



ANTECEDENTS OF CONSUMER PRODUCT RETURNS

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Abstract

Product returns inevitably occur in companies for consumer and industrial products. While returns cause business resources to be spent inefficiently, they also cause serious damage to the environment and economy due to reverse logistics activities. The aim of this study is to examine consumer return behavior and its reasons. Opinions of 653 consumers are obtained through convenience sampling for the study. In this research, the reasons for return behavior are examined in two categories: product-related and consumer-related. Consumers' returns are largely product-related. Consumer-related returns are considered in two factors: insufficient research and unable-to-use. Insufficient research returns are positively influenced by consumer attitudes towards unethical returns and impulsive (emotional dimension) buying tendencies. User manual behavior is shown to reduce unable-to-use returns. In addition, the positive attitude of consumers towards unethical returns increases the number of unable-to-use returns. Consumer attitudes towards unethical product returns are negatively affected by their environmental values.

Keywords: Product Returns, Unethical Returns, Impulsive Buying, User Manual Behavior, Environmental Values

JEL Classification: M31, M11

TÜKETİCİLERİN ÜRÜN İADELERİNİN ÖNCÜLLERİ

Öz

Ürün iadeleri tüketici ve endüstriyel ürünlerde kaçınılmaz bir biçimde işletmelerin karşısına çıkmaktadır. İadeler işletme kaynaklarının verimsiz bir biçimde harcanmasına yol açarken, tersine lojistik faaliyetleri nedeniyle çevreye ve ekonomiye ciddi zarar vermektedir. Bu çalışmanın amacı tüketici iade davranışı ve nedenlerini incelemektir. Çalışma için kolayda örnekleme ile 653 tüketicinin görüşü alınmıştır. Araştırmada iade davranışı nedenleri ürün kaynaklı ve tüketici kaynaklı olmak üzere iki kategoride incelenmektedir. Tüketicilerin iadelerinin büyük oranda ürün kaynaklı olduğu bulunmuştur. Tüketici kaynaklı iadeler, yetersiz araştırma ve kullanamama iadeleri olarak iki faktörde ele alınmaktadır. Yetersiz araştırma iadeleri tüketicilerin etik olmayan iadelere yönelik tutumları ve dürtüsel (duygusal boyut) satın alma eğilimlerinden olumlu etkilenmektedir. Tüketicilerin kullanma kılavuzu davranışının kullanamama iadelerini azalttığı gösterilmiştir. Bunun yanında etik olmayan iadelere yönelik tüketicilerin olumlu tutumu kullanamama iadelerini artırmaktadır. Tüketicilerin etik olmayan ürün iadelerine yönelik tutumları çevreci değerlerinden olumsuz etkilenmektedir.

Anahtar Kelimeler: Ürün İadeleri, Etik Olmayan İadeler, Dürtüsel Satın Alma, Kullanma Kılavuzu Davranışı, Çevreci Değerler

JEL Sınıflandırması: M31, M11

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1. INTRODUCTION

Today, companies offer their products to a wide variety of customer groups due to increasing competition in markets and their desire to grow. Companies take advantage of numerous distribution channels to serve customers in various segments in both local and international markets. As a result, the distribution channels of companies are becoming increasingly complex and diverse. Companies inevitably deal with product returns in the market segments in which they operate. Similar to distribution channel complexity, reverse logistics activities (such as collection, recycle (Sellitto, 2018)) arising from product returns are also becoming more complicated for companies to manage.

In addition, for various reasons, companies implement more lenient return policies, which also exacerbates return rates. Firstly, by adopting a generous return policy, companies may increase customer purchase intention (Jeng, 2017). Additionally, retailers can resort to a liberal return policy to avoid customer churn. Indeed, there is a negative relationship between consumers' consideration of liberal return policies and store switching behavior (Powers and Jack, 2013). Online retailers' leniency in their return policies may give rise to higher repurchase intentions among customers (Wang et al., 2020). For retailers, creating associations regarding liberal returns in customers' minds can play an important role in increasing brand awareness (Lysenko-Ryba et al., 2021). Companies in order to positively affect the corporate image and create a competitive advantage against their competitors accept and manage product returns (Jayaraman, and Luo, 2007). The implementation of liberal return policies reduces consumers' risk perception, which may also result in creating a positive store image (Rokonuzzaman et al., 2021). Conversely, denied product returns may lead to negative word-of-mouth and fraudulent returns by customers in the future (Dailey and Ülkü, 2018).

The concept of warranty has evolved and existed from early civilizations to the present day (Loomba, 1998). In order to protect consumers, governments have increasingly introduced more pro-consumer product return regulations recently. As a result, in order to comply with product liability laws and warranty conditions, companies take back products.

Product returns negatively affect the profitability of companies due to reverse logistics costs. Because of the proliferation of online stores and the liberal return policies, companies have encountered more fraudulent returns, recently (Zhang et al., 2023). In addition, it is suggested that product returns have detrimental influences on the environment, society, and economy (Frei et al., 2020). Reverse logistics activities increase CO₂ emissions by consuming energy and materials. In oil-dependent economies such as Türkiye, reverse logistics activities resulting from product returns increase the foreign trade deficit.

Studies on product returns in Türkiye (such as Erol et al. (2010) and Gilanlı et al. (2012)) have been mostly carried out in the field of supply chain management at the macro level. This study, which adopts the consumer perspective, examines the phenomenon of product returns at a more micro level. Product returns can be classified as consumer-related or product-related. Product-related returns occur as a result of mistakes (such as quality failures or poor inventory management) made by companies in the supply chain. Thus, companies along the supply chain bear responsibility for product-related returns.

The aim of the study is to evaluate individual antecedents of product return behavior. In this study, consumer-related product returns, which are largely the responsibility of the consumer, are examined in two categories (insufficient search returns and unable-to-use returns). Findings of the study show that insufficient search returns tend to increase when consumers have a more positive attitude towards unethical returns and shop more impulsively. In addition, unable-to-use returns are shown to be influenced by consumer attitudes towards unethical returns and user manual behavior. The negative

influence of environmental values on attitudes towards unethical returns is shown as well. It is expected that this study, which is one of the earliest studies conducted from a consumer perspective, will contribute to the marketing literature.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1. Reasons for Product Returns

Product return is the process of customers returning products to the manufacturer based on specific concrete or abstract reasons. The customer returning the product can be a manufacturer, a member of the company's distribution channel (such as a retailer), or a consumer. The first two types of returns are related to B2B, while the third is related to B2C marketing. Figure 1 shows four prevalent types of returns that may occur in a supply chain of a company.

