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Makale Adı/Article Name

Investigation of The Impact of Religiosity on Food Waste*****

Dindarlığın Gıda İsrafı Üzerine Etkisinin Araştırılması

ABSTRACT

Food waste remains one of the most critical global economic challenges, heavily driven by consumer habits and behaviors. While research in this field is growing, the subject still demands deeper exploration. At the heart of this study lies the concept of religiosity, a fundamental element that shapes how consumers act. Although the impact of various faiths on waste has been documented, the role of Islamic religiosity—despite Islam's explicit prohibition of waste—has not been sufficiently addressed in the literature. This study aims to fill this gap by analyzing the influence of "Traditional" and "Popular" religiosity types on food waste among university student consumers in Türkiye. The findings reveal that traditional religiosity has a moderate, positive correlation with food waste-avoidance behaviors during shopping, consumption, and packaging stages. In contrast, popular religiosity shows a lower, yet still positive, correlation with these behaviors. Ultimately, these results highlight the transformative power of spiritual values on sustainable consumption and demonstrate how different forms of religious expression play distinct roles in preventing food waste.

Keywords: Food Waste, Islamic Economics, Religiosity, Consumption Theories.

ÖZ

Küresel ölçekte en kritik ekonomik sorunlardan biri olan gıda israfını besleyen önemli faktörlerden biri de tüketici alışkanlıkları ve davranışlarıdır. Gıda İsrafı hakkında yapılan çalışmalar artsa da konu hâlâ derinlemesine incelenmeye muhtaçtır. Tüketici davranışlarını şekillendiren temel unsurlardan biri olan dindarlık olgusu, bu araştırmanın odak noktasını oluşturmaktadır. Literatürde farklı inançların israf üzerindeki etkisi incelenmiş olsa da İslam'ın israfı kesin bir dille yasaklamasına rağmen, İslami dindarlık tipolojilerinin bu süreçteki rolü yeterince ele alınmamıştır. Bu çalışma, Türkiye'deki üniversite öğrencisi tüketiciler özelinde "Geleneksel" ve "Popüler" dindarlık biçimlerinin gıda israfı üzerindeki etkisini analiz ederek literatürdeki bu boşluğu doldurmayı amaçlamaktadır. Araştırma sonuçları, geleneksel dindarlığın; alışveriş, tüketim ve paketleme süreçlerinde gıda israfından kaçınma davranışı ile orta düzeyde ve pozitif bir ilişki içinde olduğunu göstermektedir. Popüler dindarlığın ise gıda israfından kaçınma davranışının daha düşük seviyede yine pozitif bir ilişki içerisinde olduğunu göstermektedir. Elde edilen bulgular, manevi değerlerin sürdürülebilir tüketim alışkanlıkları üzerindeki dönüştürücü gücünü ve dindarlık biçimlerinin israfı önlemedeki farklılaşan rollerini açıkça ortaya koymaktadır.

Anahtar Kelimeler: Gıda İsrafı, İslam Ekonomisi, Dindarlık, Tüketim Teorisi

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Introduction

Food waste is one of the world's major economic problems and the reason of market failures. On one hand, there is food worth more than $1 trillion wasted annually, while on the other hand, there are 783 million people suffering from hunger and 150 million children experiencing health problems due to it (UN, 2024:11). As the human population continues to grow and per capita food waste increases, total food waste is also rising (Minton et al. 2020:1247). Resources used in food production are not used effectively and are wasted, and this wasted food increases carbon emissions and pollutes the environment (Hamzaoğlu & Göktuna, 2022:211). Due to these problems, policymakers, scientists, and consumer groups are searching for ways to reduce food waste. Reducing food waste will contribute to the solution of problems such as food inflation, environmental pollution, and poverty. On an individual level, it will increase people's welfare.

The majority of food waste is generated by consumers, and therefore, consumer behaviour plays a key role in food waste (Filimonau et al. 2022:797-798). One of the factors influencing consumer behaviour is religion. There are various studies in the literature examining the relationship between religion, consumer behaviour, and food waste (Mathras et al. 2016; Minton et al. 2018; Minton et al. 2020; Filimonau et al. 2022; Hassan et al. 2022; Quian et al. 2022; Teng et al. 2023; Baran et al. 2024; Novanda et al. 2025). There are a limited number of studies conducted on Muslims and samples that include Muslims (Filimonau et al. 2022; Hassan et al. 2022; Baran et al. 2024; Hamzaoğlu & Göktuna, 2022; Durmuş et.al. 2023). Despite Islam unequivocally prohibiting waste, the limited number of studies conducted on Muslims is a loss for the economics literature. The first contribution of our research to the literature is aimed at addressing this deficiency. Secondly, religiosity typologies have not been addressed in studies conducted on Muslims or on samples that include Muslims. Filimonau et al. (2022) conducted a semi-structured interview with religious leaders and Muslims. Hassan et al. (2022) examined the waste generated in restaurants in Lebanon, covering a mass that included Muslims. Baran et al. (2024) studied consumers in Romania, Türkiye, and Italy, thus covering a mass that included both Christians and Muslims. Hamzaoğlu & Göktuna (2022) surveyed residents in various districts of Istanbul and found that income positively affects food waste. Durmuş et al. (2023), in their study conducted in Sakarya, Türkiye, a city predominantly inhabited by Muslims, found that the group studied believed that excessive consumption led to waste, and waste reduced savings; however, the study concluded that excessive food waste still occurred. Furthermore, these studies did not focus on food waste according to religiosity typologies. No study has been found in the literature on food waste according to religiosity typologies that examines a universe composed of Muslims. Thirdly, there is a need for empirical studies to support the limited number of theoretical studies examining food waste within the framework of Islamic economics (Dilek et al. 2018). Our study will also try to fill this gap in the literature.

