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# HOW PRO-ENVIRONMENTAL AND SAVING BEHAVIOURS DETERMINE ORGANIC PRODUCT AND SECOND-HAND PRODUCT PURCHASE INTENTIONS: A STUDY IN TURKEY

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The study focuses on sustainable consumption, which has recently gained popularity. The study seeks to ascertain the effects of pro-environmental behaviour and saving behaviour, both of which are constructs of sustainable consumption behaviour, on the organic and second-hand product purchase intention. Convenience sampling method was used in the collection of data, in which any consumer could participate, and the data were collected with a prepared online questionnaire. According to the findings of the study conducted on 595 Turkish consumers, pro-environmental behaviour and saving behaviour have positive effects on second-hand product purchase intentions, while pro-environmental behaviour has a positive effect on organic product purchase intention and saving behaviour has a negative effect on it. These findings make significant contributions to the literature and practice of sustainable consumption.

Keywords: sustainable consumption, pro-environmental behaviour, saving behaviour, organic product, second-hand product



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## INTRODUCTION

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Environmental crises are among the most serious problems that the world has faced and will face in the coming years. Environmental problems have grown significantly as a result of factors such as dwindling natural resources required for life due to an increasing population and excessive consumption, the deterioration and destruction of environmental balance, and global warming. These issues, which are primarily the result of human activity, are becoming more prevalent by the day and are affecting the entire world. Humans will also be responsible for correcting the damage caused by humans. Sustainable consumption is proposed as a solution to these problems.

Sustainable consumption, which has become an increasingly important issue in both national and international literature in recent years, is defined as the use of products that meet the basic needs for a better life as well as the prudent use of resources while considering the needs of future generations (Mortensen, 2006). As a result, sustainable consumption behaviour includes environmentalist behaviour aimed at protecting the environment as well as saving behaviour to avoid overconsumption (Özgül, 2010). Sustainable consumption behaviour alters the concept of consumption by focusing on the benefit of the environment rather than individual wants and needs. Jackson (2005) stated that the success of transforming consumer consumption behaviour into pro-environmental behaviour will be achieved through sustainable consumption. In addition to pro-environmental behaviour, saving-oriented behaviours such as not changing unnecessary products, saving in product use, using the product for a longer period of time, and not using energy-consuming tools and equipment unnecessarily are included in sustainable consumption. As a result, in their purchasing and consumption habits, consumers should consider both the environment and saving. Consumers who are aware of sustainable consumption prefer products that do not harm nature or the environment in their consumption activities, and they avoid overconsumption as more natural resources are consumed as a result of production. Therefore, instead of purchasing a new product, consumers prefer to buy used products, protecting the environment while also saving money (Grasso et al., 2000; Roux & Korchia, 2006). The consumption of second-hand products reduces the production of new products, and the environmental damage is reduced further by reintroducing second-hand products for consumption (Thomas, 2003). Consumption of second-hand goods saves people money in addition to the environmental benefits. Because new products are more expensive than used

products, consumers gravitate towards used products, resulting in greater savings. Organic products, in addition to second-hand goods, are important for environmentally friendly consumption. Organic products, which do not contain any harmful substances and have no negative effects on both the environment and human health, have become more popular in recent years. Consumers prefer organic products because of environmental and health concerns, food safety and norms, and the perception that non-organic products are more harmful than organic products. Furthermore, the fact that organic products outperform non-organic products leads to a shift in consumer spending habits towards organic products. However, because organic products are more expensive than non-organic products, consumers who prefer to save money may opt for less expensive non-organic products (Wang et al., 2021).

In this context, when the subject is evaluated broadly, organic and second-hand products are critical for sustainability in order to protect the environment from the damage caused by excessive production and consumption, to leave a better world to future generations, and to use resources for a longer period of time by making savings. The primary goal of the study is to determine the effects of pro-environmental behaviour and saving behaviour on the organic product and second-hand product purchase intentions. There are few studies in the literature (Ferraro et al., 2016; Kuning et al., 2018; Wang et al., 2020) that look at sustainability in terms of both second-hand and organic products. It has been determined, in particular, that this subject has not been investigated within the scope of a model. Approaching sustainable consumption behaviour in terms of second-hand consumption and organic product consumption in the research is thought to make significant contributions to the study area. In addition, the findings of the study will help sellers in the marketing of second-hand and organic products, as well as public institutions and organisations in terms of sustainable policies. The following research questions have emerged in accordance with this purpose and assumption: Do environmentally conscious consumers intend to purchase organic products? Do consumers who practise frugal living intend to purchase organic products? Do environmentally conscious consumers intend to purchase used goods? Do consumers who practise frugal spending intend to purchase used goods? The research conducted on a sample of consumers in Turkey for this purpose is divided into three parts: the conceptual framework and literature review, the methods and findings, and the discussion and conclusion. Limitations and future research directions are presented at the end.

## LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

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### **Sustainable consumption behaviour**

In academic studies in the fields of sociology, psychology, management, and marketing, the concept of sustainable consumption is heavily emphasised. Constructs such as ecological consciousness, pro-environmental behaviour, responsible behaviour, and environmentally friendly behaviour come to mind when thinking about sustainable consumption (Gupta & Agrawal, 2018). Consumers must be more sustainable in their consumption habits in light of current circumstances and future generations. There are numerous definitions of sustainable consumption behaviour in the literature. While Paavola (2001) defines it as consumption behaviour with a low environmental impact, Belz and Bilharz (2005) define it as consumption behaviour with low ecological and social problems in traditional production and consumption activities. Mortensen (2006) defined it as the way people consume while meeting their own needs without overusing natural resources, at the same time protecting the environment, and considering the needs of future generations. As a result, the behaviour of protecting the environment and saving is included in the behaviour of sustainable consumption. According to some studies, energy savings can be made to reduce environmental pollution (Pepper et al., 2009; Banyté et al., 2020). It is established in some studies that consumers are willing to pay more for environmentally friendly products and consider environmental issues when making purchases (Qing-hua & Yaru, 2011). When they need a product and make the decision to buy it, consumers must act with sustainable consumption awareness. In these decision-making processes, second-hand products may be preferred to long-lasting, cost-effective, organic, environmentally friendly, or new products. Water resources and biodiversity can be protected, erosion can be avoided, and the effects of global warming can be mitigated by purchasing organic products (Karalar & Kiracı, 2011). Gilg et al. (2005) examined the behaviour of UK consumers and classified them according to behaviours such as not consuming products that harm the environment, purchasing organic products, defending local production, choosing products that can be recycled, and conserving energy. As a result, they revealed that consumers are attempting to make these behaviours a way of life in their purchasing habits.

### **Organic product purchase intention**

Organic products are important for sustainable consumption. Organic product consumption has risen significantly in recent years as a result of consumer concerns about issues such

as the environment, health, and nutrition (Gil et al., 2000). Organic products, by definition, are those that do not contain chemical additives that are harmful to people and the environment at any stage of production or distribution. It is also stated that because organic products do not contain any pollutants, they do not harm the environment or human health (Gottschalk & Leistner, 2013). According to studies, factors such as health and environmental concerns, food safety, norms, and ethical concerns are the driving forces behind consumers' purchases of organic products (Padel & Foster, 2005; Honkanen et al., 2006). It is also well known that consumers who buy organic products are environmentally conscious. Furthermore, consumers believe that organic products are less damaging to the environment than non-organic products (Hossain & Lim, 2016; Avci & Yıldız, 2021). Many studies in the literature conclude that environmental awareness or pro-environmental behaviour has a positive effect on consumers' organic product purchase intention when the environment and organic product consumption are considered together (Hossain & Lim, 2016; Ahmed et al., 2021; Wang et al., 2020). The following hypothesis was developed as a result of the literature review.

H1: Pro-environmental behaviour has a positive effect on the organic product purchase intention.

Furthermore, consumers' savings tendencies influence their organic product consumption behaviour. The fact that organic products are more expensive than non-organic products, in particular, has an impact on consumers' saving habits. Consumers who are more frugal with their spending try to get more value for money and generally prefer to buy products with lower prices (Lastovicka et al., 1999). Because they expect more benefits in the purchasing process, frugal consumers are more motivated to save and are less likely to purchase expensive products. Some studies (Kareklas et al., 2014; Wang et al., 2021) find an inverse relationship between consumers' saving behaviour and their intention to purchase organic products. As a result, when consumers with a proclivity to save are confronted with high organic product prices, they are likely to be motivated to save and reduce their organic product purchasing behaviour. In light of this circumstance, the following hypothesis was developed.

H2: Saving behaviour has a negative effect on the organic product purchase intention.

