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Decoding the Green Narrative: Exploring the Interplay between Media Literacy and Consumer Perceptions of Greenwashing

Yeşil Anlatıyı Çözmek: Medya Okuryazarlığı ile Tüketicinin Yeşil Aklama Algısı Arasındaki Etkileşimi Keşfetmek

Meltem ÖZEL[1]

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Abstract: People who consume resources without considering the future exist on the one hand, and people who have never had access to certain resources on the other. Although many businesses simply seem to adhere to sustainability, those who uphold this concept are concerned about safeguarding resources for future generations. How well-informed are customers, and what impact does media literacy have? The goal of this study is to improve comprehension of viewpoints of consumers on greenwashing and media literacy and discover whether there is a meaningful relationship between the two. This study also investigates the function of green literacy in promoting environmentally friendly behavior and sustainable consumption. A three-stage survey on greenwashing, media literacy, and demographic information was administered to 256 undergraduate students in Istanbul between October 10 and December 14, 2023. According to the study's findings, consumers' capacity to evaluate the veracity of environmental claims and greenwashing techniques is improved by greater media literacy; nevertheless, their opinions are not much effected by taking media literacy classes or events.

Keywords: corporate social responsibility, ecomedia literacy, green literacy, greenwashing, sustainability

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Öz: Bir yanda kaynakları geleceği düşünmeden tüketen insanlar varken, diğer yanda ise belirli kaynaklara hiç ulaşamamış olan insanlar bulunmaktadır. Her ne kadar pek çok işletme sürdürülebilirlik kavramına bağlı gibi görünse de sürdürülebilirlik ilkesini savunanlar, gelecek nesiller için kaynakların korunması konusunda endişe duymaktadır. Peki müşteriler bu konuda ne kadar bilgili ve medya okuryazarlığının bu alanda nasıl bir etkisi var? Bu çalışma, yeşil okuryazarlığın çevre dostu davranışı ve sürdürülebilir tüketimi teşvik etmedeki işlevini araştırırken, tüketicilerin yeşil aklama ve medya okuryazarlığı algılarının anlaşılmasını geliştirmeyi ve ikisi arasında anlamlı bir ilişki olup olmadığını tespit etmeyi amaçlamaktadır. 10 Ekim - 14 Aralık 2023 tarihleri arasında İstanbul'da 256 lisans öğrencisine yeşil aklama, medya okuryazarlığı ve demografik bilgilerle ilgili üç aşamalı bir anket uygulanmıştır. Çalışmanın bulgularına göre, tüketicilerin çevresel iddiaların ve yeşil aklama tekniklerinin doğruluğunu değerlendirme kapasiteleri daha fazla medya okuryazarlığı ile iyileşmekte; ancak medya okuryazarlığı derslerine veya etkinliklerine katılarak görüşleri çok fazla etkilenmemektedir.

Anahtar Kelimeler: kurumsal sosyal sorumluluk, eko-medya okuryazarlığı, yeşil okuryazarlık, yeşil aklama, sürdürülebilirlik

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[1]Dr. Öğr. Üyesi, Meltem Özel, Adıyaman Üniversitesi, meltemozel@adiyaman.edu.tr.

1. Introduction

Consumers are eager to purchase sustainably produced goods, but they require media literacy skills to ensure that the products in issue are actually sustainable. Although consumers are increasingly choosing sustainably produced goods, it takes strong media literacy skills to be able to identify really sustainable products.

Green and sustainable consumption has emerged as a key component of contemporary consumer behavior, representing a group effort to lessen environmental problems and advance sustainable growth. Green marketing claims have been made by brands in response to consumers' growing desire for eco-friendly products. But not all of these assertions are accurate. Greenwashing, the practice of businesses misrepresenting their goods as ecologically friendly, has become a major obstacle that undermines confidence, breeds misunderstanding, and obstructs the development of real sustainability. In this regard, the idea of "green literacy" has become more significant as a vital consumer tool. Green literacy is based on media literacy concepts and enables people to assess environmental claims critically, spot dishonest techniques like greenwashing, and make decisions based on values. Customers are better able to critique businesses for their environmental commitments and comprehend the nuances of sustainable consumption when they possess green literacy.

Several studies have looked at how green marketing influences customer choices (Krstić et al., 2021) and how greenwashing affects green brand equity (Chen, 2013; Chen et al., 2014; Chen et al., 2016). Some research shows that age disparities affect the kinds of green products that people buy (Squires, 2019) and that greenwashing undermines consumer pleasure, trust, and perceived product quality (Yıldız and Kırmızıbiber, 2019). Marinier et al. (2023) on Thai youth emphasize the significance of media literacy in identifying greenwashing and making informed environmental decisions, while interventions like literacy programs that incorporate textual and visual elements show promising results in countering deceptive green advertising (Fernandes et al., 2020; Eng et al., 2021).

The concept of "green literacy" is increasingly essential as a consumer tool. Green literacy builds on media literacy concepts, allowing individuals to critically analyze environmental claims, recognize dishonest practices like greenwashing, and make judgments based on values. Consumers that are green literate are more equipped to critique corporations for their environmental commitments and comprehend the subtleties of sustainable consumption. In order to counter deceptive marketing tactics and promote genuine environmental action, this article explores the relationship among sustainable and green consumption, greenwashing, and green literacy. It emphasizes the crucial need for education and critical thinking.

2. Literature

2.1. Sustainable And Green Consumption

Sustainable consumption and green consumption, which are among the basic components of environmental sustainability, encourage ethical and environmentally friendly purchasing behaviors to lessen the damaging effects that human activities on the environment.