In the first part of our study, the conceptual framework of the relationship between Religiosity typologies and Food Waste will be discussed. Our study does not address waste arising during production and retail sales, but instead focuses only on food waste generated by households. In the subsequent section, the results of the applied survey study will be examined. Confirmatory Factor Analysis (CFA) and Exploratory Factor Analysis (EFA) will be applied to the scales, followed by correlation analysis. Finally, the results of these analyses will be discussed.

1. Food Waste and Islam

For religiosity, we adopt the definition given by Kurt (2009:2): “The degree of acceptance, concentration on, and preoccupation with the beliefs, worship, and symbols of the religion to which one belongs.” In addition to this, there are various other definitions of religiosity in the literature (Kırış & Dilek, 2019:502). If we accept Kurt's (2009:2) definition of religiosity, then religious individuals belonging to the religion of Islam, which prohibits food waste, should not generate food waste. Research conducted on individuals belonging to religions other than Islam indicates a relationship between religiosity and food waste (Minton et al. 2019; Minton et al. 2020; Hassan, 2022; Teng et al. 2023; Baran et al., 2024). Briefly, religions take a negative view

of food waste, and individuals with high levels of religiosity who strictly adhere to their religious beliefs generate less food waste.

Although the religions are different, there are similarities between most religions regarding their perspective on food waste. Religions that guide people's daily lives are generally observed to prohibit food waste (Minton, 2020:1249-1250). Food waste is related to morality (Aydın & Yıldırım, 2021:2-3), which explains the relationship between religions and food waste. Religion plays a significant role in consumer behavior. Consumers communicate their religious identity to others and demonstrate the intensity of their religious beliefs through their consumer choices (Mathras et al. 2016:299). Religious rules (Halal, Kosher) serve as guidance that limits consumers' choices (Minton et al. 2019:443). One of the rules set by religion is the discouragement of food waste (Minton et al. 2020:1249-1250) since religion defines food as a gift or blessing from God.

Within the framework of the Quran and the Sunnah, Islam establishes rules and does not permit excesses in any matter, including consumption (Durmuş, 2022:282). In Islamic economics, consumers can maximize their benefits by consuming goods at a point of satisfaction (the middle way), and consuming more goods than necessary—i.e., waste—is forbidden (Dilek et al. 2018:34-35). Islam encourages consumers to share excess food with other people. While Islam prohibits wastefulness, a person's adherence to religious rules varies according to their level of commitment to their own religion. The level of concentration on the beliefs, worship, and symbols of the religion to which one belongs will determine the level of religiosity.

There are three typologies of religiosity used for Islam: Traditional, Popular, and Secular Religiosity. In traditional religiosity, also called Catechist religiosity, the individual firmly believes in the necessity of strictly obeying the commands and prohibitions of the religion. The belief in the necessity of fully performing acts of worship such as Salat (prayer) and Sawm (fasting) and the sensitivity to Halal and Haram (permissible and forbidden) are at a high level.

In secular religiosity, adherence to the religion remains at a mental commitment level, and compliance with religious rules takes a secondary role. The lives of secularly religious individuals do not differ from the modern lifestyle. Popular religiosity, on the other hand, manifests itself through the non-religious-based behaviours of individuals. Popular religious people are not distant from Islam; they show respect to great Islamic figures (Kırış & Dilek, 2019:507-508).

In various verses of the Quran, waste is strictly forbidden (Al-An'am:141, Al-A'raf:31, Al-Furqan:67). Despite this, the number of studies in the literature examining the relationship between religiosity and food waste in Muslim samples is low. While Filimonau et al. (2022) conducted research among Muslims, the samples in the studies by Hassan (2022) and Baran et al. (2024) are partially composed of Muslims.

The study by Hassan (2022) is noteworthy because it found that Christians have a higher tendency toward non-wasting food. Since Traditional Religiosity indicates strict adherence to Islamic worship and rules, it can be expected that their food waste levels remain very low or are non-existent. Popularly religious individuals are not distant from Islamic rules, but there is not the same intensity of concentration and commitment as seen in traditional religious individuals. For this reason, it can be expected that the level of food waste among popular religious individuals is not as low as the food waste level of traditional religious individuals.

The issue of waste is not addressed in neoclassical economic theories, as this neoclassical economic philosophy does not examine consumption from a moral standpoint. It theoretically analyzes consumption, examining the decisions of rational individuals pursuing utility maximization. This highlights the difference between neoclassical theory and Islamic economics. Islamic economics introduces a moral and social control mechanism over consumption behavior by adding the concept of 'waste' as a central constraint. Even though there are Islamic attempts to mathematize the concept of waste (Dilek et al. 2018), Islamic economics generally avoids mathematizing consumption concepts.