## Second-hand product purchase intention

Second-hand products are another important component of sustainable consumption. The term "second-hand product" is derived from the French word "d'occasion" and is defined as a product that is old or has been used at least once by someone else (Roux & Guiot, 2008; Kessous & Valette-Florence, 2019). The ability to avoid excessive consumption by purchasing second-hand products, as well as the fact that second-hand products are less expensive than new products, have resulted in second-hand consumption becoming a more modest consumption today (Rust, 1986; Crewe & Gregson, 2003). The factors that influence the purchase of second-hand products, which have recently become more popular, are generally economic, nostalgic, or pertaining to uniqueness, recycling, sustainable consumption, bargaining advantage, and so on (Williams & Windebank, 2002; DeLong et al., 2005). Consumers who are aware of sustainability prefer to buy used products over new products because they prefer products that do not harm the environment or nature. With the new generation's increased social awareness about bios and the environment, it is expected that second-hand product consumption will increase even more (Roux & Korchia, 2006). Kuning et al. (2018) discovered that buying used products has a positive impact on sustainability. Grasso et al. (2000) stated that consumers try to protect the world by purchasing second-hand products. Craig-Lees and Hill (2002) emphasised that consumers with environmentalist behaviour buy second-hand products. While previously associated with poverty, second-hand product consumption has recently been associated with environmental support (Grasso et al., 2000). As a result, taking into account the environmental impact of second-hand products, the following hypothesis has been developed.

H3: Pro-environmental behaviour has a positive effect on second-hand product purchase intention.

Economic factors also influence consumers' second-hand product purchases. Among the economic factors are motivations such as purchasing a product at a lower cost, negotiating a lower price, and bargaining (Guiot & Roux, 2010). Second-hand products are more appealing to consumers because they are less expensive than new products (Williams & Paddock 2003). The price difference between new and used products causes consumers to price discriminate, and consumers who prioritise savings are more willing to buy used products (Ferraro et al., 2016). As a result, consumers who

save money by purchasing used products can put their money towards other things (Mitchell & Harris, 2005). According to Crewe and Gregson (2003), saving is effective in consumers' second-hand product purchases, and consumers with limited means prefer second-hand products in order to save. Bardhi and Arnould (2005), on the other hand, discovered that consumers buy used products for the purpose of bargaining power and that they save money as a result of their purchases. The following hypothesis has been developed in light of saving behaviour and second-hand products.

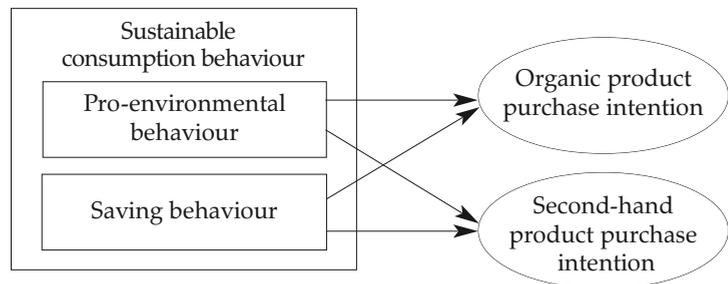
H4: Saving behaviour has a positive effect on the second-hand product purchase intention.

## RESEARCH METHODOLOGY

### Purpose of the research

The primary goal of the study is to determine the impact of sustainable consumption behaviour on consumers' organic and second-hand product purchase intentions. Since sustainable consumption behaviour has two structures: pro-environmental behaviour and saving behaviour, the effects of these structures on the organic products and second-hand products purchase intentions have been examined. The literature was examined within the scope of the research's purpose, and the following research model was developed.

FIGURE 1  
Research model



### Sample and participants

In the research, the quantitative research method was used, and the explanatory and correlation research types were preferred. The research's primary population consists of Turkish consumers. The convenience sampling method, in which each consumer can participate in the research, was used to collect the data. Data collection, which is widely used in research, continues until the desired sample size is reached, and this method is especially preferred in research where data is collected via the internet. Because collecting data face-to-face is

risky due to the Covid-19 epidemic, which affects the entire world, the data were gathered using an online survey created on the internet. The generalisability of the results obtained with this method, which has a significant cost and time advantage, is low (Etikan et al., 2016). The survey link, which was active between October 2021 to November 2021, was visited by 603 consumers. Since, according to Maccallum et al. (2001), four times the sum of the scale items is seen as sufficient in determining the sample size, it can be said that the number of samples reached as a result of the present research is sufficient. The examination of the obtained questionnaires revealed that there were issues with 8 of them, and the data of 595 participants was included in the analysis. The demographic information of participants is shown in Table 1.