Krstić et al. (2021) researched how green marketing influences green consumer decisions. According to Squires's (2019) research, there was no statistically significant variation in the number of green items purchased between generations; however, there were disparities in the categories of green products purchased by each generation. In Jones et al.'s (2010) study, sustainable consumption is defined as meeting today's needs at a level that does not compromise our children's ability to meet their own demands. This type of consumption includes all three aspects of sustainability: social, economic, and environmental. To give a few examples, consuming less overall, recycling materials, reusing products, promoting fair trade, and supporting producers who adopt ethical production methods can be some ways to contribute to sustainable consumption practices. These approaches aim to maintain a sustainable balance that both

protects the environment and meets human needs. Jackson (2005) shows that encouraging sustainable consumption is very important because consumers' behavior greatly influences the adoption of sustainability principles. This highlights the need for laws and initiatives that motivate people to make decisions that protect the environment. In their comprehensive analysis of the literature on sustainable consumption, Reisch and Thøgersen (2015) emphasize the value of theoretical frameworks and empirical research in guiding policy initiatives.

According to Jones et al. (2010), green spending is the conscious practice of choosing goods and services that have the least harmful impact on the environment when making purchases. Green consumers aggressively promote environmentally friendly businesses, work to increase consumer desire for sustainable products, and work to create a more sustainable economy and society. In his research on green marketing strategies, Ottman (2011) emphasizes the value of truly sustainable branding in building consumer trust and encouraging environmentally friendly product purchases. Peattie (2010) also emphasizes how marketing strategies can integrate green consumption trends and corporate responsibility in his studies of sustainable marketing tactics. Thøgersen and Schrader (2012) emphasize the effects of consumer attitudes on green purchasing practices and the development of effective marketing tactics.

Although consumers are prepared to purchase things made in a sustainable manner, greenwashing obscures the sustainability of these commodities. Although brands may advertise that their operations are sustainable or environmentally friendly, they might not actually live up to these ideals.

2.1.1. Greenwashing

The United Nations defines greenwashing as one major barrier to combating climate change. Greenwashing encourages phony responses to the climate crisis that divert attention from and postpone tangible, verifiable action by deceiving the public into thinking that a business or other organization is doing more to safeguard the environment than it is. According to Corcione (2020), greenwashing is a misleading advertising strategy used to humorously trick people into supporting companies that care about the environment by purchasing goods and services. Greenwashing occurs when an organization or group spends more time and budget on promoting its ecologically benign nature rather than reducing its negative impact on the environment.

Companies are expected to act with Corporate Social Responsibility (CSR) awareness and fulfill their social and environmental obligations. Ottman (2011) argues that greenwashing is ubiquitous in corporate sustainability efforts. According to Zhang (2018: 740), growing consumer demand "pushes businesses to create green marketing strategies to demonstrate to consumers their social responsibility and positive corporate image." Fombrun and Shanley (1990) define greenwashing as a type of reputation management approach in which companies present themselves as environmentally responsible to improve their market position and brand image, regardless of their actual environmental performance. Carroll (1991) defines greenwashing as companies engaging in deceptive environmental commitments to improve their reputations.

Baum (2012: 424) defines "greenwashing" as the act of misleading customers about a company's environmental policy or the environmental benefits of a good or service. Delmas and Burbano (2011) define greenwashing as the intersection of positive communication about environmental performance and poor environmental performance. They argue that competitive forces, regulatory environments, and customer expectations are important factors in shaping firms' misleading environmental behavior. According to Becker-Olsen and Potucek (2013), greenwashing is the act of misrepresenting a company's environmental initiatives or spending more money to make the organization look green than to adopt ecologically responsible practices.

Several studies have examined the impact of greenwashing on green brand equity (Chen, 2013; Chen et al., 2014; Chen et al., 2016). Yıldız and Kırmızıbiber (2019) demonstrated a beneficial relationship between green word-of-mouth and green brand equity, and consumers who are exposed to brands that engage in

greenwashing report lower levels of trust, contentment, and perceived quality. Excessive product packaging has been shown in studies to have a negative impact on green brand equity but a good impact on greenwashing and green confusion. According to these studies, the negative association between greenwashing and green brand equity is moderated by brand credibility, which lessens the negative effects of greenwashing (Qayyum et al. 2023). Fernandes et al. (2020) indicate one of the most effective strategies to stop misleading green ads is through the intervention of a literacy program that incorporates both textual and visual elements to differentiate genuine from deceptive green advertising. The simplest form of greenwashing was determined to be the most efficient at reducing consumption. The work of Eng et al. (2021) aimed to test how literacy interventions can help consumers identify greenwashing and make informed environmental decisions using examples such as quotes and visuals. They investigated the effects of these interventions on perceived vividness, cognitive load, and usability estimation, providing insights for designing effective educational tools on social media. Marinier et al. (2023) examined Thai youth's ability to detect greenwashing and other misleading advertising using media literacy principles.

2.2. Literacy

"Literacy" refers to the ability to read and write. "Media and information literacy" (MIL) is the capacity to use various forms of media safely, wisely, and responsibly. MIL is a set of skills that allows a person to access media, analyze media content, generate new media messages, reflect on existing media content, and act on media. Media and information literacy enhances comprehension of complex communications across various media platforms, including newspapers, books, radio, television, billboards, websites, and social media. They can identify deception, authenticate facts, and create media messages themselves (Braesel and Karg, 2021: 9).

