



The influence of Greenwashing Marketing on Consumers' Negative Green Purchase Intentions: a Study of Egyptian Tourism Companies

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ABSTRACT

In recent years, there has been a significant increase in demand for green goods and services as the tourism sector prioritizes environmental factors. Several tourism companies engage in deceptive techniques known as greenwashing, which involve creating false environmental claims in response to client demand for ecologically friendly goods and services, which caused the creation of customer negative Green Purchase Intentions. This study aims to address a research gap by investigating how negative green purchasing intentions are connected to greenwash marketing. This research investigates the direct impacts of green perceived risk (GPR), green customer confusion (GCC), and a negative attitude toward e-commerce (ATC) on customer purchasing intentions. This study uses a quantitative method utilizing a regression analysis to determine the influence of greenwash marketing on consumer purchase intention in light of the current growth in customer environmental concerns regarding green marketing throughout the globe, using a sample of Egyptian tourism customers. The study's results show that greenwash marketing green, perceived risk, negative attitude toward e-commerce and green customer confusion have a positive influence on consumers' negative green purchase intentions. This study recommends that tourism corporations should enhance their green marketing techniques rather than greenwashing in order to increase green purchase intention.

KEYWORDS

Greenwash, Marketing, Purchase intention, Green Confusion, Tourism companies

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تأثير التسويق الأخضر الزائف على نوايا المستهلكين السلبية للشراء الأخضر: دراسة لشركات السياحة المصرية

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الملخص

في السنوات الأخيرة، كان هناك زيادة كبيرة في الطلب على السلع والخدمات الخضراء حيث تعطي صناعة السياحة الأولوية للعوامل البيئية. تشارك العديد من شركات السياحة في تقنيات خادعة تُعرف باسم "الغسل الأخضر"، والتي تتضمن إنشاء ادعاءات بيئية كاذبة استجابةً لطلب العملاء على السلع والخدمات الصديقة للبيئة، مما أدى إلى خلق نوايا شراء خضراء سلبية لدى العملاء. تهدف هذه الدراسة إلى سد فجوة بحثية من خلال التحقيق في كيفية ارتباط نوايا الشراء الخضراء السلبية بالتسويق الأخضر الزائف. تبحث هذه الدراسة في التأثيرات المباشرة للمخاطر المدركة الخضراء (GPR)، والارتباك لدى العملاء الأخضر (GCC)، والموقف السلبي تجاه التجارة الإلكترونية (ATC) على نوايا الشراء لدى العملاء. تستخدم هذه الدراسة منهجًا كميًا باستخدام تحليل الانحدار لتحديد تأثير تسويق الغسل الأخضر على نية الشراء لدى المستهلكين في ضوء النمو الحالي في مخاوف العملاء البيئية بشأن التسويق الأخضر في جميع أنحاء العالم، باستخدام عينة من عملاء السياحة المصريين. تُظهر نتائج الدراسة أن التسويق الأخضر، والمخاطر المدركة، والموقف السلبي تجاه التجارة الإلكترونية، والارتباك لدى العملاء الأخضرين لها تأثير إيجابي على النوايا السلبية للمستهلكين تجاه الشراء الأخضر. توصي هذه الدراسة بأن تقوم شركات السياحة بتحسين تقنيات التسويق الأخضر بدلاً من التلاعب الأخضر من أجل زيادة نية الشراء الأخضر.

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الكلمات الدالة

الغسل الأخضر، التسويق، نية الشراء، الارتباك الأخضر، شركات السياحة

1- Introduction

In recent years, sustainability has been an increasingly acknowledged aspect in tourism companies' operations and marketing strategies. This change is one of the most prevalent ways for companies to show their commitment to sustainability via green marketing efforts. According to Gusai (2018), companies have gone beyond exploiting environmental measures to obtain a competitive advantage over other businesses. Dong (2022) discovered that consumers are more interested in eco-friendly enterprises and their buying attitude and intention toward such businesses has enhanced profitability for green brands.

Customers' behavior has prompted the tourism sector to boost product sales and brand image by stressing sustainable development and environmental responsibility via promotional activities. However, the increased desire for being green has led to companies engaging in greenwashing methods. Greenwashing happens when a company or organization spends a considerable amount of money and time advertising its green and environmentally friendly brand image in order to enhance product and service sales, despite the fact that it has a detrimental environmental impact (Gatti, 2019). This behavior is referred to as "greenwashing" Businesses "wash" their public image green by adopting green jargon and making false eco-friendly promises in order to appeal to a certain audience.