While classical economic theorists focused on the relationship between consumption and interest rates prior to the 1930s, Keynes introduced the Absolute Income Hypothesis, incorporating the

consumption function into economic theory. Keynes's work revealed that consumption is a significant factor influencing economic activity. Researchers such as Kuznets, Duesenberry, Brady, and Friedman put forward new approaches that criticized Keynes (Durmuş, 2022b:31-38). According to the Relative Income theory proposed by Duesenberry, individuals increase their consumption when their income increases, but they do not want to decrease their consumption when their income decreases. People's consumption decisions are influenced by their social environment; regardless of income, people's consumption is adjusted according to the living standards of the society (Tarı & Çalışkan, 2005:6). Fisher's intertemporal consumption model argues that rational people's consumption and saving decisions are time-dependent. When making consumption decisions, people also make choices between today and tomorrow. According to Fisher's intertemporal consumption theory, individuals do not have budget constraints; they can trade their consumption between today and tomorrow by making positive or negative savings (Durmuş, 2022b:46-50). The life cycle hypothesis, proposed by Modigliani and his colleagues, suggests that rational consumers aim to maximize their lifetime utility. They achieve this by allocating their consumption equally to each stage of their lives. The purpose of saving is to compensate for potential negative savings in unexpected situations or during retirement, thereby maintaining an average level of consumption (Serim & Öztürk, 2018:148).

2. Methodology

To examine whether Traditional Religiosity and Popular Religiosity affect food waste, a survey was administered to 407 participants. However, due to incomplete or incorrectly filled questionnaires, only 395 were included in the analysis. The survey was conducted online using a form prepared via Google Forms. University students in Kastamonu were selected as the main population for the study. For a universe of 100 million, a sample size of 384 people is sufficient with a 5% margin of error (Küçük, 2016:95).

The Traditional Religiosity and Popular Religiosity scales were adopted from Kırış & Dilek (2021). The Food Waste Non-Wasting scale was adopted from Kaya & Dilek (2024). First, Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were applied to the scales. Subsequently, correlation analysis was performed.

3. Findings

Findings regarding demographic variables for a sample of 395 people are presented in Table 1.

Table 1. Demographic Variables

Variables	**Group (n=116)**	
	n	**%**
Gender		
Male	167	42.3
Female	228	57.7
Age		
18-25	121	30.9
26-35	128	32.4
36-45	87	22
46-55	46	11.7
56+	13	3
Income		
Too Low	5	1.3

Low		31	7.8
Medium		279	70.6
High		69	17.5
Very High		11	2.8
Marital status			
Married		198	50.1
Single		197	49.9
	Toplam	**395**	**100.0**

63.3% of the participants are aged 35 and under, meaning that the young population is dominant in the sample. Furthermore, a large proportion of the participants, 70.6%, are in the middle-income bracket. The proportion of women among the participants is 57.7%, which is higher than that of men. The ratio of married to single participants is very close.

The Cronbach's Alpha value for the Shopping Food Non-Wasting scale is 0.865; for the Packaging Food Non-Wasting scale it is 0.866, and for the Consumption Food Non-Wasting scale it is 0.855. Since the Cronbach's Alpha values are above 0.70, the scales are considered reliable.

Exploratory Factor Analysis (EFA) was performed for the sub-dimensions of food waste: shopping, packaging, and consumption. Principal Components Analysis and the Varimax Rotation Method were used. The factor loadings and the mean, standard deviation, skewness, and kurtosis values of the items constituting these three factors are given in Table 2.

Table 2. EFA Results

Item	Shopping	Packaging	Consumption	Mean	Stan.dev.	Skewness	Kurtosis
SW1	0.797			3.72	0.931	-0.815	0.807
SW2	0.796			3.83	0.894	-1.036	1.554
SW3	0.769			3.56	0.997	0.683	0.295
SW4	0.765			3.69	0.945	-0.895	0.712
SW5	0.672			3.67	1.106	-0.788	-0.110
PW4		0.880		3.54	0.990	-0.598	-0.037
PW5		0.853		3.68	0.909	-0.658	0.167
PW3		0.741		3.75	0.996	-0.808	0.424
CW5			0.787	3.97	0.865	-1.144	1.859
CW3			0.778	3.96	0.929	-1.230	1.768
CW2			0.760	4.01	0.846	-0.980	1.341
CW4			0.749	3.91	0.943	-1.075	1.281
KMO: ,894 Chi Square:2408,375 sd:66 sig:,000 Toplam Açıklanan Varyans:%69,416							

According to the Exploratory Factor Analysis (EFA) results, the sub-dimensions of Shopping, Packaging, and Consumption emerged. The items CW1, PW1, and PW2 were excluded due to insufficient loading. The means of the items range between 3.54 and 4.01. Skewness and kurtosis values were checked to determine whether the items fit a normal distribution. Since the skewness and kurtosis values of all items are between -2 and +2, the assumption that they fit a normal distribution is acceptable (Lin et al. 2016, cited by: Yıldız & Aslan 2019:105).

The KMO value (0.894), the Bartlett's Chi-Square test (2408.375), the degrees of freedom (66), and the significance value (0.000) indicate that the scale is sufficient for factor analysis.

According to the EFA analysis, the three factors (Shopping, Consumption, Packaging) explain 69.564% of the total variance.