Information literacy emphasizes the importance of acquiring information, as well as analyzing and applying it ethically. Media literacy, on the other hand, emphasizes the ability to understand media functions, evaluate how they are performed, and use media for self-expression in a responsible manner. Media and Information Literacy (MIL) refers to a variety of related literacies, including "media literacy, information literacy, freedom of expression and information literacy, library literacy, news literacy, computer literacy, internet literacy, digital literacy, film literacy, games literacy, television literacy, advertising literacy" (Wilson et al., 2011: 19) and other types of literacy. López (2015) explores methods and approaches that can facilitate the integration of sustainability into MIL and offers a proposal that aims to combine the objectives of MIL with sustainability education (López, 2014) such as green literacy, eco-media literacy, and environmental literacy.

2.2.1. Green Literacy

Green literacy promotes sustainable consumerism and exposes dishonest corporate green initiatives. To encourage sustainable activities, ecologically conscious behavior, and a critical comprehension of environmental messaging in the media, green literacy is essential. Green literacy can be defined as the ability to be aware of, critically analyze, and evaluate how a company's environmental image affects the audience's perspective on the environment and environmental decision-making process. Green literacy skills encourage the development of critical thinking abilities by enabling the distinction between verifiable records, misleading environmental claims, and "greenwashing". Green literacy includes understanding the relationships between ecosystems, environmental problems, environmental deterioration, and human activity. Numerous studies have shown how critical green literacy the importance of green literacy in raising environmental consciousness and promoting. Understanding environmental issues, sustainable behaviors, and their impacts on the environment are key components of green literacy. Ecomedia literacy, also known as environmental literacy, is sometimes used interchangeably with green literacy, and it focuses on raising environmental awareness, educating about sustainability, and assisting individuals in making informed decisions regarding ecological issues. The common focus of both types of literacy is sustainability. Incorporating ecomedia and green literacy into educational curricula can improve students' understanding

of environmental issues, the representation of sustainability in the media, and the connection between media messages and personal behaviors, and promote a comprehensive approach to environmental education and learning. The goal of ecomedia literacy and green literacy is to teach individuals how our daily media use impacts our capacity to live sustainably within the planet's ecological boundaries, both now and in the future. (Jones, Selby, & Sterling, 2010; Sterling, 2001; Rickinson & Lundholm, 2008; Hungerford & Volk, 1990; López, 2015).

3. Methodology

This study investigates the function of green literacy in promoting environmentally friendly behavior and sustainable consumption, aims to identify consumers' perceptions of greenwashing and media literacy, and determine whether there is a significant relationship between the two.

The universe of the research consists of university students and the sample consists of university students in Istanbul, a multicultural city with a large and diverse population and high consumption levels. Within the random sampling technique, the sample was established. It is recommended that the sample size in the study be between five and ten times the number of items in the scale (Akgül, 2005). The survey consists of 47 items, and it is aimed to reach at least 235 people, which is equal to 47 times 5.

The data gathering form has three stages. The first stage comprised Andreoli et al.'s (2022) "the Consumer Judgment on the Practice of Greenwashing" scale for greenwashing. The second stage uses the "New Media Literacy Scale" created by Lin et al. (2013) for media literacy which inspired by Chen et al.'s (2011) framework and developed by Koç and Barut (2016) for university students. In the third stage of the investigation, questions were developed to gather demographic information from the participants. The following study questions, which mirror the survey's primary goal, look at the connection between students' media literacy and students' understanding of greenwashing:

1) What is the relationship between university students' media literacy and their perspectives on greenwashing?

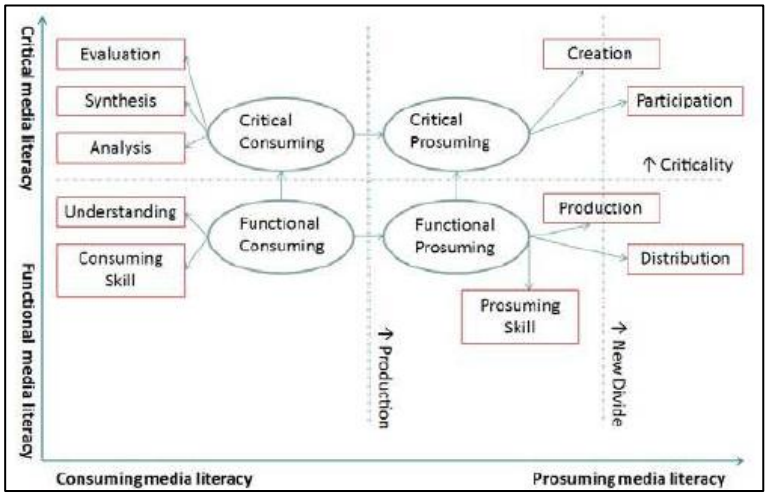
2) What are university students' views on the accuracy of green labels, the accuracy of environmental statements, and environmental claims?

3) Are university students critical of greenwashing methods, and if so, is this related to their media literacy?

4) What effects do media literacy skills have on students' evaluation of environmental claims and decision-making in purchasing processes?

The NML consists of four types of literacy: functional consumption (FC), critical consumption (CC), functional prosumption (FP) and critical prosumption (CP). NML scale is defined by these four dimensions and ten indicators: functional consuming (skill and understanding), critical consuming (analysis, synthesis, and evaluation), functional prosuming (skill, distribution, and production), and critical prosuming (participation and creation) (Figure 1).