**TABLE 1**  
Demographic  
information of  
participants

		<i>f</i>	%			<i>f</i>	%		
Gender	Female	391	65.7	Age	18 and below	50	8.4		
	Male	204	34.3		19-29	257	43.2		
	Total	595	100		30-40	151	25.4		
Marital	Married	213	29	41-51	109	18.3			
				52 and above	28	4.7			
	Single	382	71	Total	595	100			
	Total	595	100						
Education	Primary	29	4.9	Job	Freelance	103	17.3		
	Secondary	229	38.5		Officer	115	19.3		
	Bachelor	303	51		Craft	60	10.1		
	Postgraduate	34	5.6		Employee	87	14.6		
	Total	595	100		Retired	10	1.7		
Income	5000 TL below	326	54.8	Housewife	41	6.9			
				Student	172	28.9			
				5001 TL-7500 TL	167	28.1	Other	7	1.2
				7501 TL-10000 TL	64	10.8	Total	595	100
	10001 TL above	38	6.4						
Total	595	100							

Note: *f* – Frequency, % – Percent, TL – Turkish Lira

## Instrument

To collect data for the study, a questionnaire form was created. Part 1 of the questionnaire form includes descriptive questions about the subject, and Part 2 includes scale items of research variables. The independent and dependent variables in the research model were measured using previously developed scales. The 14 items based on the 5-point Likert scale used in Özgül's (2010) study and adapted from Fraj and Martinez (2006) and Şener and Hazer (2007) studies were used to measure the sustainable consumption behaviour scale pre-

ferred in the research. The organic product purchase intention scale was measured using 4 items based on the 5-point Likert scale adapted from a study conducted by Wee et al., (2014), and the second-hand product purchase intention scale was measured using four items based on the 5-point Likert scale adapted from a study conducted by Hsu et al. (2017). Because the study's scale items were not in Turkish, they were translated into Turkish using the translation-back translation method. Before being converted into an online questionnaire, the prepared questionnaire was reviewed by two academicians who are experts in their fields, and it was then used as a pre-test on 18 consumers. The questionnaire form was rearranged and converted into an online questionnaire on Google Forms based on the feedback obtained from the pretest. After the participants were informed about the study, the link to the online survey was shared on social media channels. Consumers were not compensated for their participation, and quantitative data were collected. All of the research scales were organised on a 5-point Likert scale.

### **Exploratory factor analysis (EFA)**

First, Exploratory factor analysis was used to determine the factor structures of the scales used in the study. The KMO (Kaiser-Meyer-Olkin) test is used for sample adequacy during factor analysis, and the Bartlett test is used for factor analysis suitability. For the convenience of factor analysis, the KMO value should be greater than 0.60 and the Bartlett value should be less than 0.05 (Tabachnick & Fidell, 1996). Factor loading and explained variance ratio are two other values to consider in the factor analysis. While the factor load of each scale item should be greater than 0.50, the explained variance ratio, particularly in social science studies, should be greater than 40% (Scherer et al., 1988). The reliability level of factor structures obtained as a result of factor analysis is determined using reliability analysis. The fact that the Cronbach alpha value obtained from the reliability analysis is greater than 0.70 indicates that the measurement tool used in the study is trustworthy. Furthermore, convergent validity (composite reliability (CR)) and discriminant validity (average variance extracted (AVE)) values are used to assess the research model's validity. To ensure the scale's validity, the CR value should be greater than 0.70 and the AVE value should be greater than 0.50 (Fornell & Larcker, 1981). In the current study, the Principal component analysis (PCA) method was used while performing EFA and Varimax was chosen for axis rotation. The tables below show the results of the factor, reliability, and validity analyses of the scales used in the study.

TABLE 2  
Sustainable  
consumption behavior  
scale analysis results

Dimension	Item	Factor load	Cronbach Alpha	Explained variance
Pro-environmental behaviour (PEB)	SC11	0.827	0.843	40.96%
	SC10	0.744		
	SC12	0.716		
	SC9	0.687		
	SC14	0.676		
	SC7	0.586		
	SC8	0.582		
Saving behaviour (SB)	SC5	0.829	0.775	15.88%
	SC3	0.803		
	SC4	0.700		
	SC6	0.651		
Total			0.851	56.85%

Kaiser-Meyer-Olkin Measure of Sampling Adequacy: 0.874  
Bartlett's Test of Sphericity Approx. Chi-Square: 2428.571  
df: 55; Sig: 0.000; AVE: 0.518; CR: 0.914

The KMO value is greater than 0.60 and the Bartlett value is less than 0.05, indicating that factor analysis is appropriate with these results. As a result of the factor analysis, the original scale's sustainable consumption behaviour scale was divided into two constructs: "pro-environmental behaviour" and "saving behaviour". Because the factor load was less than 0.50, items 13 in the pro-environmental behaviour dimension and 1 and 2 in the saving behaviour dimension were excluded from the analysis. As a result of the analysis, the factor loads of the other items were found to be greater than 0.50. The pro-environmental behaviour dimension explained 40.96 percent of the sustainable consumption behaviour, the saving behaviour dimension explained 15.88 percent, and both dimensions explained 56.85 percent. Furthermore, the Cronbach alpha test values for both the pro-environmental behaviour and the saving behaviour dimensions were greater than 0.70, indicating that the scale was reliable, and the CR and AVE values were higher than the minimum recommended values.