According to Nguyen et al. (2019), this situation exhibits misleading marketing methods intended at duping environmentally conscientious customers looking for real eco-friendly items with reputable green brand marks. Some companies are using more "economical" greenwashing to seem ecologically benign and establish consumer trust, although spending less on environmental protection and so benefiting financially. As a consequence, consumers are growing more confused and distrustful of companies' green promises. Greenwashing may be particularly harmful in the tourism industry since consumers who really want to spend their money on environmentally friendly vacations wind up supporting financially motivated businesses. Tourism or tour companies, for example, may provide the appearance that their operations benefit surrounding animals or people, despite the fact that they profit from them. They pay little salaries, and the bulk of earnings go to rich investors or firm owners.

In certain cases, greenwashing causes buyers to have negative purchasing intentions for green goods and services. The greenwashing phenomena breeds distrust among consumers and companies. Customers are unable to discern between greenwashing and green marketing owing to distrust (Brunton, 2015). This study sought to explain the link between greenwash marketing, green confusion, and negative green buy intentions. Furthermore, using the Theory of Planned Behavior (TPB), it investigated the impacts of consumers' green Perceived Risk (GPR), and negative Attitude toward E-commerce (ATC). Therefore, filling a gap in the previous literature.

Previous research of green consumer behavior has extensively used the TPB since it is one of the most fundamental and robust models of behavioral decisions. TPB believed that behavior is predicted by purpose, which is governed by three social-cognitive factors: attitude, subjective norms, and perceived behavioral control. In this path, the current study stood out because it investigated the extent to which customers perceived green risk, green customer confusion, and negative attitude toward

commerce influenced the relationships between greenwash marketing and negative green purchase intentions to buy green products and services. Whereas prior research showed mainly broad issues in purchasing intentions, no study has yet examined purchase intent in the context of greenwashing, perceived risk, and a negative attitude toward ecommerce (Emekci, 2019)

This study aims to address a research gap by investigating how negative green purchasing intentions are connected to greenwash marketing. This research investigates the direct impacts of Green Perceived Risk (GPR), Green Customer Confusion (GCC), and a negative Attitude toward E-commerce (ATC) on customer purchasing intentions. As a result, this study suggests a new greenwash framework that is consistent with the green pattern, helping consumers by improving their green buying intention and allowing for the extension of the scope of green marketing research.

2. Theoretical background and hypotheses development

2.1 Theory of Planned Behavior

Icek Ajzen developed the Theory of Planned Behavior (TPB), which predicts human behavior. According to the Theory of Planned Behavior, attitudes toward behavior, subjective norms, and perceived behavioral control all impact behavioral intentions. The first construct of the theory is behavioral intention, which Ajzen defined as a notion incorporating motivational components of conduct (Ajzen, 1991). A stronger desire to do a certain activity is associated with a higher likelihood of carrying it out. The second component is a behavior attitude, which "refers to a person's positive or negative evaluation of performing the target behavior". Attitude is made up of two components: behavioral beliefs and judgments of results. The third component is the subjective norm, which refers to societal pressure on a certain conduct. The subjective norm is created by combining normative views with incentive to conform. Perceived behavioral control is an essential concept in understanding planned behavior. Perceived behavioral control is described as "the perceived ease or difficulty of performing the behavior (Hagger et al., 2022).

Ajzen's Theory of Planned Behavior demonstrated that consumer attitudes and actions are inextricably linked. This idea has shown to be quite accurate for researchers when studying customer attitudes, beliefs, behavior, and intentions. According to this idea, an individual's attitude toward accomplishments, subjective standards, and perceived behavioral control shapes an individual's capacity to execute certain activities, which influences consumer intention. It is regarded as a direct predictor of real conduct (Ajzen, 1991).

Customers that buy green goods or services follow a five-step decision-making process that includes issue identification, alternative assessment, information search, purchase intention, and post-purchase evaluation (Armstrong and Kotler, 2010). The consumer usually recognizes the issue or need by discriminating between need and desire.

Armstrong and Kotler (2010) argued that a person may prefer an ecologically friendly lifestyle, encouraging them to look for things that support this goal. At this point, the client wants knowledge about the environmental characteristics of items, which will influence their impressions of the product. Perceptions have a huge impact on client

purchase intentions, assisting customers in selecting an organization and interpreting accessible information. Customers will explore and assess other items based on the information they have gathered. A client may consider the pricing, quality, or environmental advantages of the items. Customers' attitudes and impressions of environmental friendliness are crucial, since they may influence their purchasing choices toward items with better environmental features. Customer satisfaction or unhappiness is followed by post-buy behavior after the purchase decision has been made.