Figure 1: A refined framework of new media literacy



Source: Lin et al. (2013)

To perform FC, people need to have access to media information and realize its textual sense. On the other hand, CC includes the ability to contextualize the accessed media information specifically in domains of politics, economy, society, and culture. While FP focuses on experiences to share in the creation of media content, CP emphasizes individuals' contextual understanding of media messages during participation conditioning (Lin et al., 2013: 162). Andreoli et al. (2022) developed one scale including 13 items called Consumer Judgment on the Practice of Greenwashing to test the consumer judgment of greenwashing experiences. The greenwashing consumer judgment scale's factor structure was determined using the Kaiser-Meyer-Olkin (KMO) coefficient and Bartlett's sphericity test. The factor structure of the greenwashing consumer judgment scale was determined using the Kaiser-Meyer-Olkin (KMO) coefficient and Bartlett's test of sphericity. Exploratory factor analysis was conducted to determine the construct validity and factors of the greenwashing consumer judgment scale. Both the Principal Components Method and the Varimax Transformation Method were used in the factorization methodology. Item factor loadings were determined as .30 and above. After the factor structure of the greenwashing consumer judgment scale was established, Cronbach's alpha internal consistency and reliability were tested. The items on the scale are "1. It was assessed on a 5-point Likert scale as "Strongly Disagree, 2. Disagree, 3. Undecided, 4. Agree, and 5. Strongly Agree."

Table 1: Consumers' Judgment About the Practice of Greenwashing

P1 It is fairly easy for consumers to correctly interpret the environmental appeals used by organizations.
P2 The information conveyed by organizations about their green practice clearly demonstrate their environmental impact.
P3 The information conveyed by organizations about their green practice is always easily understood by consumers.
P4 The environmental appeals ensure that the products contribute positively to the preservation of the environment, regardless of the impacts generated in their process.
P5 The environmental benefits are completely assured when the product has a green seal.
P6 Organizations never intend to confuse consumers with irrelevant information.

P7 Organizations always make proof of environmental claims available to consumers.

P8 Consumers are always able to understand the truth about the information contained in environmental.

claims.

P9 The labels, seals and green figures adopted in the products are the guarantee that the organization is

concerned about the environment.

P10 The arguments highlighted in the environmental appeals used by the organizations are true.

P11 Practically no organization conveys untruthful information about its environmental practices.

P12 There is no reason for consumers to doubt the environmental appeals made by organizations.

P13 Any and all green appeals used by organizations are truthful.

Source: Andreoli et al. (2022)

4. Findings

The findings of the study consisted of an online survey conducted with 256 undergraduate students in Istanbul from October 10, 2023, and December 14, 2023.

4.1. Consumer Judgment on The Practice of Greenwashing Scale Exploratory Factor Analysis

The consumer judgment scale on greenwashing was factor structured using Exploratory Factor Analysis (EFA). Factor loadings of at least 0.30 were considered adequate. Tests for sampling adequacy and Bartlett Sphericity were run to show that the sample was appropriate for factor analysis. The sample appropriateness coefficient for Kaiser-Meyer-Olkin (KMO) is 0.933, and the data set exhibits significant results from the Bartlett Sphericity Test. ($p<0.001$) These findings demonstrate that factor analysis can be performed on the data. The Principal Components Method, Varimax Transformation, And Exploratory Factor Analysis produced a two-factor structure with an eigenvalue greater than 1 that accounted for 64.114% of the variation in total. "Environmental Claims Assurance" and "Environmental Awareness" are the names of these components. The Environmental Claim Assurance concerns customers' opinions of the authenticity and trustworthiness of firms' environmental claims. It contains statements implying that consumers trust organizations to be honest and truthful in their environmental communications, as well as that products labeled as environmentally friendly contribute to environmental protection. Consumers believe that organizations provide proof to back up their environmental claims, and that the use of green labels and emblems demonstrates real environmental concern. Environmental awareness relates to the level of customer understanding and perception about the environmental information delivered by companies. It encompasses customers' ease of perceiving and comprehending environmental appeals, as well as their belief that companies efficiently relay their environmental consequences. Consumers are confident in their capacity to assess the veracity of environmental statements and grasp the implications of firms' green initiatives. This element measures customers' awareness and grasp of environmental issues given by organizations. The Environmental Claims Assurance sub-dimension, which accounts for 38.695% of the total variance, has factor loadings ranging from 0.822 to 0.607. These loadings are the outcome of EFA. The Environmental Awareness sub-dimension accounts for 25.872% of the total variation, with factor loadings ranging from 0.876 to 0.684. 70.420% of the total variance is explained by the two factors that were found. Table 2 below provides the item means, standard deviations, item-test correlation coefficients, and results of the exploratory factor analysis.

Table 2: The Findings of The Exploratory Component Analysis for The Greenwashing Consumer Judgment Scale, Item-Test Correlation Coefficients, Item Means, And Standard Deviations

Factor 1: Environmental Claims Assurance (Explained Variance:38,695)	**Average**	**Standard Deviation**	**Item Test Correlation**	**Factor Loading**
P13	2,90	1,21	,740**	,822
P12	2,83	1,23	,689**	,762
P6	2,82	1,25	,710**	,755
P5	3,06	1,18	,720**	,745
P11	3,12	1,23	,713**	,719
P10	3,17	1,03	,773**	,695
P7	2,96	1,14	,746**	,694
P9	3,16	1,21	,768**	,660
P4	3,35	1,07	,706**	,607
Factor 2: Environmental Awareness (Explained Variance:25,420)				
P3	3,54	1,12	,582**	,876
P1	3,39	1,12	,574**	,834
P8	3,26	1,09	,666**	,705
P2	3,27	1,11	,684**	,684

***KMO:0,933, Total Variance =64,114*

At the 0.01 significance level, the correlations between the items on the sub-dimensions of the scale were determined to be low, medium, and high. The correlation values among the elements
in the scale's final version and the overall score are displayed in Table 1. At a significance level of 0.01 Table 1 demonstrates that all items on the scale are associated with the scale total score in a moderate to strong way. The scale's item test correlations varied from 0.773 to 0.574. The correlation scores for item validity and scale homogeneity indicate that the scale items are valid and assess the same structure. When both item-by-item and item-test correlation values are studied, it is clear that the scale's items have a high level of validity.