TABLE 3  
Organic product  
purchase intention  
scale analysis results

Dimension	Item	Factor load	Cronbach Alpha	Explained variance
Organic product purchase intention (OPI)	OPI2	0.901	0.903	77.45%
	OPI4	0.889		
	OPI3	0.888		
	OPI1	0.841		

Kaiser-Meyer-Olkin Measure of Sampling Adequacy: 0.824  
Bartlett's Test of Sphericity Approx. Chi-Square: 1526.100  
df: 6; Sig: 0.000; AVE: 0.774; CR: 0.932

The organic product purchase intention scale has a KMO value greater than 0.60 and a Bartlett value less than 0.05. The factor analysis reveals that the factor load of each item on the organic product purchase intention scale is greater than 0.50, and the explained variance ratio is greater than 0.40. As a result, the scale used explains 77.45 percent of the organic product purchase intention. The organic product purchase intention scale had a Cronbach alpha test value of 0.903, and the CR and AVE values were higher than the baseline values.

TABLE 4  
Second-hand product  
purchase intention  
scale analysis results

Dimension	Item	Factor load	Cronbach Alpha	Explained variance
Second-hand product purchase intention (SPI)	SPI3	0.870	0.828	66.12%
	SPI1	0.864		
	SPI2	0.795		
	SPI4	0.714		

Kaiser-Meyer-Olkin Measure of Sampling Adequacy: 0.745  
Bartlett's Test of Sphericity Approx. Chi-Square: 983.425  
df: 6; Sig. 0.000; AVE: 0.661; CR: 0.886

The KMO value of the second-hand product purchase intention scale was greater than 0.60, while the Bartlett value was less than 0.05. The factor analysis reveals that the factor load of each item on the second-hand product purchase intention scale was greater than 0.50, and the explained variance ratio was greater than 0.40. As a result, scale items explain 66.21 percent of the second-hand product purchase intention. The Cronbach alpha test value for the second-hand product purchase intention scale was 0.828, and the CR and AVE values were also higher than the baseline values.

### Confirmatory factor analysis (CFA)

The data was analysed using the statistical programs SPSS 21 and AMOS 24. Confirmatory factor analysis was also used to validate the factor structures formed in the measurement model as a result of exploratory factor analysis. The fit index values obtained from confirmatory factor analysis were used to evaluate the structures obtained. When looking through the literature, the most commonly recommended and preferred fit index values are  $\chi^2/df$ , GFI, AGFI, CFI, and RMSEA (Jöreskog & Sörbom, 1984). Table 5 shows the fit index values obtained from confirmatory factor analyses for each scale used in the study, as well as the acceptable and good fit index value ranges.

During the CFA, the goodness of fit values were not at a good level before the items were removed from the pro-environmental behaviour and saving behaviour scales (e.g. GFI: 0.904, AGFI: 0.867, CFI: 0.866, RMSEA: 0.087), but after the items were

removed from the relevant scales, the goodness of fit values increased. As a result, the fit index values of the pro-environmental behaviour and saving behaviour scales are between acceptable and good, while the fit index values of the organic product purchase intention and second-hand product purchase intention scales are between good and acceptable.

TABLE 5  
Confirmatory factor  
analysis results

Scales	$\chi^2$	<i>df</i>	$\chi^2/df$	GFI	AGFI	CFI	RMSEA
Sustainable consumption behaviour	127.400	40	3.185	0.915	0.891	0.931	0.061
Organic product purchase intention	4.508	2	2.254	0.998	0.981	0.999	0.046
Second-hand product purchase intention	1.971	1	1.971	0.998	0.983	0.999	0.040
Fit indices	Good fit		$\leq 3$	$\geq 0.90$	$\geq 0.90$	$\geq 0.97$	$\leq 0.05$
	Acceptable fit	$p > 0.05$	$\leq 4.5$	0.89-0.85	0.89-0.80	$\geq 0.95$	0.06-0.08

## Correlation analysis

Correlation analysis is used to determine the direction and strength of a relationship between two or more variables. Table 6 shows that there are positive relationships between pro-environmental behaviour and saving behaviour ( $r = 0.440$ ,  $p < 0.01$ ), pro-environmental behaviour and organic product purchase intention ( $r = 0.379$ ,  $p < 0.01$ ), pro-environmental behaviour and second-hand product purchase intention ( $r = 0.555$ ,  $p < 0.01$ ), saving behaviour and second-hand product purchase intention ( $r = 0.519$ ,  $p < 0.01$ ) and organic product purchase intention and second-hand product purchase intention ( $r = 0.210$ ,  $p < 0.01$ ). A negative relationship was found between saving behaviour and organic product purchase intention ( $r = -0.075$ ,  $p < 0.01$ ).