2.2 The Relationship between Greenwash Marketing, Negative Attitude Towards e-commerce, and Green Perceived Risk

Green goods and services have relatively little negative influence on the environment. People often consider these items as sustainable and surprising. The demand for ecologically friendly goods and services is expanding. Customer impressions regularly influence behavior and purchase intentions. Purchasing intentions are the customer's intended purchase behavior. Ajzen's (1991) Theory of Planned Behavior posits that a customer's attitude, subjective standards, and perceived behavioral control all impact their purchase intents and actions.

Consumers' growing environmental concerns have fueled demand for more sustainable replacements as the major distinguishing factor in green marketing (Nekmahmud and Fekete-Farkas, 2020). According to Kahraman (2019), a firm's environmental performance influences customer purchasing inclinations. Whereas green marketing aims to add value to businesses by describing their offerings as environmentally friendly, greenwashing refers to an organization's intentional misrepresentation of consumers about corporate-level environmental policies or the environmental benefits of goods or services at the product and service levels (Gatti et al., 2021; Seele & Schultz, 2022). "For example, Etihad Airways exemplifies greenwashing with two advertising claims: "Net zero emissions by 2050" and "Flying shouldn't cost the Earth." However, the airline lacks a clear and effective plan for achieving these objectives (Visontay, 2023).

While green marketing tries to generate demand, raise consumer awareness, and assist shape a positive picture, when such programs are shown to be flawed upon closer examination, they tend to subtract from the brand image of the firm running the campaign (Berrone et al., 2017). According to Parguel et al. (2015), the presence of false environmental advertising is one factor that might diminish customer confidence in green marketing. Greenwashing strategies by companies have been connected to increased customer skepticism in environmentally friendly goods and services, resulting in increased perceived risk and "green" uncertainty (Huang & Li, 2017). According to previous research, perceived risk and attitude toward e-commerce might impact buyer impressions of sustainable items. On the other hand, various researches shows that increased perceived risk connected with ecologically sustainable items leads to negative views toward these products (Braga Junior et al., 2019).

On the other side, Schmuck et al. (2018) discovered that greenwashing in marketing had a negative impact on consumers' perceived risk and attitude toward marketing, particularly among customers with significant environmental expertise. Based on the previous arguments the following hypothesis has been developed

H1: There's a significant positive correlation between Greenwash marketing and green perceived risk, green consumer confusion, negative attitude toward e-commerce, and negative green purchase intentions

2.3 The Relationship between Green Perceived Risk, and Negative Attitude Towards e-commerce

In specific settings, perceived risk theory explored the underlying influence of potential losses and negative outcomes on consumers' purchasing intentions (Trinh et al., 2021). Perceived risk shows how a customer could evaluate a scenario in which the real loss is felt subjectively; this is a propensity that is often established to reduce the perceived risk. According to Chen and Chang (2012), "Green perceived risk refers to the expected negative environmental consequences associated with buying behavior". In other words, customers who are pleased with a brand's performance may be more willing to embrace its environmental claims.

Consumers with good views are more resistant to adverse brand information than those who have negative attitudes. Consumers with strong brand attitudes may engage in biased assimilation and exhibit more resistance to counter-attitudinal information, resulting in conflicting viewpoints (Luo et al., 2020). Furthermore, Nguyen's (2019) result found that perceived risk may impact the relationship between consumers' green views and their willingness to purchase eco-friendly things via consumer attitudes.

Furthermore, an empirical study has shown that greenwashing improves perceived risk (Lu et al., 2022). The perceived risk is the level of uncertainty that a consumer experiences when making decisions and is connected with the anticipation of potential losses. According to Uhm et al. (2022), perceived risks are the amounts of uncertainty that a client feels while deciding to acquire eco-friendly items. Although perceived risk is important in many aspects of consumer behavior, little empirical study has been undertaken on the topic with reference to eco-friendly goods (Chen & Chang, 2013).

Sadiq et al. (2021) indicated a link between risk and eco-friendly items in terms of greenwashing. Keni et al. (2020) defined his study's aims as the following: a) To analyze the impact of perceived green risk and value on green attitude; and b) To determine if perceived green risk impacts green purchasing intention. The findings of Keni et al. (2020) revealed that green perceived risk has a substantial impact on the prediction of green buying intention. Hence, we postulate the following

H2: Green Perceived Risk has a significant positive impact on Negative Green Purchase Intentions

2.4 Green customer confusion, and negative attitudes toward e-commerce

Customer confusion is defined as the incapacity of customers to appropriately comprehend product qualities during the information absorption stage, resulting in customers misunderstanding markets and goods (Yang et al., 2021). The manner in which information is displayed and given is an important consideration since style and presentation influence client views. As a result, Yang et al. (2021) took into account the current shift in client interest in green and sustainable goods.