4.2. Reliability Analysis of New Media Literacy and Consumer Judgment on The Practice of Greenwashing Scale

Table 3: Reliability Analysis of New Media Literacy and Consumer Judgment on The Practice of Greenwashing Scales

	Crα
Functional Consumption	0,949
Critical Consumption	0,955
Functional Prosumption	0,927
Critical Prosumption	0,928
New Media Literacy Scale	0,979
Environmental Claims Assurance	0,916
Environmental Awareness	0,848
Consumer Judgment on the Practice of Greenwashing Scale	0,926

Reliability coefficient: $0.60\alpha \leq 0.80$ indicates a reliable scale, whereas $0.80\alpha \leq 1.00$ indicates a highly reliable scale. The obtained Crα Coefficients show that the new media literacy and Consumer judgment on the practice of greenwashing scales used are quite reliable.

4.3. Features Of the Participants

Table 4: Features of the Participants

		N	%
Gender	Woman	180	70,3
	Man	76	29,7
Age	18-20	130	50,8
	21-25	102	39,8
	26-30	10	3,9
	31-35	4	1,6
	36 and above	10	3,9
Family Total Income	Minimum wage and below	43	16,8
	11.402-20.000 TL	85	33,2
	20.001 TL and above	128	50,0
Status of Taking Media Literacy Course	Yes	41	16,0
	No	183	71,5
	I don't remember	32	12,5
Attending Any Seminar or Event Related to Media Literacy	Yes	40	15,6
	No	174	68,0
	I don't remember	42	16,4

The research included 256 participants, 70.3% of whom were women and 29.7% were men. 50.8% of the participants are between the ages of 18-20, 39.8% are between the ages of 21-25, 3.9% are between the ages of 26-30, 1.6% are between the ages of 31-35, 3,9% of them are aged 36 and over. 16.8% of the participants have a total family income of minimum wage or below, 33.2% have a family income of 11,402-20,000 TL, and 50% have a family income of 20,001 TL and above. 16% of the participants took a media literacy course, 71.5% did not take it, and 12.5% did not remember whether they took it. 15.6% of the participants attended a seminar on media literacy, 68% did not attend, and 16.4% do not remember whether they attended or not.

4.4. Participants' Consumer Judgment Levels Regarding Greenwashing and New Media Literacy

Table 5: Examining Participants' New Media Literacy and Greenwashing Consumer Judgment Levels

	N	Median	Min	Max
Functional Consumption	256	29,00	7,00	35,00
Critical Consumption	256	44,00	11,00	55,00
Functional Prosumption	256	28,00	7,00	35,00
Critical Prosumption	256	38,00	10,00	50,00
New Media Literacy Scale	256	137,50	35,00	175,00
Environmental Claims Assurance	256	27,00	9,00	45,00
Environmental Awareness	256	14,00	4,00	20,00
Consumer Judgment on the Practice of Greenwashing Scale	256	41,00	13,00	65,00

Functional consumption levels of the participants included in the research are 29 (7-35), critical consumption levels are 44 (11-55), functional prosumption levels are 28 (7-35), critical prosumption levels are 38 (10-50), new media literacy levels are 137. 5(35-175), environmental claims assurance levels are 27(9-45), environmental awareness levels are 14(4-20), greenwashing consumer judgment levels are 41(13-65).

4.5. The Relationship Between Participants' New Media Literacy and Greenwashing Consumer Judgment Levels

Table 6: Examining The Relationship Between Participants' New Media Literacy and Greenwashing Consumer Judgment Levels

		Environmental Claims Assurance	Environmental Awareness	Consumer Judgment on The Practice of Greenwashing Scale
Functional Consumption	r	0,281**	0,572**	0,393**
	p	<0,001	<0,001	<0,001
Critical Consumption	r	0,308**	0,605**	0,426**
	p	<0,001	<0,001	<0,001
Functional Prosumption	r	0,277**	0,559**	0,386**
	p	<0,001	<0,001	<0,001
Critical Prosumption	r	0,434**	0,600**	0,521**
	p	<0,001	<0,001	<0,001
New Media Literacy Scale	r	0,354**	0,633**	0,471**
	p	<0,001	<0,001	<0,001

***Significance at 0.01 level, Spearman Correlation Analysis*

There is a positive linear relationship between the participants' functional consumption (FC), critical consumption (CC), functional prosumption (FP), critical prosumption (CP) and new media literacy levels and their environmental claims assurance, environmental awareness and greenwashing consumer judgment levels. ($p<0.05$) As the participants' FC, CC, FP, CP and new media literacy levels increase, their environmental claims assurance, environmental awareness and greenwashing consumer judgment levels also increase.