TABLE 6  
Correlation analysis  
results

	Mean	SD	N	PEB	SB	OPI	SPI
PEB	3.23	0.98	595	1			
SB	4.23	0.84	595	0.440**	1		
OPI	2.70	0.91	595	0.379**	-0.075	1	
SPI	3.86	0.95	595	0.555**	0.519**	0.210**	1

Note: \*\* $p < 0.001$ , SD – Standard deviation, N – Sample size

## Hypothesis test results

The research hypotheses were tested using Structural equation models (SEM). Taking into account the measurement errors in the variables used in research ensures that the SEM is preferred in social science research. Because these errors are

not taken into account in regression analyses, the research results are misleading, and thus SEM analyses are used (Fornell & Larcker, 1981). Because of these errors, the SEM was chosen for the current study. Figure 2 shows the output of the SEM used within the scope of the research model.

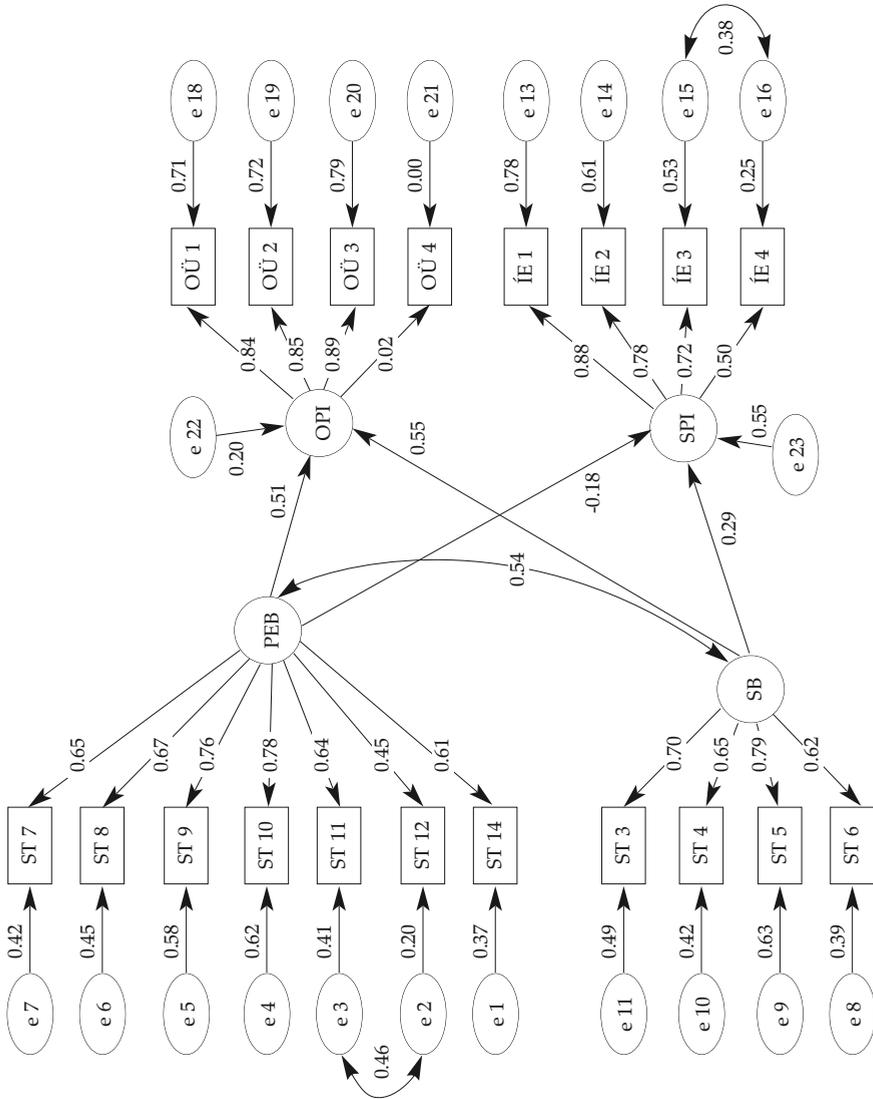


FIGURE 2  
Conceptual  
model results

Figure 2 depicts some of the effects of the research's independent variables on the dependent variables. The figure also shows the covariance connections made to keep the model fit index values within an acceptable range. First, covariance connections were established between the research's independent variables in accordance with the proposed modifications,

TABLE 7  
Research model  
fit indices

and then covariance connections were established between the pro-environmental behaviour scale's error terms e2-e3 and the second-hand product purchase intention scale's error terms e15-e16, respectively. When the covariance connections formed as a result of the proposed modifications were examined, it was discovered that all of them were formed between the error terms of the same factor. Table 7 shows the fit index values of the model after it was re-run as a result of these changes.