The alleged deceit of green marketing in the tourism business has made consumers vulnerable to green misunderstanding. Customers may be confused due to the physical similarity of items, overwhelming information, or their inability to interpret the information presented. Green confusion is a phenomenon that negatively

influences consumer attitudes toward ecologically friendly actions (Chen and Chang, 2013). The company's confusing information reduces customer confidence (Mitchell et al. 2005). Furthermore, customers demonstrated aversion to purchasing new goods from some companies due to their marketing strategies, which included deceptive and ambiguous green promises (Kalafatis et al. 1999). As a result, an increase in green claims received by consumers correlates with a reduced likelihood of trusting green products on the market (Chen, 2010). This suggests that green confusion influences consumers' perceptions and attitudes about e-commerce. In addition, Customers may feel mislead even if the product's promotional promises were accurate (Xie et al., 2015). Thus, we suggest:

H3: Green customer confusion has a significant positive impact on Negative Green Purchase Intentions

2.5 Negative Attitude towards e-commerce, and Negative Green Purchase Intention

Although Indrawati et al. (2022) revealed that buying intention is a strong predictor of actual purchasing behavior, most previous research focused on the variables influencing buyers' intentions to purchase eco-friendly items rather than actual purchases. According to Ajzen (2020) and Fishbein & Ajzen (1977), the Theory of Planned Behavior's main contributions are that customer attitudes toward environmentally friendly products are considered a major determinant of green purchasing behavior and, as such, must establish the basis for predicting customer green purchasing behavior. This explanation therefore supports the requests of Arli et al. (2018), Santos et al. (2023), and Zaremohzzabieh et al. (2021), among others, to include behavioral attitudes in the creation of green buying models. A more positive mindset corresponds with a larger desire to buy these things. Several researches have underlined the impact of attitudes on consumer purchasing intentions for environmentally friendly items (Chang & Hung, 2023; Gleim et al., 2023; Sun & Shi, 2022).

Zhang and Sun (2021) highlighted that customers' perceptions regarding items have a substantial impact on their purchase choices. Interactions with these items, including what they believe they know, how they feel about them, and their buy intents (Zhang & Sun 2021). While Indrawati et al. (2022) recognized the importance of purchase intention in forecasting actual purchasing behavior, the majority of research has focused on identifying the factors that influence customers' intentions to buy eco-friendly products rather than investigating their actual purchasing behavior.

While green buying intention does not always result in real purchases, research (Jaiswal & Kant, 2018; Zhuang et al., 2021) shown that buyers' goal to acquire eco-friendly items influenced their actual shopping behavior. On the other hand, although green buying intentions may not always lead to real purchases, several research studies show that buyers' intentions to buy eco-friendly items have a beneficial effect on their actual purchasing behavior (Jaiswal & Kant, 2018; Zhuang et al., 2021). Many researchers have discovered that a positive attitude has a substantial impact on green buy intention in investigations of the association between green items, environmental behaviors, green tourism purchasing intention, and organic food (Wang et al., 2016; Teng et al., 2015).

Unlike really unsustainable things, partially sustainable packaged products may have a positive influence on attitudes and purchasing intentions because of perceived sustainability, even if the promise is not delivered. Thus, we propose the following
H4: Negative Attitude towards e-commerce has a significant positive impact on Negative Green Purchase Intentions

2.6 Greenwash marketing and negative green purchase intention.

Tarabieh (2021) establishes a link between greenwashing and the goal to buy ecologically beneficial items. The studies showed that greenwashing had a favorable impact on perceived risk and green confusion. This report proposes that companies eliminate greenwashing and back up their environmental claims with proof of their green goods. This will encourage businesses to become green and brag about their sustainability credentials, while people will be more able and eager to buy environmentally friendly goods and drinks. It affects consumers' green buying power for the company's goods (Yang et al., 2020), and it has an impact on customer attitude and perception as more customers grow wary of corporate green advertising techniques (Akturan, 2018).

Based on the previous arguments Figure 1 depicts the conceptual framework for the present investigation, which is based on the hypotheses stated. This study employs a measurement model comprising five constructs: Greenwash (GW), Green perceived risk (GPR), green customer confusion (GCC), negative Attitude towards e-commerce (NA), and negative Green Purchase Intentions (GPI).

Figure 1 demonstrates how Greenwash Marketing relates to negative attitudes about e-commerce and green perceived risk. In addition, the proposed conceptual model investigates how greenwash marketing and green perceived risk affect customers' negative green purchasing intention, with an emphasis on psychological and behavioral aspects that link the relationship.