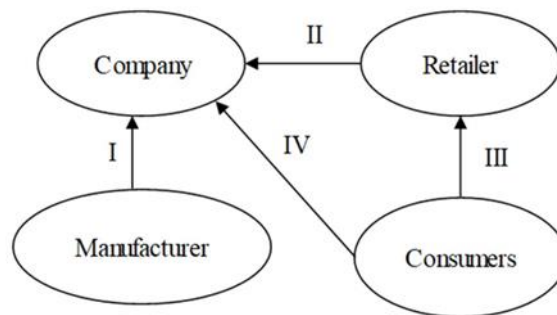


Figure 1. Types of Product Returns

Manufacturer returns (I) consist of the returns of a manufacturer to supplier companies. Inventories are tested before they are used in production processes to ensure their compliance with the company's quality standards. The quality control department often decides whether a batch of product delivered to the facility is suitable for use as a result of inspections with acceptance sampling (Slack et al., 2010). Various tests and experiments are conducted on inputs in line with quality standards. In addition, visual inspections are carried out to examine whether the inputs are damaged during transportation. Thus, the batch that does not meet the quality standards is returned to the supplier. In some cases, the quality control activities may be insufficient to detect defective inputs. Therefore, poor quality occurs during the production phase or, even worse, in the products delivered to the customers of the manufacturer. Products that are detected to cause problems in production will be returned to the supplier. In addition to quality defects, manufacturer returns may result from errors made during the order fulfillment process, such as shipping the incorrect item and the wrong quantity.

Companies that produce branded products for consumers usually deliver products to customers through retailers. In addition, large-scale retailers outsource the production of private label brands to manufacturing companies. In both cases, retailers are industrial customers of the company. Retailer returns (II) occur for a variety of reasons. With respect to retailers, quality issues are one of the leading reasons for product returns. Similar to manufacturers, retailers also carry out quality inspections on products sent by supplier companies (Maleki Vishkaei et al., 2019). As a result, products that fail the acceptance inspection are sent back to the manufacturer. In addition, retailers can return products to manufacturers due to slow sales, close-outs, buy-outs, and job-outs (Rogers et al., 2002). Product recalls due to product safety and security issues could be a source for product returns, especially in industries such as food and pharmacy (Maruchek et al., 2011). The company might also be responsible for taking back damaged or expired products from retail stores (Akkas et al., 2019). Seasonal products, such as products sold during Christmas and various holiday periods, can be returned as a result of agreements between the suppliers and the retailers. Retailers could be allowed to send back any unsold products to

the suppliers in exchange for a refund (Lau et al., 2000).

One of the important roles that retailers play could be dealing with product returns from consumers (III). For instance, European retailers undertake several tasks regarding product return management, such as collecting returned products to be sent to the manufacturer and evaluating them for a refund (Frei et al., 2022). Alternatively, consumers can make returns directly to the manufacturing company (IV). Geographic proximity to the manufacturing company is likely to facilitate type-IV returns for consumers. Remote consumers, however, are likely to return the products to the manufacturers via mail services as a result of customer service decision.

End-users tend to return products for a variety of reasons (Pei and Paswan, 2018; Saarijärvi et al., 2017). The main reasons for returns are product defects. Nearly half of UK and US consumers return online-bought products due to poor quality and defects (Coveo, 2022). Although quality experts of companies have tried to create perfect products for many years, a certain percentage of defective products might reach customers. For instance, even companies that adopt the six-sigma methodology have worked hard for many years to achieve the 3,4 defect per million opportunities (DPMO) target (Kurnia and Purba, 2021; Goyal et al., 2019). In addition to the manufacturer's quality problems with products, defects may arise from damages during the logistics process. Carelessly loading products into distribution vehicles may cause such damages unless the products are well packaged with protective packaging materials such as air pillows and foam.

One of the most important reasons for consumers to return products is that differences between the ordered and received products. One reason why the order placed by the consumer arrives in a different form is that retailers may not carry out the order management process appropriately. For example, 7% of product returns to one of Brazil's leading e-commerce retailers are due to the wrong product being delivered to consumers (De Araújo et al., 2018). Inadequate tactile information and the lack of opportunity for the customer to try the products in online shopping increase retail returns. Indeed, more than half of UK and US consumers report that bad fit, color and incorrect size are the causes of returns for online-bought products (Coveo, 2022).

Consumers perceive various risks when purchasing products. Perceived performance risk may have an impact, especially when shopping via mail order or online (Featherman and Pavlou, 2003). For both the mobile phone and computer categories, the performance of products is the most important dimension of product quality experienced by consumers (Tunahan and Kutlu, 2023). Based on product liability laws, consumers might return poorly performing products.

Companies try to meet consumer needs just in time. Delivery delays cause negative experiences for consumers, especially in online shopping (Liao and Keng, 2013). Although overpromises for deliveries may result in increased sales, failure by retailers to comply with the promised delivery time heightens the risk of product returns (Rao et al., 2014; Cui et al., 2023).

Price competition may also play a role in consumer return behavior. Significant discounts on product prices applied by rivals may cause consumers to return products. Alternatively, competitors may offer the superior model to the consumer at the same price. Consumers who do not want to miss the opportunity for better deals might return the products. Indeed, being a price leader might have an impact on the returns of the company (Ishfaq et al., 2016). Likewise, better prices and products may lead to product returns (Powers and Jack, 2015).

Individuals may return gifts purchased by another consumer due to size or quality problems. Some retail stores issue exchange cards, allowing the consumer to exchange the product given as a gift. However, gifts are less likely to be returned than purchased products because they have social value as

well as economic value (Petersen and Kumar, 2009). During holiday times and peak demand seasons, consumers may make more careless purchasing decisions. Consumers who later regret their purchases may return the products (Petersen and Kumar, 2009). Likewise, purchasing unfamiliar product categories and using unfamiliar retailers may result in more product returns (Petersen and Kumar, 2009).

In some cases, consumers may return products simply due to dissatisfaction without explaining any reason. This might be especially evident when retailers apply an unconditional return policy. However, customer dissatisfaction might result from several factors. In the field of marketing, the ACSI (American customer satisfaction index), the Gap (Zeithaml et al., 1988; Parasuraman et al., 1985), and the Kano models have been frequently used to explain customer satisfaction. According to the ACSI model, quality perceptions, expectations of customers, and value perceptions regarding products might play a significant role in forming customer satisfaction. The Gap model conceptualizes service quality as the discrepancy between expectations and perceptions of consumers regarding five quality dimensions (reliability, tangibles, responsiveness, assurance, and empathy). The Kano model classifies customer needs (such as must-be and delighter) in terms of importance and proposes relationships between customer satisfaction and the level of needs met (Rotar and Kozar, 2017).

2.2. Consumer Unethical Returns

Unethical returns constitute an unknown portion of total returns. These types of returns are generally arbitrary returns made by consumers and are not caused by business processes or product errors. In nascent marketing ethics studies, the focus is mostly given to sellers or marketers rather than consumers (Vitell, 2003). However, consumer ethics studies have gained momentum since the 1990s (Vitell, 2003). According to Muncy and Vitell (1992:298), consumer ethics is “the moral principles and standards that guide behavior of individuals or groups as they obtain, use, and dispose of goods and services”. The Hunt-Vitell theory (Hunt and Vitell, 1986), theory of planned behavior (Ajzen, 1985), neutralization theory (Matza and Sykes, 1957) have been frequently used to explain consumer ethics (Hassan et al., 2022). Unethical behavior in the realm of consumption might be influenced by several factors, such as consumer attitudes towards unethical behavior, social norms, and perceived unfairness (Fukukawa and Ennew, 2010). Besides, consumer ignorance, laziness, and selfishness might be influential in unethical behaviors (Mayr et al., 2022).

Consumer ethics have been operationalized with various approaches. Vitell and Muncy (1992) investigate consumer ethics with statements in which the respondents state that they find various ethics-related actions wrong or right. Later, Vitell and Muncy (2005) updated the Muncy-Vitell consumer ethics scale with new items. On the other hand, in order to calculate the consumer ethics index, participants rate the acceptability of 15 situations involving unethical behavior in a study conducted by Fullerton et al. (1996).