For the Consumption sub-dimension, the AVE (Average Variance Extracted) value is 0.7498 and the CR (Composite Reliability) value is 0.9930; for the Shopping dimension, the AVE value is 0.7572 and the CR value is 0.9942; and for the Packaging dimension, the AVE value is 0.7641 and the CR value is 0.9852. The conditions AVE > 0.50, CR > 0.80, and CR > AVE are met for all three sub-dimensions. These results indicate that the scales satisfy convergent validity (or composite validity).

In addition to EFA, Confirmatory Factor Analysis (CFA) was performed. The CFA results are presented in Table 3.

Table 3. CFA Results (Food Non-Wasting)

	X2	df	CMIN/Df	NFI	TLII	CFI	AGFI	RMSEA
	88.127	51	1.728	0.964	0.98	0.984	0.946	0.043

It is observed that a good fit is provided as the following conditions are met: CMIN/DF < 3; NFI > 0.95; TLI > 0.95; CFI > 0.97; and AGFI > 0.90. The CFA diagram is shared in Figure 1. The factor loadings of the scale are seen to be above 0.50.

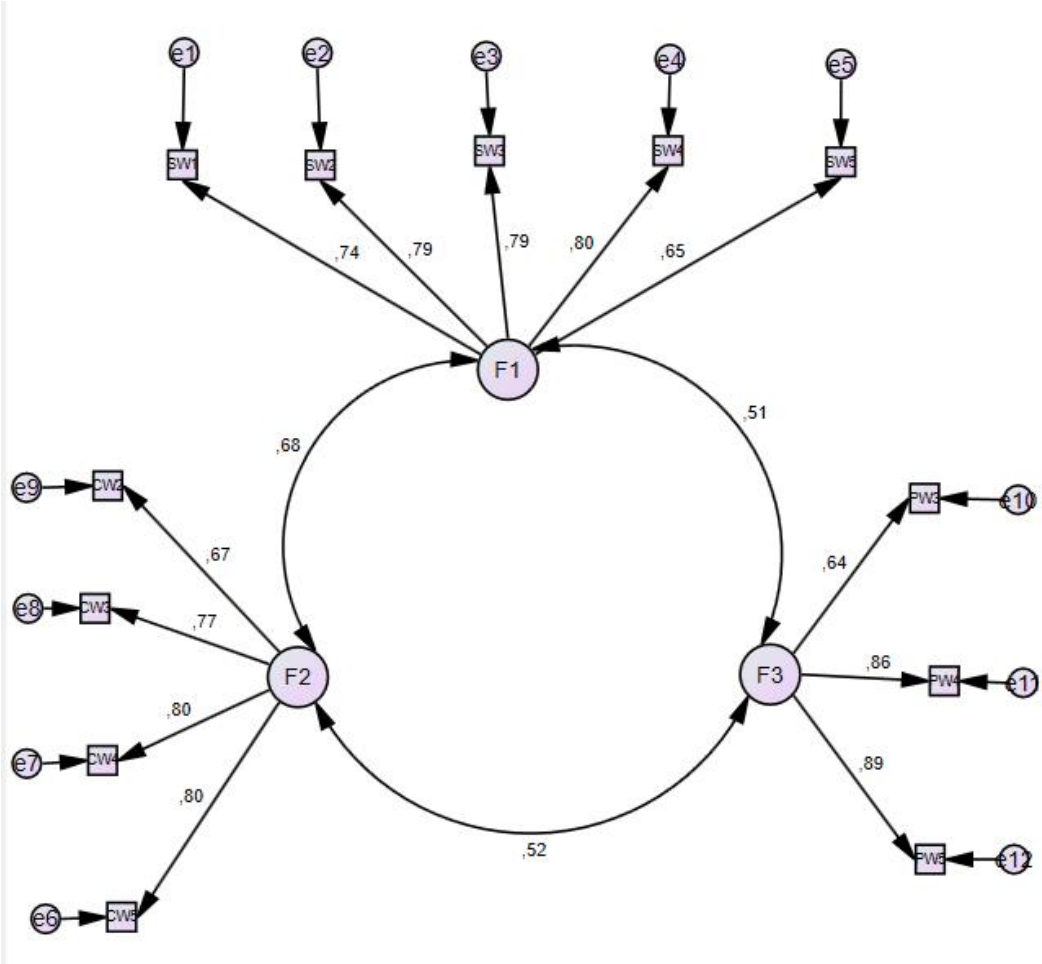


Figure 1. EFA Results (Food Non-Wasting)

EFA and CFA analyses were also performed for the Traditional and Popular Religiosity scales.

Principal Components Analysis and the Varimax Rotation Method were used. The factor loadings, and the mean, standard deviation, skewness, and kurtosis values of the items constituting these two factors are given in Table 4. The Cronbach's Alpha coefficient for Traditional Religiosity is 0.908, and for Popular Religiosity is 0.828, which indicates that the scales are reliable.