This paradigm implies that misleading green marketing methods, as well as the perceived risk connected with green goods, contribute to negative customer impressions and cognitive uncertainty. These, in turn, reduce the chance of customers participating in green buying habits, especially in the e-tourism setting. Thus, we proposed the following hypothesis:

H5: Greenwash marketing has a significant positive impact on Negative Green Purchase Intentions

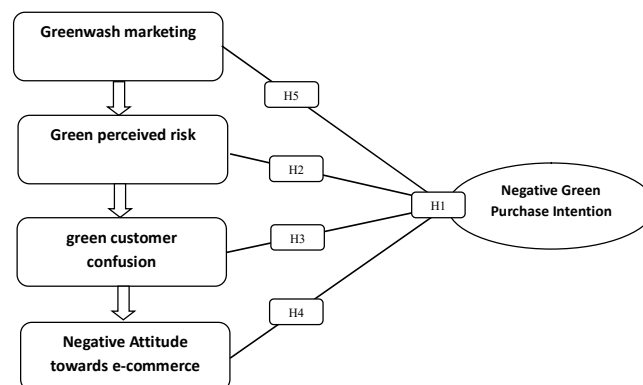


Figure 1. Conceptual Framework, Source, Author

3- Methodology

3.1 Methods

The data for this study were gathered using a random sampling approach. The study sample focused on Egyptian consumers who had interacted online with Egyptian tourism companies, whether to arrange an internal entertainment program or purchase a product from them through the company website during the year of 2024, as well as the driving elements behind these companies' greenwash marketing.

The contact information of the customers was obtained through the travel agencies they dealt with in 2024. Questionnaires were prepared and distributed using Google Forms and Survey Monkey, through sending the questionnaire link by emails. A total of 250 questionnaires were collected and analyzed for missing data. 40 replies were chosen as outliers, leaving 210 responses eligible for further analysis.

Greenwash marketing, green perceived risk, green consumer confusion, negative attitude toward e-commerce, and negative green purchase intentions were the study components consisting of 24 questions covered in this research. Five measures of Greenwash and five items of Green perceived risk were derived and altered from Chen and Chang (2013), green consumer confusion from Chen et al. (2013) and Aji and Sutikno (2015). Attitudes toward e-commerce, and green purchase intentions were measured using ten questions adapted and modified from Newell et al. (1998); Yi (1990); and Khandelwal & Bajpai (2011).

All variables were created using a 5-point Likert scale (1=strongly disagree, 5=strongly agree). An exploratory factor analysis (EFA) was undertaken to determine the underlying dimensions of the research and decrease the number of variables in the constructs. After deleting all items with weak psychometric qualities, Cronbach alpha was calculated to ensure appropriate reliability.

3.2 Validity and reliability

Validity describes the appropriateness of the degree of measurement for what it claims to measure. Validity is divided into several types, including face validity; construct validity, content validity, and criterion validity (Rothman et al., 2008). Therefore, the questionnaire was presented to a group of experienced academics in faculties of tourism and hotel management, as well as the tourism consultants. The reviewers' comments and suggestions were considered, and adjustments were made in light of their recommendations.

Furthermore, Cronbach's alpha scale was used in this study to test reliability measurements. Cronbach's alpha is a number that ranges from 0 to 1 and is generally considered acceptable if it is higher than 0.7. A high alpha value indicates a strong correlation between the tested items (Shrestha, 2021). See table (1).

3.3 DATA ANALYSIS PROCESS

The gathered data is examined using SPSS (version 24). A descriptive analysis conducted first, and then a simple regression analysis was used to test the proposed hypotheses in order to investigate a direct relationship between the variables. Cronbach's alpha values are also used to determine the degree of internal consistency of each dimension.

The Cronbach Alpha values for all 24 variables in the study, including 19 independent variables "Greenwash marketing (GW), Green perceived risk (GPR), green customer confusion (GCC), and Negative Attitude towards e-commerce (NA)", and five items

for the dependent variable “Negative Green Purchase Intentions (GPI)”, significantly exceeded the recommended minimum value ($\alpha = 0.70$) as suggested by Saunders et al. (2009). Furthermore, Cronbach's Alpha is the most widely used approach for assessing reliability by measuring internal consistency. An Alpha value of 0.70 or above is considered acceptable, with higher values indicating more dependability.

4. Analysis and findings

4.1 Descriptive Statistics

All the constructs of the internal consistency model were measured with Cronbach's alpha and composite reliability threshold criterion set at 0.70 as recommended by Hair et al., (2010). Table 1 shows the Cronbach alpha for all variables are above the recommended of 0.70. Greenwash marketing (0.832), Green perceived risk (0.843), green customer confusion (0.838), Negative Attitude towards e-commerce (0.843), and Negative Green Purchase Intentions (0.839). Furthermore, the overall Cronbach alpha was (0.846), which means that the results have proved the measurement model was reliable.