Although such studies adopt different approaches, unethical consumer behavior regarding product returns is commonly included. For example, returns due to damage to the product because of the consumer's fault and arbitrarily disliking the product are unethical situations described in the Munchy-Vitell scale. Similarly, Fullerton et al. (1996) considers it unethical for a consumer to return the product to the retailer after seeing that the product is sold at a lower price at another retailer.

Zhang et al. (2023) provide a comprehensive classification of unethical and fraudulent product returns. Moreover, they describe ten different types of counterfeit product returns. Wardrobing (such as when a consumer buys a cloth to use at a party and returns it after usage), shipping-related frauds, and price arbitrage are found to be the most frequent consumer frauds (Zhang et al., 2023).

Product returns may occur due to product or user related reasons. Product-related returns

generally occur because of poor quality or defects in the products. Therefore, in terms of product-related returns, return behavior is based on legitimate reasons. On the other hand, consumer-related returns can be described as arbitrary. Even if the consumer-related returns are not legally problematic, they might be ethically problematic. It is unclear whether or not consumer-related returns are ethical from the consumer's perspective. According to Consequentialism Theory, humans assess the morality of an action through its overall impact. Individuals may be more willing to participate in immoral activity if it results in benefits (for instance, economic gain) (Chakrabarti et al., 2020). Furthermore, Social Learning Theory states that individuals learn by observing others (Bandura, 1969). If customers see the unethical behavior of other consumers being praised or tolerated by companies, they may mimic it. As product returns become easier and more common among consumers, they might occur more frequently. Consumers who have a positive perspective on even unethical returns will easily make any type of return. In this study, consumer-related returns are investigated in two dimensions (insufficient search returns and unable-to-use returns). It is expected that consumers' positive attitudes towards unethical returns will increase the number of consumer-related returns. Therefore, in this study, the following hypotheses are tested:

H1: Consumer attitudes towards unethical returns positively influences unable-to-use returns,

H2: Consumer attitudes towards unethical returns positively influences insufficient search returns.

2.3. Impulsive Buying

One of the factors that may affect product return behavior is impulse purchases. Consumers can purchase products without a good evaluation to meet their needs. As a result, the product that does not meet the consumer's needs adequately may be returned. Indeed, it is shown that impulse buying behavior might result in post-purchase dissonance, followed by return behavior (Chen et al., 2023). Especially when consumers act with hedonic motives, the possibility of unplanned purchases resulting in product returns increases (Seo et al., 2016). It can be said that companies are at least partially responsible for impulsive purchases and resultant returns. Marketers usually try to drive customers to spend more than they anticipated. Store environment, product characteristics, and promotional activities might trigger consumer impulse buying (Ünsalan, 2016).

In addition, impulse buying has been investigated as a personality trait. Some consumers appear to be more prone to impulsive buying. According to Rook and Fisher (1995), impulsive buying can be defined as, “*a consumer's tendency to buy spontaneously, unreflectively, immediately, and kinetically*” (Rook and Fisher, 1995: 306). Although impulsive buying has been considered a general tendency, its effect on behavior may be more obvious in some cases. For instance, only when consumers think that buying impulsively is an appropriate behavior, their impulsive buying tendency might influence their behavior (Rook and Fisher, 1995). Similarly, product-specific operationalization of impulsive buying tendency is suggested to better predict behavior (Jones et al., 2003).

Impulsive purchases made without proper research can lead to product returns (Lysenko-Ryba, 2021). It is shown that the frequency of apparel returns is positively related to consumer impulsive buying tendencies (Kang and Johnson, 2009). Products purchased without a thorough evaluation might create post-purchase negative emotions and regret. Therefore, consumers try to reduce such negative emotions by returning products. In this study, the positive influence of cognitive and affective impulsive buying tendencies of customers on insufficient search returns is investigated. The number of insufficient search returns is expected to increase with the increase in consumer impulsive buying tendencies. Consequently, the following hypotheses are tested:

H3: Affective impulsive buying tendency positively influences insufficient search returns,

H4: Cognitive impulsive buying tendency positively influences insufficient search returns.

2.4. Environmental Consumption Values

Values guide individuals' behavior and can play an important role in consumer choices. Consumer values regarding the environment have been examined by marketing academics in terms of their impact on consumer behavior. For example, Antil (1984) proposed the Socially Responsible Consumption Scale, which includes consumers' preferences in a wide range of environmentally related behaviors. Later, Roberts (1996) developed the Ecologically Conscious Consumer Behavior Scale, which consists of 30 items regarding environmental behaviors.

One of the outcomes of environmental values is ethical consumption behavior. For instance, consciousness for sustainable consumption is shown to influence ethical consumption behavior (Tomşa et al., 2021). Whether ethical or not, product returns negatively affect the environment. Because green values prioritize reducing environmental harm, consumers who embrace these values may see unethical returns as contrary to their convictions. As a result, unethical product returns are expected to be negatively affected by green consumption values. Thus, the following hypothesis is tested:

H5: Consumer environmental values negatively influences their attitudes towards unethical returns.

2.5. User Manual Behavior

Consumers have a broad knowledge of a wide range of things they use in their everyday lives. Almost all consumers utilize items such as vehicles, electronic devices, appliances for the home, cosmetics, cleaning products, pharmaceuticals, and clothes. Brands in various product categories may have different uses and operations. Consumers may require more specific information regarding bought items. Companies provide user manuals to enlighten consumers about their products and important considerations during use (Kutlu, 2023). Individuals' user manual behavior can negatively influence firms and the environment. Misuse, inappropriate, and unintentional usage of products can lead to self-harm. Companies may be held liable for such failures (Trombetta and Wilson, 1975). For example, compensation for harmed passengers might be a substantial cost in the automotive industry (Fan et al., 2020). When there is an issue with the product, customers who call customer service instead of consulting the user manual create additional operational costs for companies. Failure to read the user manuals may result in the consumer not knowing or understanding the terms of use of the products. As a result, utilizing products that do not comply with the terms of use may damage the products. In addition, failure to read the user manual may result in the product not being operated. For instance, nearly one-third of product returns to a printer manufacturer are due to the inability to use and install products (Ferguson et al., 2006). In both cases, consumers who think there is a fault in the product will return it. It is therefore hypothesized that:

H6: Consumer user manual behavior negatively influences unable-to-use returns.

3. METHODOLOGY

3.1. Sampling and Data Collection Process

Since the product return process is often carried out by adults, the participants in the research are consumers over the age of 18. This study was approved by Sivas Cumhuriyet University Social Sciences Ethics Review Board on 10.07.2023 (Decision number: 2023/22). The link to the survey form prepared with the help of the Google Forms platform was shared with people around the researcher (family and acquaintances) via social media in Türkiye. The data collection process, using the convenience sampling method, continued throughout December 2022. At the end of the data collection process, sufficient data (n=653) was obtained for analysis (such as exploratory factor analysis) to be

used to test the research hypotheses. The gender, age, and income characteristics of the participants are given in Table 1. The monthly income distribution of the respondents is provided in the folds of the minimum wage (5500 TL) in Türkiye in December 2022.