4.6. Examining Participants' New Media Literacy and Greenwashing Consumer Judgment Levels According to Various Variables

Table 7: Examining Participants' New Media Literacy and Greenwashing Consumer Judgment Levels by Gender

	Gender	N	Median	Min	Max	Z	p value
Functional Consumption	Woman	180	28	7	35	-0,613	0,540
	Man	76	29,5	7	35		
Critical Consumption	Woman	180	44	11	55	-0,229	0,819
	Man	76	44	12	55		
Functional Prosumption	Woman	180	28	7	35	-0,696	0,486
	Man	76	27	7	35		
Critical Prosumption	Woman	180	38	10	50	-0,569	0,569
	Man	76	36	11	50		
New Media Literacy Scale	Woman	180	139,5	35	175	-0,418	0,676
	Man	76	137	45	175		
Environmental Claims Assurance	Woman	180	27,5	9	45	-0,901	0,368
	Man	76	26,5	9	45		
Environmental Awareness	Woman	180	14	4	20	-0,085	0,933
	Man	76	14	4	20		
Consumer Judgment on The Practice of Greenwashing Scale	Woman	180	41	13	65	-0,913	0,361
	Man	76	39,5	13	65		

p<0,05, Mann Whitney U Test

The FC, CC, FP, CP, new media literacy, environmental claims assurance, environmental awareness and greenwashing consumer judgment levels of the participants in the research exhibit no discernible gender difference in a statistically meaningful way. (p >0.05)

Table 8: Examination Of Participants' New Media Literacy and Greenwashing Consumer Judgment Levels by Age

	Age	N	Median	Min	Max	K-square	p value	Difference
Functional Consumption	18-20	130	29,00	8,00	35,00	1,953	0,744	
	21-25	102	28,00	7,00	35,00			
	26-30	10	29,50	11,00	35,00			
	31-35	4	32,00	28,00	35,00			
	36 and above	10	28,00	9,00	35,00			
Critical Consumption	18-20	130	43,50	11,00	55,00	1,203	0,878	
	21-25	102	44,00	11,00	55,00			
	26-30	10	46,00	16,00	55,00			
	31-35	4	45,00	42,00	54,00			
	36 and above	10	44,00	11,00	55,00			
Functional Prosumption	18-20	130	28,00	7,00	35,00	2,711	0,607	
	21-25	102	27,00	7,00	35,00			
	26-30	10	28,00	7,00	35,00			
	31-35	4	31,50	27,00	35,00			
	36 and above	10	27,00	9,00	35,00			
Critical Prosumption	18-20	130	38,00	15,00	50,00	2,913	0,572	
	21-25	102	36,00	10,00	50,00			
	26-30	10	39,50	11,00	48,00			
	31-35	4	42,50	39,00	47,00			
	36 and above	10	38,50	17,00	50,00			
New Media Literacy Scale	18-20	130	138,50	43,00	175,00	2,313	0,678	
	21-25	102	136,00	35,00	175,00			
	26-30	10	145,50	45,00	171,00			
	31-35	4	151,50	138,00	168,00			
	36 and above	10	134,50	46,00	175,00			
Environmental Claims Assurance	18-20	130	28,50	9,00	45,00	11,432	0,022	1>3
	21-25	102	27,00	9,00	45,00			
	26-30	10	19,00	16,00	29,00			
	31-35	4	20,00	19,00	31,00			
	36 and above	10	23,50	11,00	43,00			
Environmental Awareness	18-20	130	14,00	4,00	20,00	3,507	0,477	
	21-25	102	14,00	4,00	20,00			
	26-30	10	13,00	6,00	18,00			
	31-35	4	13,00	10,00	15,00			
	36 and above	10	13,00	4,00	20,00			
Consumer Judgment on The Practice of Greenwashing Scale	18-20	130	42,00	13,00	65,00	10,390	0,051	
	21-25	102	40,00	13,00	65,00			
	26-30	10	31,50	22,00	44,00			
	31-35	4	35,00	30,00	41,00			
	36 and above	10	36,00	15,00	63,00			

p<0,05, Kruskal Wallis H Test

Environmental claims assurance levels of the participants in the study show statistically considerable differences according to age. (p<0.05) Environmental claims assurance levels of participants aged 18-20 are higher than participants aged 26-30. Other scale scores do not show statistically meaningful differences according to age. (p>0.05)

Table 9: Examining Participants' New Media Literacy and Greenwashing Consumer Judgment Levels According to Family Total Income

	Family Total Income	N	Median	Min	Max	K-square	p value
Functional Consumption	Minimum wage and below	43	28,00	11,00	35,00	4,305	0,166
	11.402-20.000 TL	85	29,00	7,00	35,00		
	20.001 TL and above	128	29,50	7,00	35,00		
Critical Consumption	Minimum wage and below	43	41,00	16,00	55,00	3,236	0,198
	11.402-20.000 TL	85	44,00	17,00	55,00		
	20.001 TL and above	128	44,00	11,00	55,00		
Functional Prosumption	Minimum wage and below	43	26,00	7,00	35,00	4,787	0,091
	11.402-20.000 TL	85	27,00	12,00	35,00		
	20.001 TL and above	128	28,00	7,00	35,00		
Critical Prosumption	Minimum wage and below	43	36,00	11,00	50,00	1,520	0,468
	11.402-20.000 TL	85	38,00	17,00	50,00		
	20.001 TL and above	128	38,50	10,00	50,00		
New Media Literacy Scale	Minimum wage and below	43	134,00	45,00	175,00	3,096	0,213
	11.402-20.000 TL	85	137,00	59,00	175,00		
	20.001 TL and above	128	139,50	35,00	175,00		
Environmental Claims Assurance	Minimum wage and below	43	27,00	9,00	45,00	0,106	0,949
	11.402-20.000 TL	85	27,00	13,00	45,00		
	20.001 TL and above	128	27,50	9,00	45,00		
Environmental Awareness	Minimum wage and below	43	12,00	4,00	20,00	5,233	0,073
	11.402-20.000 TL	85	14,00	5,00	20,00		
	20.001 TL and above	128	14,00	4,00	20,00		
Consumer Judgment on The Practice of Greenwashing Scale	Minimum wage and below	43	39,00	13,00	65,00	0,833	0,659
	11.402-20.000 TL	85	41,00	24,00	65,00		
	20.001 TL and above	128	41,00	13,00	65,00		