The descriptive statistics results from Table 1 also show that Green perceived risk (GPR) (mean = 3.979, SD = 0.665) has the highest mean among the impact of Greenwash marketing dimensions, followed by Negative Green Purchase Intentions (GPI) (mean = 3.218, SD = 0.773), green customer confusion (GCC) (mean = 3.217, SD = 0.919), and Greenwash marketing (GW) (mean = 3.148, SD = 1.058). On the other hand, the lowest mean among the impact of Greenwash marketing dimension was Negative Attitude towards e-commerce (NA) (mean = 2.734, SD = 0.703).

Table 1: Reliability and Mean results

DIMENSIONS	Items	Mean	Std. Deviation	Reliability Statistics
Greenwash marketing (GW)	4	3.148	1.058	0.832
Green perceived risk (GPR)	5	3.979	0.665	0.843
green customer confusion (GCC)	4	3.217	0.919	0.838
Negative Attitude towards e-commerce (NA)	6	2.734	0.703	0.843
Negative Green Purchase Intentions (GPI)	5	3.218	0.773	0.839
Total Mean, Std. Deviation, and Cronbach's Alpha	24	3.2591	.59744	0.846

These results indicate that Greenwashing is likely to increase Green perceived risk and green confusion, as customers struggle to believe promises. In addition, the High risk and confusion are associated with moderate negative views towards e-commerce platforms. These findings also demonstrate that greenwashing is weakening confidence in e-commerce, but consumers have not given up on sustainability yet. Tourism companies must move swiftly to regain credibility—or risk losing the expanding market of environmentally conscious customers.

4.2 Pearson correlation test

Pearson correlation was conducted to test the association between each variable and Greenwash marketing. As shown in table (2), it shows that the Negative Green Purchase Intentions (GPI) has the highest positive correlation with Greenwash marketing (0.661), followed by green customer confusion (0.538), Green perceived risk (0.375), and Negative Attitude towards e-commerce (0.330).

These results indicate that Greenwash marketing has a strong positive effect on customers, and it may have a negative impact on customers in terms of confusion and Purchase Intentions

Table 2: Pearson correlation

		GW	GPR	GCC	NA	GPI
GW	Pearson Correlation	1				
	Sig. (2-tailed)					
GPR	Pearson Correlation	.375**	1			
	Sig. (2-tailed)	.000				
GCC	Pearson Correlation	.538**	.282**	1		
	Sig. (2-tailed)	.000	.000			
NA	Pearson Correlation	.330**	.253**	.208**	1	
	Sig. (2-tailed)	.000	.000	.002		
GPI	Pearson Correlation	.661**	.365**	.516**	.315**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
**. Correlation is significant at the 0.01 level (2-tailed).						

This result confirm, H1 “There’s a significant positive correlation between Greenwash marketing and green perceived risk, green consumer confusion, negative attitude toward e-commerce, and negative green purchase intentions.”

4.3 Regression analysis

A linear regression analysis was conducted to indicate the influence of Greenwashing Marketing as an independent variable, on the predictors of Greenwashing Marketing green perceived risk, green consumer confusion, negative attitude toward e-commerce, and negative green purchase intentions” in Egyptian tourism companies as shown in Table 3.

Table 3 shows that the extracted model is statistically significant, with p-values ranging from zero to three decimal places, which are less than "0.05". The correlation coefficient "R" between the model elements was 71.7%, indicating a moderate positive correlation among the study elements. The coefficient of determination (R^2) was 0.514, suggesting that the variables in the model explained approximately 51.4% of the variance in the Negative Green Purchase Intentions, while 38.6% could be attributed to other factors. Therefore, it can be assumed that the variables in this model are linearly correlated.

The results demonstrated that Greenwash Marketing, green perceived risk, green consumer confusion, and negative attitude toward e-commerce, are significant predictors of the dependent variable (negative green purchase intentions) in this research ($p < 0.05$). Greenwash marketing (GW) has the highest positive predictor value ($\beta = 0.336$, $p < 0.001$) and contributes significantly to the variation of the dependent variable purchase intentions when compared to other predictor variables. This suggests that when all other predictor factors in the model are adjusted for, Greenwash Marketing (GW) offer the most distinctive contribution to explaining the variation in the dependent variable purchase intentions. This finding support H5 “Greenwash marketing has a significant positive impact on Negative Green Purchase Intentions”

Table 3: regression results

	Unstandardized B	Std. Error	t- value	p- value	Collinearity Statistics	
Dependent Variable: Negative Green Purchase Intentions (GPI)	(Constant)				Tolerance	VIF
	.660	.254	2.599	.010		
Green perceived risk (GPR)	.129	.062	2.076	.039	.835	1.197
green customer confusion (GCC)	.209	.048	4.329	.000	.723	1.383
Negative Attitude towards e-commerce (NA)	.117	.057	2.036	.043	.877	1.140
Greenwash Marketing (GW)	.336	.044	7.622	.000	.653	1.531
F-Value=54.128, P-Value=.000, R= .717, R-Square=.514						
Notes. *p< .05, **p< .01, ***p< .001.						