Table 1. Demographic Characteristics of Participants

Gender	Male (50.53%) Female (49.47%)	
Age	Mean (32.60), Std. dev. (9.65)	
Income	5500 TL and below	23.58 %
	5501 TL-10999 TL	35.83 %
	11000 TL-16499 TL	29.56 %
	16500 TL-21999 TL	6.74 %
	22000 TL and above	4.29 %
Level of education	Primary or secondary school	4.13 %
	High school	23.12 %
	College	13.02 %
	Undergraduate	50.23 %
	Graduate (Masters, PhD)	9.49 %

3.2. Measures

In order to measure the product return behavior of consumers, the number of product returns of the participants for various reasons is asked in the survey form (*When you think about past product returns, what is the number of times you have returned products for the following reasons?*). 13 scale items regarding return behavior are adopted from Pei and Paswan (2018) and Lee (2015). The scale consists of five categories (never, one time, two-times, three times and four times and over).

In the next part of the survey, participants' attitudes towards unethical product returns are measured with a five-point Likert scale (1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree). Participants are asked to rate their agreement with four statements regarding unethical product returns. Items of the scale are adopted from Vitell and Muncy (2005), Harris (2008) and Zhang et al. (2023).

The next section of the survey evaluates consumer awareness regarding the negative impact of product returns on the environment with four statements. For the context of product returns, scale items are adopted from academic studies (Dhingra and Maheshwari (2018); Pohjolainen et al. (2016); Rasool et al. (2021)). Consumer awareness scale is applied as a five-point Likert scale (1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree).

Later, impulsive buying tendency of participants are evaluated with a five-point Likert scale proposed by Badgaiyan et al. (2016). The scale assesses consumer impulsive buying in two sub-dimensions (affective and cognitive). Participants evaluate eight statements regarding their impulsive buying behavior (1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree).

In the next section, respondents answer questions about their level of environmental values. The GREEN scale developed by Haws et al. (2014) is used for measuring environmental values of

respondents. The GREEN scale is applied as a five-point Likert scale (1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree).

In the final part of the questionnaire, user manual behavior of respondents is evaluated with four statements borrowed from Kutlu (2023). The scale is a five-point Likert scale (1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree).

4. DATA ANALYSIS

4.1. Descriptive Statistics

In this part of the study, in order to contribute to the literature, significant research findings regarding product returns are reported. The distribution of sources of product return behavior is given in the Table 2. In this study, consumers' reasons for returning products are examined in two categories: individual and product-related. Product-related returns generally occur if there is a defect or deficiency in the product. In Table 2, eight return sources (R1-R5 and R11-R13) are considered product-related. On the other hand, individual returns are related to the consumers themselves, such as impulsively purchasing the product but arbitrarily changing their mind or not being able to use the product. Items, R6 to R10 (given in bold) measure the number of consumer-related product returns. It is seen that the product-related returns of the participants are considerably higher than the consumer-related returns.

Table 2. Product Return Behaviors

Item	Causes of product returns	Mean	Std. Deviation
R1	The product does not perform its specified function	1.26	1.25
R2	The product is damaged or broken	1.42	1.22
R3	The received product is different from the ordered product.	1.21	1.24
R4	The product is of lower quality than expected	1.57	1.32
R5	Not being satisfied with the product	1.42	1.31
R6	Buying a product without doing research and changing your mind later	0.74	1.04
R7	Buying the product in a hurry and changing your mind later	0.75	1.03
R8	Inability to use the product	0.28	0.70
R9	Inadequate knowledge to use the product	0.28	0.71
R10	Realizing that the product is sold much cheaper elsewhere	1.06	1.21
R11	Product colors differ from those on the internet or in advertisements	1.17	1.23
R12	The product is larger or smaller than expected	1.25	1.27
R13	The product material is different than expected	1.18	1.22

In addition, the product returns made by the participants in various product categories are revealed as a result of the research. Most of the participants (82.39%) have made returns on apparel products. The second-highest number of product returns is revealed in the electronic products category (40.28%). In the food, white goods, and furniture categories, 8.73%, 25%, and 18.84% of the participants have returned products, respectively.

In Table 3, participant attitudes towards unethical product returns and their awareness regarding the impact of unethical returns on the environment are given. The findings of the study demonstrate that participants have negative attitudes toward unethical product returns. On the other hand, it seems that the participants are not at a high level of awareness regarding the environmental impact of product returns. It can be seen that the participants disagree with all statements except AW3.

Table 3. Consumer Attitudes and Awareness about Unethical Returns

Item	Statements	Mean	Std. Dev.
UR1	I return products that are damaged as a result of misuse as defective	1.62	1.16
UR2	I use the clothes I buy from stores and return them when I'm done	1.29	0.80
UR3	I deliberately damage products to return them	1.26	0.76
UR4	Product returns allow me to use products I can't afford	1.46	0.95
AW1	I am aware that product returns negatively affect the environment	2.71	1.26
AW2	Product returns cause significant environmental problems	2.61	1.21
AW3	Avoiding unnecessary product returns contributes to the solution of environmental problems such as global warming	2.96	1.26
AW4	Returning products increases environmental pollution	2.78	1.27

4.2. Exploratory Factor Analysis and Scale Reliability

Since the scale items are compiled from different studies and adapted within the context of product returns, in order to test the validity and reliability of the measures of the study, exploratory factor analysis is initially conducted. KMO (measure of sampling adequacy =0.88) and Bartlett's Test of Sphericity (Chi-square=14132.42; df=465; Sig=0.001) show that the data is suitable for exploratory factor analysis.

In Table 4, results of factor analysis and Cronbach's Alpha reliabilities of the measures are given. For the extraction method Principal Component Analysis is preferred. In addition, Varimax with Kaiser Normalization is applied as rotation method for the factor analysis. Findings indicate that the eight-factor structure explains 75.90% of variance with an Eigen value of 0.98. It is seen that each item loads on related factors. In terms of individual-related returns, factor analysis reveals two factors. As a result of examining the scale items, such factors are named as insufficient search returns and unable-to-use returns.

With regard to scale reliability, all scales are found to be above the 0.7 threshold. Therefore, the measures of the study show good reliability. Besides, factor scores of the items exceed 0.7. In terms of construct validity, it could be concluded that measures of the study are acceptable.

Table 4. Factor Loadings and Scale Reliabilities

Construct	Items	Factor loading	Cronbach's Alpha
Environmental values	G2	0.87	0.93
	G6	0.82	
	G4	0.79	
	G3	0.78	
	G5	0.78	
	G1	0.78	
Impulsive buying affective	I4	0.84	0.86
	I3	0.84	
	I2	0.83	
	I1	0.75	
	I5	0.71	
User manual behavior	U4	0.81	0.92

	U3	0.81	
	U2	0.80	
	U1	0.80	
Awareness	Aw4	0.88	0.88
	Aw2	0.87	
	Aw1	0.85	
	Aw3	0.80	
Attitudes towards unethical returns	UR2	0.87	0.81
	UR3	0.85	
	UR4	0.81	
	UR1	0.68	
Impulsive buying cognitive	I7	0.86	0.92
	I6	0.84	
	I8	0.82	
Insufficient research returns	R6	0.84	0.74
	R7	0.82	
	R10	0.73	
Unable-to-use returns	R9	0.90	0.87
	R8	0.88	

4.3. Hypothesis Testing

Hypothesis of the research are tested with linear regression analyses (Figure 2). Three regression models given in Table 5 are used to test the hypotheses. Since the VIF values are less than 2, there is no collinearity issue in the models. In Model 1, to test the negative influence of environmental values on attitudes towards unethical returns, a simple regression analysis is run. As a result, a significant regression equation is found ($F(1,651) = 17.99$; $p < 0.001$) with an R^2 of 0.03. Consumer environmental values are shown to negatively influence attitudes towards unethical returns. Therefore, hypothesis 5 is supported.