p<0,05, Kruskal Wallis H Test

FC, CC, FP, CP, new media literacy, environmental claims assurance, environmental awareness and greenwashing consumer judgment levels of the participants in the research do not show a statistically meaningful variation according to family income status. (p>0.05)

Table 10: Examination Of Participants' New Media Literacy and Greenwashing Consumer Judgment Levels According to The Status of Taking Media Literacy Courses

	Status of Taking Media Literacy Course	N	Median	Min	Max	K-square	p value
Functional Consumption	Yes	41	28,00	7,00	35,00	0,388	0,824
	No	183	29,00	7,00	35,00		
	Don't remember	32	28,00	7,00	35,00		
Critical Consumption	Yes	41	44,00	11,00	55,00	0,268	0,874
	No	183	44,00	11,00	55,00		
	Don't remember	32	44,00	11,00	55,00		
Functional Prosumption	Yes	41	28,00	7,00	35,00	0,929	0,628
	No	183	28,00	7,00	35,00		
	Don't remember	32	27,00	7,00	35,00		
Critical Prosumption	Yes	41	40,00	10,00	50,00	2,931	0,231
	No	183	36,00	10,00	50,00		
	Don't remember	32	38,00	10,00	50,00		
New Media Literacy Scale	Yes	41	140,00	35,00	175,00	0,426	0,808
	No	183	137,00	35,00	175,00		
	Don't remember	32	138,50	35,00	175,00		
Environmental Claims Assurance	Yes	41	27,00	9,00	45,00	0,389	0,823
	No	183	27,00	9,00	45,00		
	Don't remember	32	27,00	9,00	45,00		
Environmental Awareness	Yes	41	14,00	4,00	20,00	0,194	0,908
	No	183	14,00	4,00	20,00		
	Don't remember	32	13,50	4,00	20,00		
Consumer Judgment on The Practice of Greenwashing Scale	Yes	41	40,00	13,00	65,00	0,206	0,902
	No	183	41,00	13,00	65,00		
	Don't remember	32	41,00	13,00	65,00		

p<0,05, Kruskal Wallis H Test

FC, CC, FP, CP, new media literacy, environmental claims assurance, environmental awareness and greenwashing consumer judgment levels of the participants in the research do not show a difference that is statistically important depending on whether they take a media literacy course. (p>0.05)

Table 11: Examining Participants' New Media Literacy and Greenwashing Consumer Judgment Levels According to Their Participation in A Seminar or Event on Media Literacy

	Attending a Seminar or Event Related to Media Literacy	N	Median	Min	Max	K-square	p value
Functional Consumption	Yes	40	30,50	7,00	35,00	1,053	0,591
	No	174	29,00	7,00	35,00		
	Don't remember	42	28,00	14,00	35,00		
Critical Consumption	Yes	40	46,00	11,00	55,00	3,965	0,138
	No	174	44,00	11,00	55,00		
	Don't remember	42	44,00	22,00	55,00		
Functional Prosumption	Yes	40	29,50	7,00	35,00	3,288	0,193
	No	174	27,00	7,00	35,00		
	Don't remember	42	28,00	10,00	35,00		
Critical Prosumption	Yes	40	39,00	10,00	50,00	3,592	0,166
	No	174	36,00	10,00	50,00		
	Don't remember	42	39,00	20,00	50,00		

New Media Literacy Scale	Yes	40	145,50	35,00	175,00	3,197	0,202
	No	174	137,00	35,00	175,00		
	Don't remember	42	138,50	70,00	175,00		
Environmental Claims Assurance	Yes	40	25,50	10,00	45,00	2,596	0,273
	No	174	27,00	9,00	45,00		
	Don't remember	42	27,00	9,00	45,00		
Environmental Awareness	Yes	40	14,00	4,00	20,00	0,174	0,917
	No	174	14,00	4,00	20,00		
	Don't remember	42	14,00	4,00	20,00		
Consumer Judgment on The Practice of Greenwashing Scale	Yes	40	39,00	14,00	65,00	1,363	0,506
	No	174	41,00	13,00	65,00		
	Don't remember	42	39,50	13,00	65,00		

p<0,05, Kruskal Wallis H Test

FC, CC, FP, CP, new media literacy, environmental claims assurance, environmental awareness and greenwashing consumer judgment levels of the participants in the research do not show a statistically meaningful variation depending on whether they attend a seminar or event on media literacy. (p>0.05)

Table 12: Examining Participants' New Media Literacy and Greenwashing Consumer Judgment Levels According to The Undergraduate Department