Table 4. EFA Analysis (Religiosity Scale)

Item	Traditional	Populer	Mean	Stan. Dev.	Skewness	Kurtosis
GD6	0.818		4.16	0.978	-1.453	2.071
GD12	0.817		4.02	1.118	-1.216	0.869
GD4	0.815		3.91	1.027	-1.196	1.293
GD10	0.793		3.79	0.967	-1.038	1.041
GD2	0.771		4.16	1.066	-1.351	1.287
GD7	0.745		4.00	1.108	-1.090	0.570
PD4		0.854	3.15	1.117	-0.473	-0.755
PD1		0.820	3.52	1.050	-0.777	0.098
PD2		0.744	3.63	1.108	-0.962	0.295
PD3		0.710	3.49	1.028	-0.771	0.165
KMO: ,907 Chi Square:2299,682 sd:45 sig:,000 Toplam Açıklanan Varyans:%68,924						

Due to insufficient loading, items GD1, GD3, GD5, GD8, GD9, and GD11 were eliminated. The skewness and kurtosis values for all items except GD6 remained between the values of -2 and +2, and thus were accepted as satisfying the normality conditions (Lin et al. 2016, cited by: Yıldız & Aslan 2019:105). The item means also range between 3.15 and 4.16.

The KMO value (0.907), the Bartlett's Chi-Square test (2299.682), the degrees of freedom (45), and the significance value (0.000) indicate that the scale is sufficient for factor analysis. According to the EFA analysis, the two factors (Traditional and Popular Religiosity) explain 68.924% of the total variance.

For the Traditional Religiosity sub-dimension, the AVE (Average Variance Extracted) value is 0.6298 and the CR (Composite Reliability) value is 0.8654; for the Popular Religiosity sub-dimension, the AVE value is 0.6148 and the CR value is 0.9815. The conditions AVE > 0.50, CR > 0.80, and CR > AVE are met for both sub-dimensions. These results demonstrate that the scales satisfy convergent validity (or composite validity).

In addition to EFA, Confirmatory Factor Analysis (CFA) was performed. The CFA results are presented in Table 3.

Table 5. CFA Results (Religiosity Scale)

	X2	df	CMIN/Df	NFI	TLII	CFI	AGFI	RMSEA
	109.136	33	3.307	0.953	0.954	0.967	0.916	0.077

The model shows a good fit as it meets the conditions NFI >0.95; TLI >0.95; AGFI >0.90. The CMIN/DF and CFI values are also acceptable as they meet the conditions CMIN/DF<5 and CFI>0.90.

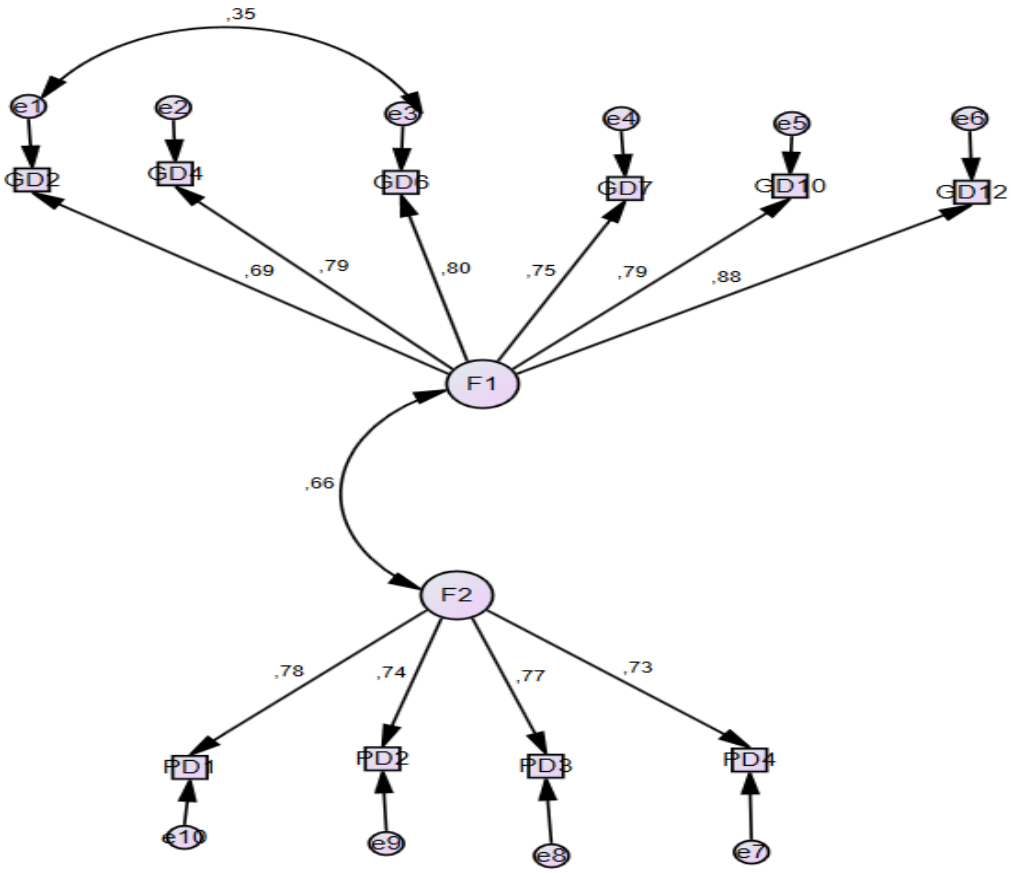


Figure 2. CFA Results (Religiosity Scale)

The CFA diagram is shared in Figure 2. The factor loadings of the scale are seen to be above 0.50.