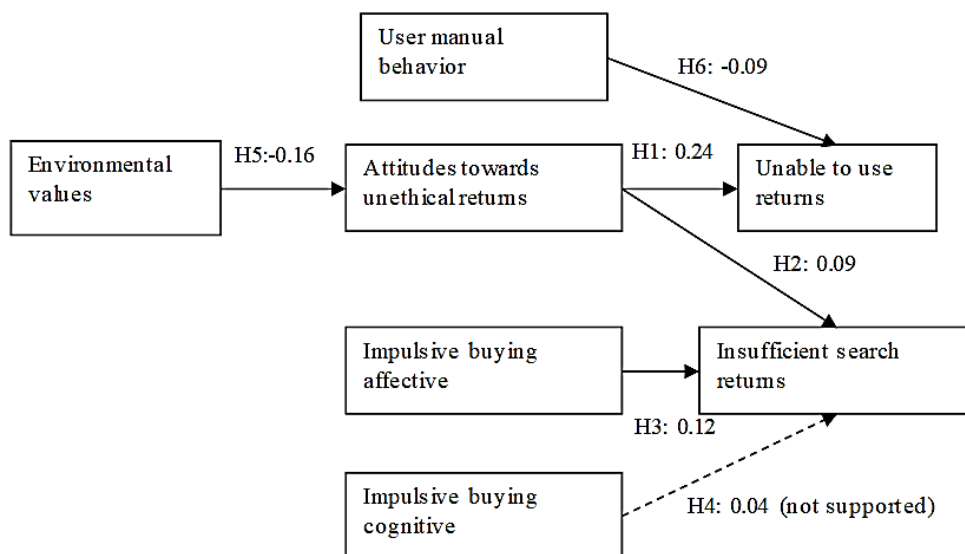


Figure 2. Research Hypotheses and Standardized Regression Coefficients

In Model 2, user manual behavior and attitudes towards unethical returns are the independent variables, while unable-to-use returns is the dependent variable. The multiple regression analysis conducted is found to be significant ($F(2,650) = 25.63; p < 0.001$). The model explains 7.3% of unable-to-use returns. Both consumer attitudes towards unethical returns and user manual behavior are shown to significantly influence unable-to-use returns. Consequently, hypothesis 1 and hypothesis 4 are accepted.

In Model 3, consumer impulsive buying tendency (affective and cognitive) and attitudes towards unethical products predict insufficient search returns. Model 3 is found to be significant ($F(3,649) = 6,71; p < 0.001; R^2 = 0.03$). Affective dimension of impulsive buying positively influences number of insufficient search returns. Cognitive impulsive buying tendency, however, is shown to have no influence on insufficient search returns. Thus, hypotheses 2 and 3 are accepted, while hypothesis 4 is rejected.

Table 5. Regression Analyses of The Study

Model	Unstandardized Coefficients		Stan. Coef.	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	7.27	0.40		18.11	0.00	
	Environmental values	-0.08	0.02	-0.16	-4.24	0.00	
2	(Constant)	0.34	0.21		1.63	0.10	
	Att. towards unethical ret.	0.11	0.02	0.24	6.23	0.00	0.96
	User manual behavior	-0.03	0.01	-0.09	-2.31	0.02	0.96
3	(Constant)	1.22	0.33		3.76	0.00	
	Impulsive buying affective	0.06	0.02	0.12	2.91	0.00	0.92
	Impulsive buying cognitive	0.03	0.03	0.03	0.87	0.39	0.93
	Att. towards unethical ret.	0.08	0.04	0.09	2.09	0.04	0.90

DISCUSSION AND CONCLUSION

Product returns, which are facilitated to increase customer satisfaction, cause serious harm to both businesses and customers in the long term. This study is conducted in order to shed light on the potential individual sources of product return behavior. In order to achieve the purpose of the research, a cross-sectional research design was adopted, and the opinions of 653 Turkish participants were obtained through convenience sampling.

Consumers return products for a variety of reasons. In this study, the product return reasons of the participants are measured with 13 statements adopted from the literature. In the study, the reasons

for product returns are classified into two categories: consumer-related and product-related. Findings indicate that the returns made by the participants are mostly due to product-related problems. Quality problems, broken parts, and dissatisfaction with the product are among the leading reasons for product-related returns. Manufacturers, intermediaries in the distribution channel, and logistics service providers can reduce such returns by taking various measures. For example, companies to create higher-quality outputs from operations might use the Six Sigma Approach and continuous improvement activities. Retailers, on the other hand, may use more effective inventory management and materials handling to protect against damage that may occur to products waiting on shelves and in the warehouse area. In addition, packaging products more securely during distribution to retailers and delivery to end customers can be effective in reducing the number of returns.

In the study, exploratory factor analysis results reveal that customer-related returns fall into two categories (insufficient search returns and unable-to-use returns). According to the laws in Türkiye, consumers have the right of withdrawal and can return the products they purchased within 14 days without giving a reason. Changes of mind due to hasty decisions, poor research, and better offers elsewhere are considered insufficient search returns. On the other hand, returns due to consumers' inability to use the products they purchased or their lack of knowledge are considered unable-to-use returns. Results of the study indicate that returns due to insufficient search are more common among participants than returns due to unable-to-use products.

Research findings show that product returns occur more frequently in some industries. The majority of the participants state that they have returned apparel products. The widespread use of online shopping and the difference between the appearance and colors of the products on screens and reality might give rise to such apparel returns. The second-highest number of product returns by participants is in the electronic products group.

Logistics operations and product recovery activities (such as remanufacturing, refurbishing, and recycling) resulting from product returns have a negative impact on the environment due to their energy consumption and carbon emissions. The study shows that consumers' awareness of the negative impact of return behavior on the environment is not sufficient. Public authorities need to provide more information to consumers and raise awareness about not making arbitrary product returns, which are obviously harmful to the environment and economy. For this purpose, parties such as ministries and chambers of commerce may carry out social marketing interventions and projects.

Research findings show that participants have a negative attitude towards unethical product returns. In addition, as a result of testing hypothesis 5, the increase in environmental values strengthens this negative attitude. Therefore, building environmental values is important for influencing attitudes towards unethical returns. Individual environmental values can be developed in schools (Scott and Oulton, 1998). Moreover, social marketing interventions could be used to build environmental values (Maibach, 1993).

In hypotheses 1 and 2, the influence of attitudes towards untechnical returns on consumer-related returns is examined. Research findings show that attitudes towards unethical returns positively affect consumer-related return behavior. Both the number of returns due to insufficient search and unable-to-use are increasing as attitudes towards unethical returns become more positive. Although consumer-related returns are the legal right of individuals, they are ethically questionable. Because in the long term, consumer-related returns harm the environment, businesses, the economy, and consumers.