Fit indices	Good fit	Acceptable fit	Research model
$\chi^2$	$P > 0.05$ should be (meaningless)		505.945
$df$	-	145	
$\chi^2/df$	$< 3$	$3 < (\chi^2/df) < 5$	3.489
GFI	$> 0.95$	$> 0.90$	0.914
CFI	$> 0.95$	$> 0.90$	0.934
RMSA	$< 0.05$	$< 0.08$	0.065
NFI	$> 0.95$	$> 0.90$	0.911
IFI	$> 0.95$	$> 0.90$	0.935
TLI	$> 0.95$	$> 0.90$	0.923

Source: Jöreskog & Sörbom, 1984

As shown in Table 7, the model is among the acceptable fit index values, implying that the research model has an acceptable level of fit. The  $p$  values obtained as a result of the SEM were used to test the research hypotheses after the fit index values. Whether the hypotheses were supported or not, the significance level of  $p < 0.05$  was used. Table 8 shows the outcomes of the research hypotheses.

TABLE 8  
Hypotheses test results

Hypothesis	$\beta$	$R^2$	S.E.	P	Result
H1: PEB $\rightarrow$ OPI	0.518	0.202	0.080	***	Supported
H2: SB $\rightarrow$ OPI	-0.167		0.077	***	Supported
H3: PEB $\rightarrow$ SPI	0.548	0.553	0.074	***	Supported
H4: SB $\rightarrow$ SPI	0.285		0.071	***	Supported

The H1, H2, H3, and H4 hypotheses are supported at the  $p < 0.05$  significance level. As a result, according to H1, pro-environmental behaviour has a positive effect on organic product purchase intention and is supported; according to H2, saving behaviour has a negative effect on organic product purchase intention and is supported ( $R^2$ : 0.202); according to H3, pro-environmental behaviour has a positive effect on second-hand product purchase intention and is supported; and according to H4, it was determined that saving behaviour has a positive effect on second-hand product purchase intention and is supported ( $R^2$ : 0.553).

## DISCUSSION AND CONCLUSIONS

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The world's growing population, as well as the development of an excessive consumption culture, have revealed that existing resources must be used more sustainably. As a result, it is critical to use and protect existing resources with caution, keeping future generations in mind. Consumers must engage in sustainable consumption behaviour to achieve this. There are two dimensions to sustainable consumption: pro-environmental behaviour and saving behaviour. The primary goal of this study is to determine the effect of these constructs of sustainable consumption on organic product purchase intention and second-hand product purchase intention. The obtained data were analysed for this purpose, and meaningful results were obtained as a result of the analysis.

When the research findings are examined, all of the hypotheses are supported. According to the study's H1 findings, pro-environmental behaviour had a positive effect on organic product purchase intention. According to this finding, as consumers' pro-environmental behaviour improves or deteriorates, so does their organic product purchase intention. Several previous studies have found that consumers prefer organic products to protect the environment (Honkanen et al., 2006; Ahmed et al., 2021; Wang et al., 2020), because consumers believe organic products are less damaging to the environment than non-organic products. As a result, it can be stated that consumers who value the environment and seek to protect it through sustainable consumption are more likely to purchase organic products. Honkanen et al. (2006) discovered that environmental motives have a strong effect on attitudes toward organic food while researching the ethical motives of Norwegian consumers in organic food choices. Similarly, Ahmed et al. (2021), who investigated Chinese consumers' organic food purchase intentions, discovered that environmental concerns had a positive effect on the organic products purchase intention. As a result, it is clear that the result obtained within the scope of H1 agrees with similar research findings in the literature. According to the research's H2 hypothesis, saving behaviour had a negative effect on organic product purchase intention, and there was an inverse relationship between saving behaviour and organic product purchase intention. As a result, as consumers' savings behaviours increase, their intention to purchase organic products decreases; on the contrary, as consumers' saving behaviour decreases, their intention to purchase organic products also increases. Organic products are more expensive than non-organic products, which explains this, as the desire of consumers to spend less money is the foundation of saving behaviour. Consumers who save money are

less likely to buy organic products because they will spend more money on the organic product. Donaher and Lynes (2017) discovered that organic products are more expensive than non-organic products. While Kareklas et al. (2014) discovered that the tendency to save affects the organic food purchase intention in the opposite direction, Wang et al. (2021) also discovered that there is an inverse relationship between the consumers' tendency to save and their organic products purchase intentions. According to Katt and Meixner (2020), consumers' price awareness has a negative impact on their organic foods purchase intention. As a result, the result obtained within the scope of the research's H2 hypothesis coincides with the findings of the studies in the literature.

