are management-organization, management-finance, financial behaviour, corporate governance and organizational behaviour.

Akif Ziya Bayrak

Akif Ziya Bayrak holds an MA degree in Economics from Manisa Celal Bayar University in Manisa, Turkey and is currently doing his PhD in the same program of this university. He also works as a research

assistant at Recep Tayyip Erdogan University. He has published several articles on economics and banking.