Therefore, the linear regression function was predicted to be $GPI = 0.660 + 0.336(GW)$. This suggests that increasing one unit of the Greenwash variable resulted in a "33.6%" rise in negative green purchase intentions.

The results shown in table also demonstrated that a substantial positive relationship ($p < 0.05$) among green perceived risk, green consumer confusion, and negative attitude toward e-commerce in predicting the dependent variable negative green purchase intentions. The β values for green perceived risk, green consumer confusion, negative attitude toward e-commerce is 0.129, 0.209, and 0.117, respectively.

Negative Attitude towards e-commerce (NA) is regarded as the lowest significant predictor variable contributing to the variance of the dependent variable green purchase intentions when compared to other predictor factors. This suggests that when all other predictor factors in the model are adjusted for, Negative Attitude towards e-commerce have the lowest unique contribution to explain the variation in green purchase intentions. These results suggest that increasing one unit of green perceived risk, green consumer confusion, and negative attitude toward e-commerce, generates an increase with 12.9%, 20.9%, 11.7% respectively, rise in negative green purchase intentions.

These findings support H2, H3, H4 (Green Perceived Risk has a significant positive impact on Negative Green Purchase Intentions; Green customer confusion has a significant positive impact on Negative Green Purchase Intentions; and Negative Attitude Towards e-commerce has a significant positive impact on Negative Green Purchase Intentions), respectively.

Furthermore, according to the linear regression Results, multicollinearity is the amount to which independent variables are associated with one another. Tolerance should exceed 0.1 (or $VIF < 10$) for all variables. If tolerance is less than 0.1, there is a suspicion of multicollinearity, while tolerance less than 0.01 indicates confirmation

of multicollinearity. Table 2 shown that Multicollinearity diagnostics revealed no significant problems, since all tolerance thresholds were surpassed. 60, and all VIF readings remained far below the crucial threshold of 5. Furthermore, the four independent variables, which define the negative green purchase intentions, may be represented by the regression equation shown below: $GPI = 0.660 + (0.129) GPR + (0.209) GCC + (0.117) NA + (0.336) GW$

5. Discussion

The present study was specially designed to investigate the effect of greenwash marketing on negative green purchase intentions among Egyptian customers. The study aimed to measure the influence of independent greenwash marketing predictors including green perceived risk, green customer confusion, and negative attitude towards e-commerce, on the dependent variable negative Green Purchase Intentions (GPI).

The Results of the study showed that the relationship between independent variables and the dependent variable was significant and positive, hence supporting hypotheses H1. Thus, these findings are in coherence with previous studies which have stated that the greenwash marketing activities have a direct and positive impact on perceived risk and negatively influence customers' attitude and purchase intention (Chang and Hung, 2023; Lu et al., 2022; Tarabieh, 2021; Nguyen & Dekhili, 2019). These findings suggest that when undesired, ambiguous consequences are comprehended by consumers (Mwencha et al., 2014), then consumers feel the risk. In support, due to the fact that the consequence is ambiguous and not predictable, the high risk of purchasing decision demonstrates more uncertainty. Additionally, the perceived risk is defined in the psychological as, physically, financially, socially, and performance-related fields (Junior et al., 2019). Accordingly, the perceived risk would increase the negative Attitude of customers towards e-commerce. Consequently, the risk of using greenwash marketing in tourism companies is observed and recognized as stronger than the advantages customers obtain. This result is consistent with the results of Aji and Sutikno (2015) who found that that customers want to decrease perceived risk instead of maximizing benefits.

The study's results also show that greenwash marketing has a strong positive impact on negative green purchase intention. This result is in line with the results of Tarabieh (2020) who reported that greenwash exerts significant indirect negative impacts on green trust and green purchase intention via green confusion and green perceived risk. This indicates that when businesses mislead customers by using greenwash marketing, customers may be less willing to form long-term connections or trust with organizations, reducing their purchase intention (Yang et al., 2020).