Traits may play an important role in forming consumer behavior. In this study, the influence of impulsive buying tendency on insufficient search returns is examined. To test the relationship between

impulsive buying tendency and consumer-related returns, hypotheses 3 and 4 are developed. While the affective component of impulsive buying is found to have an influence on insufficient search returns, the cognitive component is shown to be insignificant. As a result, it is shown that an increase in individuals' emotional-based impulsive buying tendency increases insufficient research returns.

User manuals that provide information to consumers on various issues regarding the products are generally not consulted. On the other hand, consumers' attempts to use products that do not comply with the conditions specified in the user manual may result in broken products or an inability to use them. Hypothesis 5 is developed to test the effect of consumers' user manual behavior on returns due to unable-to-use. Research findings show that increasing user manual behavior reduces returns due to unable-to-use returns. Companies may reduce returns by taking measures to facilitate consumers' user-manual behavior. User manual quality, indeed, is shown to positively influence even customer satisfaction levels (Gök et al., 2019).

The most important limitation of the research is that the results cannot be generalized as the data was collected by convenience sampling. In addition, consumer-related returns are examined in two dimensions (insufficient search and unable-to-use returns) in the study. Consumer-related returns can be further revealed, and more comprehensive models can be developed with the help of qualitative studies.

Ethical Statement

The rules of research and publication ethics were followed during the writing and publication process of the study (Antecedents of Consumer Product Returns), and the data collected was not tampered with. This study was approved by Sivas Cumhuriyet University Sciences Ethics Review Board on 10.07.2023 (Decision number: 2023/22).

Contribution Rate Statement

All authors contributed to all processes from writing the study to drafting the manuscript and read and approved the final version

Conflict Statement

This study did not lead to any individual or institutional/organizational conflict of interest.

REFERENCES

- Ajzen, I. (1985). From Intentions To Actions: A Theory Of Planned Behavior. In *Action Control: From Cognition To Behavior* (pp. 11-39). Berlin, Heidelberg: Springer Berlin Heidelberg.
- Antil, J. H. (1984). Socially Responsible Consumers: Profile and Implications for Public Policy. *Journal of Macromarketing*, 4(2), 18-39.
- Akkas, A., Gaur, V., and Simchi-Levi, D. (2019). Drivers Of Product Expiration In Consumer Packaged Goods Retailing. *Management Science*, 65(5), 2179-2195.
- Badgaiyan, A. J., Verma, A., and Dixit, S. (2016). Impulsive Buying Tendency: Measuring Important Relationships With A New Perspective And An Indigenous Scale. *IIMB Management Review*, 28(4), 186-199.
- Bandura, A. (1969). Social-Learning Theory of Identificatory Processes. *Handbook of Socialization Theory and Research*, 213, 262.

- Chakrabarti, G., Chatterjea, T., Chakrabarti, G., and Chatterjea, T. (2020). Being (un) Ethical In Workplaces: The Theories And The Empirics. *Ethics and Deviations in Decision-making: An Applied Study*, 13-80.
- Chen, W.-K., Chen, C.-W., and Lin, Y.-C. (2023). Understanding the Influence of Impulse Buying Toward Consumers' Post-Purchase Dissonance And Return Intention: An Empirical Investigation Of Apparel Websites. *Journal of Ambient Intelligence and Humanized Computing*, 14(11), 14453-14466.
- Coveo. (2022). 2022 Holiday Shopper Report Habits, Trends and Motivators. https://www.coveo.com/en/pdf?file=-/media/library/files/reports/holiday-shopper-trends-2022/ccs-2928_report_holiday_personalization.pdf
- Cui, R., Lu, Z., Sun, T., and Golden, J. M. (2023). Sooner or later? Promising Delivery Speed In Online retail. *Manufacturing and Service Operations Management*.
- Dailey, L. C., and Ülkü, M. A. (2018). Retailers Beware: On Denied Product Returns and Consumer Behavior. *Journal of Business Research*, 86, 202-209.
- De Araújo, A. C., Matsuoka, E. M., Ung, J. E., Massote, A., and Sampaio, M. (2018). An Exploratory Study On The Returns Management Process In An Online Retailer. *International Journal of Logistics Research and Applications*, 21(3), 345-362.
- Dhingra, S., and Maheshwari, N. S. (2018). E-Waste Management Awareness and Intentions Among Youth Consumers: The Mediating Role Of Motivation. *International Journal of Indian Culture and Business Management*, 16(4), 359-370.
- Erol, I., Nurtaniş Velioğlu, M., Sivrikaya Şerifoğlu, F., Büyüközkan, G., Aras, N., Demircan Çakar, N., and Korugan, A. (2010). Exploring Reverse Supply Chain Management Practices In Turkey. *Supply Chain Management: An International Journal*, 15(1), 43-54.
- Fan, J., Ni, D., and Fang, X. (2020). Liability Cost Sharing, Product Quality Choice, And Coordination In Two-Echelon Supply Chains. *European Journal of Operational Research*, 284(2), 514–537.
- Featherman, M. S., and Pavlou, P. A. (2003). Predicting e-Services Adoption: A Perceived Risk Facets Perspective. *International journal of human-computer studies*, 59(4), 451-474.
- Ferguson, M., Guide Jr, V. D. R., and Souza, G. C. (2006). Supply Chain Coordination For False Failure Returns. *Manufacturing and Service Operations Management*, 8(4), 376-393.
- Frei, R., Jack, L., and Brown, S. (2020). Product Returns: A Growing Problem For Business, Society And Environment. *International Journal of Operations and Production Management*, 40(10), 1613-1621.
- Frei, R., Jack, L., and Krzyzaniak, S. A. (2022). Mapping Product Returns Processes In Multichannel Retailing: Challenges And Opportunities. *Sustainability*, 14(3), 1382.
- Fullerton, S., Kerch, K. B., and Dodge, H. R. (1996). Consumer Ethics: An Assessment Of Individual Behavior In The Market Place. *Journal of Business Ethics*, 15, 805-814.
- Fukukawa, K., and Ennew, C. (2010). What We Believe Is Not Always What We Do: An Empirical Investigation Into Ethically Questionable Behavior In Consumption. *Journal of Business Ethics*, 91, 49-60.