After performing EFA and CFA analyses for the Food Waste Non-Wasting and Religiosity scales, Correlation Analysis was conducted. The results of the Correlation Analysis are presented in Table 6.

Tablo 6. Correlation

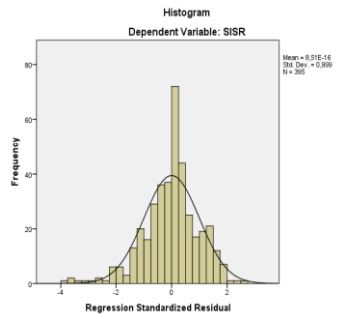
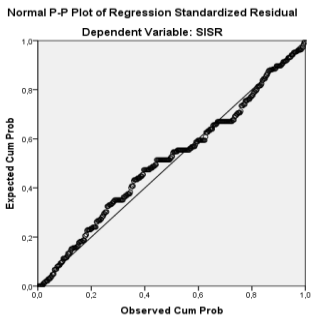
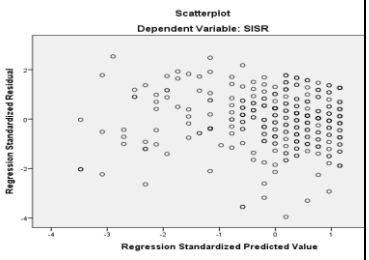
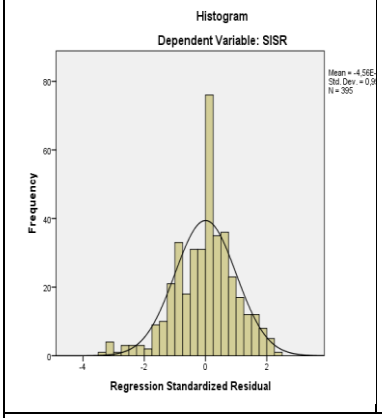
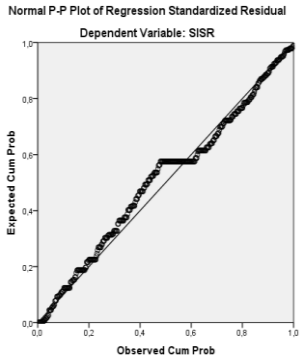
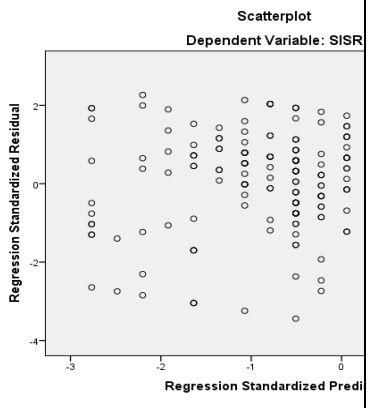
	GDİN	PDİN	SİSR	CİSR	PİSR
GDİN	1	0.563** ,000	0.466** ,000	0.471** ,000	0.411** ,000
PDİN	0.563** ,000	1	0.334** ,000	0.285** ,000	0.288** ,000
SİSR	0.466** ,000	0.334** ,000	1	0.582** ,000	0.458** ,000
CİSR	0.471** ,000	0.285** ,000	0.582** ,000	1	0.472** ,000
PİSR	0.411** ,000	0.288** ,000	0.458** ,000	0.472** ,000	1