According to the H3 hypothesis of the study, pro-environmental behaviour has a positive effect on second-hand product purchase intention. Within the context of this result, the more environmentally conscious consumers are, the more likely they are to purchase second-hand goods. The use of natural resources for the production of new products, as well as the wastes generated by production, are both harmful to the environment. Consumers who are aware of this and practise environmentally responsible behaviour meet their needs with second-hand products rather than purchasing new products, and thus engage in sustainable consumption by avoiding excessive and unnecessary consumption. Grasso et al., (2000) stated that consumers buy second-hand products to protect the world, whereas Craig-Lees and Hill (2002) emphasised that consumers with pro-environmental behaviour buy second-hand products. According to Norris (2015), using second-hand products is an environmentally responsible behaviour that protects natural resources. Yan et al. (2015) discovered, on the other hand, that university students who shop at thrift stores are more environmentally conscious than those who do not. Borusiak et al. (2020) discovered significant relationships between sustainable consumption and the second-hand product purchase intention in a Polish sample. When these studies are considered, the conclusion reached in the scope of the H3 hypothesis is consistent with the findings of other studies in the literature. According to the research's H4 hypothesis, saving behaviour had a positive effect on the second-hand product purchase intention. As a result, consumers who save money are more likely to buy second-hand products. Many previous studies found that economic factors were decisive in second-hand product purchases by consumers; it was emphasised that these economic factors included constructs such as affordable price and bargaining power (Crewe & Gregson, 2003; Guiot & Roux, 2010). Consumers who save tend to fa-

your second-hand products because they want to meet their needs at a lower cost; they are saving by purchasing second-hand products. According to Ferraro et al. (2016), consumers who prioritise saving are more likely to buy used products. Therefore, the result obtained within the scope of the H4 hypothesis supports the literature as well.

When the research findings are considered as a whole, it is clear that sustainable consumption behaviour is critical for all people around the world, and that sustainable consumption behaviour has two constructs: pro-environmental behaviour and saving behaviour. Approaching sustainable consumption behaviour in terms of both organic and second-hand products in the research contributes significantly to the literature. Furthermore, it is suggested that both public institutions and non-governmental organisations raise consumer awareness of sustainable consumption and encourage them to consume second-hand and organic products. Furthermore, given that consumers who prefer to save money cannot afford organic products, it is suggested that organic product marketers work out pricing policies.

The study has some limitations as well as important findings. The research time constraint was that the research data could not be collected face to face due to the Covid-19 pandemic, and that the data were collected in a short period of time. In addition, the study employed the convenience sampling method, which limits the generalisability of the research findings. Researchers who plan to study this topic in the future should conduct in-depth research using various sampling and data collection methods, and then repeat the study by adding mediator and moderator variables related to the research model.

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## Kako prokolišno i štedljivo ponašanje određuju namjeru kupnje organskih i rabljenih proizvoda: istraživanje u Turskoj

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Istraživanje je usmjereno na održivu potrošnju, koja je nedavno postala vrlo popularna u Turskoj. Rad nastoji utvrditi učinke ponašanja usmjerenog na očuvanje okoliša i ponašanja štednje, a oba su konstruktivna ponašanja održive

potrošnje, na namjeru kupnje organskih i rabljenih proizvoda. U prikupljanju podataka upotrijebljena je metoda prigodnog uzorkovanja, u kojoj je svaki potrošač mogao sudjelovati u istraživanju, a podaci su prikupljeni pripremljenim online-upitnikom. Prema nalazima istraživanja koje je provedeno na 595 turskih potrošača, prookolišno ponašanje i štedljivo ponašanje imaju pozitivne učinke na namjeru kupnje rabljenih proizvoda, dok prookolišno ponašanje pozitivno utječe na namjeru kupnje organskih proizvoda, a štedljivo ponašanje na tu namjeru ima negativan učinak. Ovi nalazi daju značajan doprinos literaturi i praksi održive potrošnje.

Ključne riječi: održiva potrošnja, prookolišno ponašanje, štedljivo ponašanje, organski proizvod, rabljeni proizvod



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