	Department	N	Median	Min	Max	K-square	p value	Difference
Functional Consumption	Faculty of Literature	38	28,50	14,00	35,00	11,052	0,011	3>4
	Communication / Faculty of Fine Arts	110	29,00	7,00	35,00			
	Faculty of Management	42	31,50	8,00	35,00			
	Faculty of Health	66	28,00	7,00	35,00			
Critical Consumption	Faculty of Literature	38	43,00	22,00	55,00	10,924	0,012	3>4
	Communication / Faculty of Fine Arts	110	44,00	11,00	55,00			
	Faculty of Management	42	47,50	12,00	55,00			
	Faculty of Health	66	43,00	11,00	55,00			
Functional Prosumption	Faculty of Literature	38	27,00	14,00	35,00	14,309	0,003	3>4
	Communication / Faculty of Fine Arts	110	28,00	7,00	35,00			
	Faculty of Management	42	30,00	9,00	35,00			
	Faculty of Health	66	26,00	7,00	35,00			
Critical Prosumption	Faculty of Literature	38	36,00	20,00	50,00	12,423	0,006	3>1,2,4
	Communication / Faculty of Fine Arts	110	37,00	10,00	50,00			
	Faculty of Management	42	41,00	15,00	50,00			
	Faculty of Health	66	36,00	10,00	50,00			
New Media Literacy Scale	Faculty of Literature	38	134,00	70,00	175,00	14,365	0,002	3>1,4
	Communication / Faculty of Fine Arts	110	139,00	35,00	175,00			
	Faculty of Management	42	151,50	46,00	175,00			
	Faculty of Health	66	131,50	35,00	175,00			
Environmental Claims Assurance	Faculty of Literature	38	26,50	13,00	45,00	4,469	0,215	
	Communication / Faculty of Fine Arts	110	27,00	9,00	45,00			
	Faculty of Management	42	29,00	11,00	45,00			

Environmental Awareness	Faculty of Health	66	26,50	9,00	45,00	8,755	0,033	3>4
	Faculty of Literature	38	14,00	8,00	20,00			
	Communication / Faculty of Fine Arts	110	14,00	4,00	20,00			
	Faculty of Management	42	14,50	4,00	20,00			
Consumer Judgment on The Practice of Greenwashing Scale	Faculty of Health	66	13,00	4,00	20,00	5,393	0,145	
	Faculty of Literature	38	39,50	24,00	65,00			
	Communication / Faculty of Fine Arts	110	41,00	13,00	65,00			
	Faculty of Management	42	42,00	24,00	65,00			
	Faculty of Health	66	39,00	13,00	65,00			

p<0,05, Kruskal Wallis H Test

Participants were evaluated in 4 different faculty groups according to the departments they studied. The functional consumption, critical consumption, functional prosumption, critical prosumption, new media literacy and environmental awareness levels of the participants in the research show statistically meaningful differences according to their departments. ($p<0.05$) FC, CC, FP, CP and environmental awareness levels of the participants from the management faculty are higher than the participants from the health faculty. The critical prosumption levels of participants from business faculties are higher than those from literature, communication, fine arts or health faculties. New media literacy levels of participants from management faculties are higher than participants from literature or health faculties. Other scale scores do not show statistically important differences depending on the section read. ($p>0.05$)

5. Conclusion

The purpose of this research is to better comprehend consumers' perceptions of greenwashing and media literacy, also to find out whether there is a prominent connection between the two, while also looking into the role of green literacy in promoting environmentally friendly behavior and sustainable consumption.

As a result of the factor analyses, it was determined that the scale showed high validity and reliability, a two-factor structure was obtained and named as Environmental Claims Assurance and Environmental Awareness. In addition, significant relationships were found between media literacy and greenwashing consumer judgment, and it was shown that the level of media literacy increases the capacity of consumers to evaluate greenwashing claims from a critical perspective.

The participants' levels of environmental claims assurance, environmental awareness, and greenwashing consumer judgment rise in tandem with their increases in functional consumption, critical consumption, functional prosumption, critical prosumption, and new media literacy. As consumers' level of access to created media content and understanding of the literary meaning of the content increases, their capacity to analyze and interpret the socio-cultural, financial and political suggestions of media content increases, their ability to participate in the production of new media content on various media platforms increases, their capacity to convey their own beliefs and negotiate with the ideas of others increases, the honesty of organizations, their natural disclosures, the authenticity of their natural communications and the emergence of their green activities can be better evaluated by consumers.

The degree of functional consumption, critical consumption, functional prosumption, critical prosumption, new media literacy, environmental claims assurance, environmental awareness, and greenwashing consumer judgment do not seem to be statistically impacted by research participants' attendance at seminars and events on the topic or their completion of a media literacy course. A significant number of participants, however, reported that they had never taken media literacy classes or attended workshops or lectures on the topic. Some participants were also uncertain if they had participated in such activities. Considering these results, a focus group study measuring consumer perceptions of greenwashing before and after a media literacy session may offer more profound understanding of the practice's possible effects. Future studies could focus on media literacy training that place greater emphasis on critical analysis, particularly in relation to corporate marketing claims and green coding methods. Conducting a focus group

study in which judgments of greenwashing practices are measured before and after a media literacy seminar could provide deeper insights into its potential impact.

Furthermore, it is advised that future studies apply it to customers from different cities and/or educational backgrounds, to identify the commonalities and distinctions among distinct groups. Further understanding of how media literacy can successfully combat greenwashing methods and encourage sustainable consumption behavior can be obtained by examining these distinctions. In the end, this study emphasizes the necessity of focused media literacy initiatives to help customers understand the intricacies of greenwashing and make better, more sustainable purchasing decisions.

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