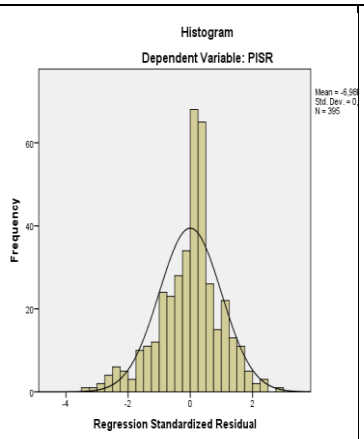
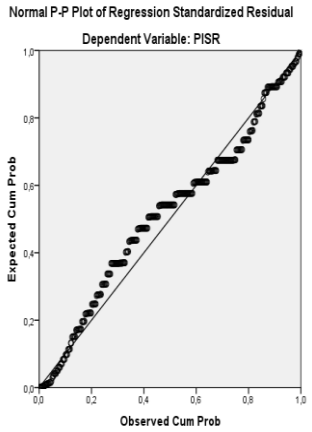
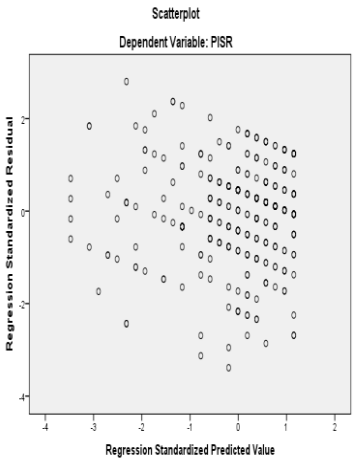
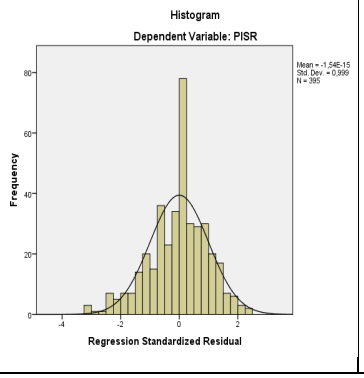
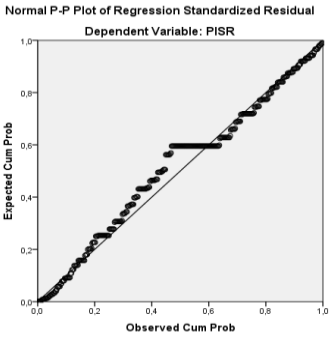
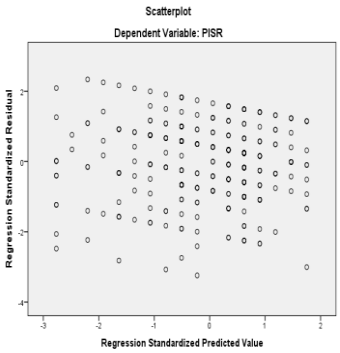
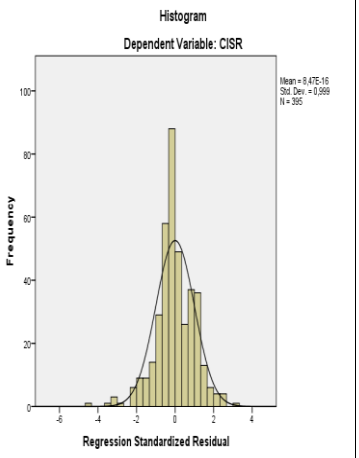
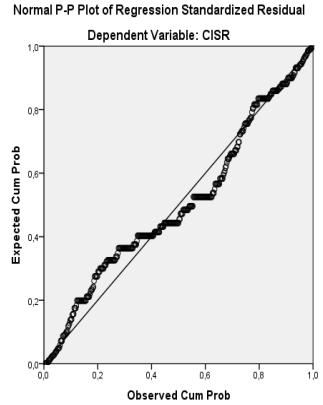
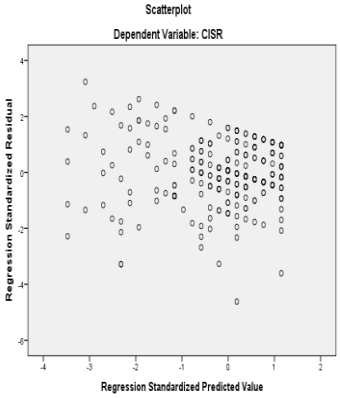
**:0,01 significant at

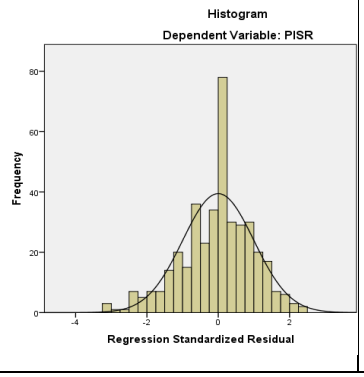
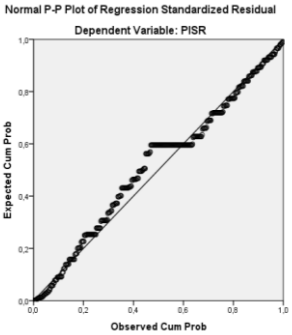
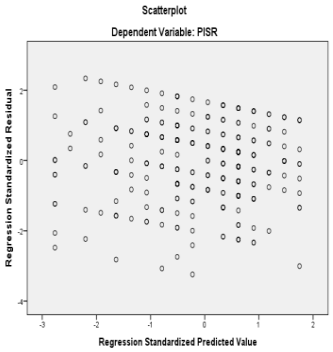
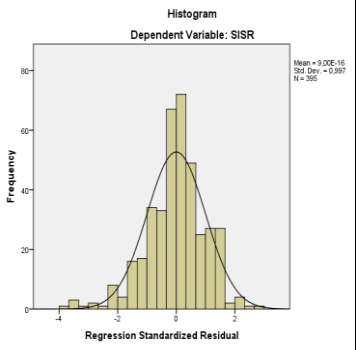
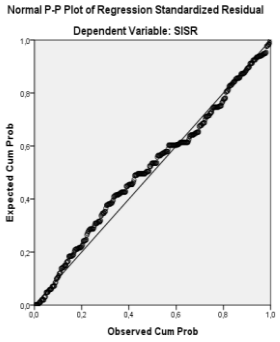
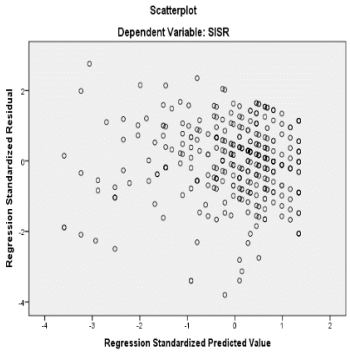
A positive, moderate correlation was found between Traditional Religiosity and the Food Waste Non-Wasting subscales. A positive, weak correlation was found between Popular Religiosity and the Food Waste Non-Wasting subscales. That is, as the level of Traditional Religiosity increases, the tendency to not waste food also increases.