- Kutlu, M. B. (2024). Antecedents of Consumer Product Returns. *KMÜ Sosyal ve Ekonomik Araştırmalar Dergisi*, 26(47), 1347-1366.
- Gilanlı, E., Altuğ, N., and Oğuzhan, A. (2012). Reverse Logistics Activities In Turkey. *Ege Academic Review*, 12(3), 391-399.
- Goyal, A., Agrawal, R., and Saha, C. R. (2019). Quality Management For Sustainable Manufacturing: Moving From Number To Impact Of Defects. *Journal of Cleaner Production*, 241, 118348.
- Gök, O., Ersoy, P., and Börühan, G. (2019). The Effect Of User Manual Quality On Customer Satisfaction: The Mediating Effect Of Perceived Product Quality. *Journal of Product and Brand Management*, 28(4), 475-488.
- Harris, L. C. (2008). Fraudulent Return Proclivity: An Empirical Analysis. *Journal of Retailing*, 84(4), 461-476.
- Hassan, S. M., Rahman, Z., and Paul, J. (2022). Consumer Ethics: A Review And Research Agenda. *Psychology and Marketing*, 39(1), 111-130.
- Haws, K. L., Winterich, K. P., and Naylor, R. W. (2014). Seeing the World Through Green-Tinted Glasses: Green Consumption Values And Responses To Environmentally Friendly Products. *Journal of consumer psychology*, 24(3), 336-354.
- Hunt, S. D., and Vitell, S. (1986). A General Theory Of Marketing Ethics. *Journal of Macromarketing*, 6(1), 5-16.
- Ishfaq, R., Raja, U., and Rao, S. (2016). Seller-Induced Scarcity And Price-Leadership: Impact On Product Returns In The Internet Retail Supply Chain. *The International Journal of Logistics Management*, 27(2), 552-569.
- Jayaraman, V., and Luo, Y. (2007). Creating Competitive Advantages Through New Value Creation: A Reverse Logistics Perspective. *Academy of management perspectives*, 21(2), 56-73.
- Jeng, S. P. (2017). Increasing Customer Purchase Intention Through Product Return Policies: The Pivotal Impacts Of Retailer Brand Familiarity And Product Categories. *Journal of Retailing and Consumer Services*, 39, 182-189.
- Jones, M. A., Reynolds, K. E., Weun, S., and Beatty, S. E. (2003). The Product-Specific Nature Of Impulse Buying Tendency. *Journal of Business Research*, 56(7), 505-511.
- Kang, M., and Johnson, K. (2009). Identifying Characteristics Of Consumers Who Frequently Return Apparel. *Journal of Fashion Marketing and Management: An International Journal*, 13(1), 37-48.
- Kano, N. (1984). Attractive Quality And Must-Be Quality. *Journal of the Japanese society for quality control*, 31(4), 147-156.
- Kutlu, M. B. (2023). The Role of Consumer Impulsivity and Self-Efficacy on User Manual Behavior. In *Using Self-Efficacy for Improving Retention and Success of Diverse Student Populations* (pp. 272-292). IGI Global.
- Kurnia, H., and Purba, H. H. (2021). A Systematic Literature Review Of Lean Six Sigma In Various Industries. *Journal of Engineering and management in Industrial System*, 9(2), 19-30.
- Lau, A. H. L., Lau, H. S., and Willett, K. D. (2000). Demand Uncertainty And Returns Policies For A Seasonal Product: An alternative model. *International Journal of Production Economics*, 66(1), 1-12.

Kutlu, M. B. (2024). Antecedents of Consumer Product Returns. *KMÜ Sosyal ve Ekonomik Araştırmalar Dergisi*, 26(47), 1347-1366.

- Liao, T. H., and Keng, C. J. (2013). Online Shopping Delivery Delay: Finding A Psychological Recovery Strategy By Online Consumer Experiences. *Computers in Human Behavior*, 29(4), 1849-1861.
- Lee, D. H. (2015). An Alternative Explanation Of Consumer Product Returns From The Postpurchase Dissonance And Ecological Marketing Perspectives. *Psychology and Marketing*, 32(1), 49-64.
- Loomba, A. P. (1998). Evolution Of Product Warranty: A Chronological Study. *Journal of Management History*, 4(2), 124-136.
- Lysenko-Ryba, K. (2021). The Impact Of Impulsive Buying On Customer Returns. *International Journal for Quality Research*, 15(3), 857.
- Lysenko-Ryba, K., Zimon, D., and Zatwarnicka-Madura, B. (2021). The Effect of Lenient Return Policy on Brand Recognition. *International Journal for Quality Research*, 15(4), 1049–1060. <https://doi.org/10.24874/IJQR15.04-02>
- Maleki Vishkaei, B., Niaki, S. T. A., Farhangi, M., and Mahdavi, I. (2019). A Single-Retailer Multi-Supplier Multi-Product Inventory Model With Destructive Testing Acceptance Sampling And Inflation. *Journal of Industrial and Production Engineering*, 36(6), 351-361.
- Maibach, E. (1993). Social Marketing For The Environment: Using Information Campaigns To Promote Environmental Awareness And Behavior Change. *Health Promotion International*, 8(3), 209-224.
- Maruchek, A., Greis, N., Mena, C., and Cai, L. (2011). Product Safety And Security In The Global Supply Chain: Issues, Challenges And Research Opportunities. *Journal of operations management*, 29(7-8), 707-720.
- Matza, D., and Sykes, G. (1957). Techniques of Neutralization: A Theory Of Delinquency. *American Sociological Review*, 22(6), 664-670.
- Mayr, K., Schwendtner, T., Teller, C., and Gittenberger, E. (2022). Unethical Customer Behaviour: Causes and consequences. *International Journal of Retail and Distribution Management*, 50(13), 200-224.
- Muncy, J. A., and Vitell, S. J. (1992). Consumer ethics: An Investigation Of The Ethical Beliefs Of The Final Consumer. *Journal of Business Research*.
- Parasuraman, A., Zeithaml, V. A., and Berry, L. L. (1985). A Conceptual Model Of Service Quality And Its Implications For Future Research. *Journal of marketing*, 49(4), 41-50.
- Pei, Z., and Paswan, A. (2018). Consumers'legitimate And Opportunistic Product Return Behaviors In Online Shopping. *Journal of Electronic Commerce Research*, 19(4), 301-319.
- Petersen, J. A., and Kumar, V. (2009). Are Product Returns A Necessary Evil? Antecedents and Consequences. *Journal of Marketing*, 73(3), 35-51.
- Pohjolainen, P., Tapio, P., Vinnari, M., Jokinen, P., and Räsänen, P. (2016). Consumer Consciousness On Meat And The Environment—Exploring Differences. *Appetite*, 101, 37-45.
- Powers, T. L., and Jack, E. P. (2013). The Influence Of Cognitive Dissonance On Retail Product Returns. *Psychology and marketing*, 30(8), 724-735.
- Powers, T. L., and Jack, E. P. (2015). Understanding The Causes Of Retail Product Returns. *International Journal of Retail and Distribution Management*, 43(12), 1182-1202.

Kutlu, M. B. (2024). Antecedents of Consumer Product Returns. *KMÜ Sosyal ve Ekonomik Araştırmalar Dergisi*, 26(47), 1347-1366.

- Rao, S., Rabinovich, E., and Raju, D. (2014). The Role Of Physical Distribution Services As Determinants Of Product Returns In Internet Retailing. *Journal of Operations Management*, 32(6), 295-312.
- Rasool, S., Cerchione, R., Salo, J., Ferraris, A., and Abbate, S. (2021). Measurement Of Consumer Awareness Of Food Waste: Construct Development With A Confirmatory Factor Analysis. *British Food Journal*, 123(13), 337-361.
- Roberts, J. A. (1996). Green Consumers In The 1990s: Profile And Implications For Advertising. *Journal of Business Research*, 36(3), 217-231.
- Rogers, D. S., Lambert, D. M., Croxton, K. L., and García-Dastugue, S. J. (2002). The Returns Management Process. *The International Journal of Logistics Management*, 13(2), 1-18.
- Rokonuzzaman, M., Iyer, P., and Harun, A. (2021). Return Policy, No Joke: An Investigation Into The Impact Of A Retailer's Return Policy On Consumers' Decision Making. *Journal of Retailing and Consumer Services*, 59, 102346.
- Rook, D. W., and Fisher, R. J. (1995). Normative Influences On Impulsive Buying Behavior. *Journal of consumer research*, 22(3), 305-313.
- Rotar, L. J., and Kozar, M. (2017). The Use Of The Kano Model To Enhance Customer Satisfaction. *Organizacija*, 50(4), 339-351.
- Scott, W., and Oulton, C. (1998). Environmental Values Education: An Exploration Of Its Role In The School Curriculum. *Journal of Moral Education*, 27(2), 209-224.
- Saarijärvi, H., Sutinen, U. M., and Harris, L. C. (2017). Uncovering Consumers' Returning Behaviour: A Study Of Fashion E-Commerce. *The International Review of Retail, Distribution and Consumer Research*, 27(3), 284-299.
- Sellitto, M. A. (2018). Reverse Logistics Activities In Three Companies Of The Process Industry. *Journal of Cleaner Production*, 187, 923-931. <https://doi.org/10.1016/j.jclepro.2018.03.262>
- Seo, J. Y., Yoon, S., and Vangelova, M. (2016). Shopping Plans, Buying Motivations, And Return Policies: Impacts On Product Returns And Purchase Likelihoods. *Marketing Letters*, 27(4), 645-659.
- Slack, N., Chambers, S., and Johnston, R. (2010). *Operations Management*. Pearson Education.
- Tomşa, M. M., Romoñi-Maniu, A. I., and Scridon, M. A. (2021). Is Sustainable Consumption Translated Into Ethical Consumer Behavior?. *Sustainability*, 13(6), 3466.
- Trombetta, W. L., and Wilson, T. L. (1975). Foreseeability of Misuse And Abnormal Use Of Products By The Consumer. *Journal of Marketing*, 39(3), 48-55.
- Tunahan, C. and Kutlu, M. B. (2023). Experienced Product Quality and Brand Loyalty: Mediating Role of Customer Satisfaction . *Ege Academic Review*, 23 (2), 185-202.
- Ünsalan, M. (2016). Stimulating Factors Of Impulse Buying Behavior: A Literature Review. *Ankara Hacı Bayram Veli Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 18(2), 572.
- Vitell, S. J. (2003). Consumer Ethics Research: Review, Synthesis And Suggestions For The Future. *Journal of Business Ethics*, 43, 33-47.

Kutlu, M. B. (2024). Antecedents of Consumer Product Returns. *KMÜ Sosyal ve Ekonomik Arařtırmalar Dergisi*, 26(47), 1347-1366.

Vitell, S. J., and Muncy, J. (1992). Consumer Ethics: An Empirical Investigation Of Factors Influencing Ethical Judgments Of The Final Consumer. *Journal of Business Ethics*, 11, 585-597.

Vitell, S. J., and Muncy, J. (2005). The Muncy–Vitell Consumer Ethics Scale: A Modification and Application. *Journal of Business Ethics*, 62, 267-275.

Wang, Y., Anderson, J., Joo, S. J., and Huscroft, J. R. (2020). The Leniency Of Return Policy And Consumers' Repurchase Intention In Online Retailing. *Industrial Management and Data Systems*, 120(1), 21-39.

Zeithaml, V. A., Berry, L. L., and Parasuraman, A. (1988). Communication and Control Processes In The Delivery Of Service Quality. *Journal of Marketing*, 52(2), 35-48.

Zhang, D., Frei, R., Senyo, P. K., Bayer, S., Gerding, E., Wills, G., and Beck, A. (2023). Understanding Fraudulent Returns And Mitigation Strategies In Multichannel Retailing. *Journal of retailing and consumer services*, 70, 103145.

Extended Abstract

Antecedents of Consumer Product Returns

Aim: Product returns negatively affect the profitability of companies due to reverse logistics costs. Because of the proliferation of online stores and the liberal return policies, companies have encountered more fraudulent returns, recently (Zhang et al., 2023). In addition, it is suggested that product returns have detrimental influences on the environment, society, and economy (Frei et al., 2020). Reverse logistics activities increase CO2 emissions by consuming energy and materials. In oil-dependent economies such as Türkiye, reverse logistics activities resulting from product returns increase the foreign trade deficit. Studies on product returns in Türkiye (such as Erol et al. (2010) and Gilanlı et al. (2012)) have been mostly carried out in the field of supply chain management at the macro level. This study, which adopts the consumer perspective, examines the phenomenon of product returns at a more micro level. Product returns can be classified as consumer-related or product-related. Product-related returns occur as a result of mistakes (such as quality failures or poor inventory management) made by companies in the supply chain. Thus, companies along the supply chain bear responsibility for product-related returns. The aim of the study is to evaluate individual antecedents of product return behavior. In order to reach the objectives of the study, six hypotheses are developed, drawing on the literature.

Method: In order to test research hypotheses cross-sectional research design and convenience sampling method is adopted. Data is gathered via an online questionnaire. 653 respondents over 18 years-old participate the study. Product return behavior, attitudes towards unethical returns, impulsive buying tendency, environmental consumption values, user manual behavior and awareness regarding the environmental impact of product returns are the main constructs of the study. The measures of the study are compiled from the previous research (such as Pei and Paswan (2018), Lee (2015), Vitell and Muncy (2005), Harris (2008), Zhang et al. (2023), Badgaiyan et al. (2016), and Haws et al. (2014)).

Findings: In this research, product return behavior stem from two sources. Product-related returns generally occur if there is a defect or deficiency in the product. On the other hand, individual returns are related to the consumers themselves, such as impulsively purchasing the product but arbitrarily changing their mind or not being able to use the product. Findings of the study show that participants have mostly returned products due to product-related problems. With regard to consumer-related returns, it is seen that consumer-related returns are in two dimensions: insufficient research and inability-to-use. In addition, insufficient search returns outweighs unable-to-use returns. The study also reveals that, consumer awareness regarding the environmental impact of product returns is low. Research findings show that product returns occur more frequently in some industries. The majority of the participants state that they have returned apparel products. The widespread use of online shopping and the difference between the appearance and colors of the products on screens and reality might give rise to such apparel returns. The second-highest number of product returns by participants is in the electronic products group. Research findings show that participants have a negative attitude towards unethical product returns. The reliability and validity of the study measures are assessed by conducting exploratory factor analysis and reliability (Cronbach's Alpha) analysis. Findings indicate that on the whole, the measures of the study are at an acceptable level of validity and reliability. In order to test the research hypotheses, regression analyses are carried out. As a result five hypotheses are supported whereas only one hypothesis is rejected (H4). The research hypotheses are:

H1: Consumer attitudes towards unethical returns positively influences unable-to-use returns,

H2: Consumer attitudes towards unethical returns positively influences insufficient search returns,

H3: Affective impulsive buying tendency positively influences insufficient search returns,

H4: Cognitive impulsive buying tendency positively influences insufficient search returns,

H5: Consumer environmental values negatively influences their attitudes towards unethical returns,

H6: Consumer user manual behavior negatively influences unable-to-use returns.

Conclusion

In this study examining product returns, the antecedents of consumer-related product returns are revealed. Consumer attitudes towards unethical returns, impulsive buying tendencies, and user manual behavior might play an important role on return behavior.