Finally, seven regression models were attempted to be established to examine whether Traditional and Popular Religiosity affect the tendencies to not waste food. However, due to the low Adjusted R-squared values and the shape of the Scatterplot curves in these regression models, the hypothesis that the variables are homoscedastic (have equal variance) was observed to be rejected. In other words, regression equations could not be established. There are studies which argue that Adjusted R-Square values of 0.10 and above are also acceptable in the social sciences (Ozili, 2023:8). Our sample consists of a population with high homogeneity in terms of age, gender, income, and socioeconomic status. This low variance in the data made setting up regression analysis difficult.

Table 7. Regression (Model 1)

Model 1		
Model 1 (Dependent SISR, Independent: GDİN)	SISR =1993 + 0.425GDIN	Cooks (max):0.080 Durbin Watson: 1.938 Adjusted R2:0.215
		
Model 2		
Model 2 (Dependent SISR, Independent: PDİN)	SISR =2670 + 0.297PDIN	Cooks (max):0.080 Durbin Watson: 1.937 Adjusted R2:0.109
		
Model 3		
Model 3 (Dependent PISR, Independent: GDİN)	PISR =2064 + 0.398GDIN	Cooks (max):0.066 Durbin Watson: 2.045 Adjusted R2:0.167

		
Model 4		
Model 4 (Dependent PISR, Independent: PDİN)	PISR =2717 + 0.272PDIN	Cooks (max):0.070 Durbin Watson: 2.011 Adjusted R2:0.167
		
Model 5		
Model 5 (Dependent PISR, Independent: PDİN)	PISR =2341 + 0.404PDIN	Cooks (max):0.148 Durbin Watson: 1.929 Adjusted R2:0.220
		

Model 6		
Model 6 (Dependent PISR, Independent: PDİN)	PISR =3137 + 0.239PDIN	Cooks (max):0.128 Durbin Watson: 1.909 Adjusted R2:0.079
		
Model 7		
Model 7 (Dependent SISR, Independent: GDİN,Gender)	SISR=1626 + 0.415GDIN +0.257Gender	Cooks (max):0.070 Durbin Watson: 1.919 Adjusted R2:0.239
		

4. Conclusion and Discussion

Food waste is not just a matter of individual belief, but also an economic problem that generates serious negative externalities (social and environmental costs). Therefore, reducing or preventing food waste is also an economic issue. A positive, moderate correlation was found between Traditional Religiosity and the Food Waste Non-Wasting subscales. A positive, weak correlation was found between Popular Religiosity and the Food Waste Non-Wasting subscales. However, regression models could not be established because the necessary assumptions (prerequisites) were not met.

These results confirm the research in the literature which suggests that religiosity influences consumer behaviour (Mathras et al. 2016; Minton et al. 2018; Minton et al. 2019; Minton et al. 2020; Novanda et al. 2025). However, the aforementioned studies were primarily conducted on Christian samples. Studies where a part of the sample consisted of Muslims, such as those by Hassan et al. (2022), Teng et al. (2023), and Baran et al. (2024), also concluded that religiosity increases the tendency for food non-wasting. Despite the clear prohibition of waste in the two primary sources of Islam, the Quran and the Sunnah, the number of studies investigating the relationship between religiosity and food waste among Muslims is low. Filimonau et al. (2022), through a semi-structured interview conducted with Muslims, concluded that religiosity

influences the tendency for non-wasting, albeit to a limited extent, which is consistent with the findings of our research.

Our research findings indicate that religiosity can be a significant motivating factor in preventing waste. These results suggest that research into whether religious education can also help prevent food waste will contribute to the literature. Our research findings indicate that religiosity can be a significant motivating factor in preventing waste. These results suggest that research into whether religious education can also help prevent food waste will contribute to the literature. Given that economic literacy can raise awareness among people about the negative impacts of wasted food on their own budgets, common societal resources, and the ecological environment, future researchers could study the relationship between economic literacy and food waste.

According to research conducted by Karakaş (2022) in Çorum, a province in Türkiye, secular-materialist values influence environmental and waste awareness. Our research is important for investigating the relationship between food waste and religiosity in university students of Kastamonu (The University in Türkiye), but the literature can be expanded by conducting more research within the country. Our study was conducted on university students in a small city in Türkiye (Kastamonu). Therefore, caution should be exercised when making generalizations about Türkiye or the world. It is possible that differences in lifestyle and religiosity between major metropolitan areas and smaller cities could lead to different results. New researchers could investigate the relationship between food waste and religiosity on a province-by-province basis. Furthermore, similar studies could be conducted in other countries, which would also allow cultural differences to expand the literature on the relationship between food waste and religiosity.

The second limitation of our study is the failure to examine the relationship between Secular Religiosity and food waste. A study investigating the food non-wasting tendency of the secularly religious segment in Türkiye would contribute to the literature. Our research contributes to the literature by studying the Traditional Religious and Popular Religious typologies, distinguishing it from other studies in the literature.

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Contribution Statement

The authors contributed as Büşra Nursuhan ŞANO:%28, Arzu Yalçınkaya:%28, Serkan DİLEK: %28 and Ali Konak: %16 of the article.

Conflict of Interest Statement

The authors declare that they have no financial relationships or personal relationships that could be related to this study and therefore have no conflict of interest.

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