This result is consistent with previous research showing that customers' views of greenwashing have a direct negative influence on their propensity to buy green products (Wang et al., 2019; Aktura et al., 2018). The results indicate that Greenwash has an important effect on Purchase Intentions, and influenced

by several factors and relationships. An understanding of these relationships may, therefore, lead to the formulation of strategies that could serve to address customer perceptions and encourage genuine environmental practices. Further research is

needed to establish direct effects as well as possible moderating factors that may occur in such relationships.

Moreover, green customer confusion was also highly associated with green wash marketing and Negative Green Purchase Intentions. This result confirms the evidence from previous studies by (Chen & Chang, 2013; Mitchell and Ramey, 2011). Their results found that greenwash marketing makes customers confused, not knowing which products genuinely green and which ones are not. The results indicate that when consumers become confused about a firm that takes advantage of environmental factors in an opportunistic manner, they have a negative approach to the firm and tend not to purchase products from the firm. As a consequence, to increase their customers' green trust, businesses should limit their greenwashing efforts. Furthermore, companies must reduce the green customer uncertainty about green products, and services if they want to reduce the unfavorable association between negative Attitude Negative Green Purchase Intentions and green customer confusion. Thus, according to the findings an increase in customer green confusion would lead to an increase in their Negative Green Purchase Intentions, which aligns with a previous study conducted by (Saxena & Sharma 2021).

Furthermore, the findings confirm the hypothesis (H3) that green customer confusion has a positive impact on customer the negative Green Purchase Intentions, which is consistent with previous research (Cheung & To, 2021; Chen & Chang, 2013). Green customer confusion sets low expectations, and when a product is not or only partially sustainable, this leads to a high the negative Green Purchase Intentions. Thus, when green customer confusion is perceived as a result of misleading marketing, a lack of actual intention is especially likely to backfire through increased the negative Green Purchase Intentions. This result aligns with the results of previous studies found that Customers are distrustful of green products because they have discovered deceptive marketing tactics (Rahman and Nguyen-Viet, 2020). These results support the findings of Al-Heali (2020) who found that confused advertising is a technique in which businesses or salespeople falsify or modify information that impacts the customer's intention, resulting in poor purchase choices. As a result, green businesses mislead customers by exaggerating the benefits of their products and taking advantage of inexperienced clients (Rahman et al. 2015).

This study finds out that negative Attitude towards e-commerce, and Perceived risk have a significant and positive impact on the negative Green Purchase Intentions which confirm H2, and H4. This result demonstrates that Green Purchase Intentions is positively associated with negative Attitude towards e-commerce, and Perceived confusion which would negatively affect Purchase Intentions. Studies have shown a favorable and substantial association between attitude toward green items and products and green purchase intention (Chanda et al., 2023). Furthermore, negative Attitude has a direct influence on negative green purchasing intention, demonstrating its role in determining customer behavior (Lavuri et al., 2023).

The results also demonstrate that Perceived risk has a detrimental impact on the Purchase Intentions. This suggests that any firm that engages in deceitful marketing is untrustworthy since both new and current customers may transfer to another product or service. As a result, the firm will get a bad reputation as a dishonest organization, which will lead to a decline in future sales. This will also destroy the brand image and

reputation of any company that adopts these tactics. Furthermore, Al-Bayati and Al-Rabaiwi (2020) feel that misleading marketing is a premeditated effort to conceal the negative aspects of the product, invent attributes that do not exist in the product, or alter the way the product is presented to the client.

Hence, this study can conclude that greenwash does not only directly affect negative Green Purchase Intentions positively, but it also predicts its influences from green perceived risk, negative attitude toward e-commerce, and perceived confusion. Therefore, if tourism companies would like to reduce the positive relationship between greenwash and negative Green Purchase Intentions, they need to decrease their customers' Green perceived risk (GPR), green customer confusion (GCC), negative Attitude towards e-commerce (ATC), and Perceived confusion (PC)

5.1 Theoretical Implications

This article contributes to the current research on greenwash marketing and sustainable goods and services provided by Egyptian tourism companies, including the Theory of Planned Behavior (TPB) into the study conceptual framework, resulting in a more comprehensive analysis of the phenomena. The study's findings highlight the impact of greenwash marketing on negative green purchase intentions, supporting the hypotheses that green perceived risk, green customer confusion, negative attitude toward e-commerce, positively influence customers' negative green purchase intentions.

The functions of green perceived risk, green customer confusion, and a negative attitude toward e-commerce are especially important for expanding the Theory of Planned Behavior (TPB) model and better understanding consumer attitudes and actions, as well as their intents.

This article presents not just empirical evidence, but also a full theoretical model that incorporates numerous factors of consumer behavior. This paradigm may be used in a variety of study scenarios including green, sustainable, and green marketing initiatives. The findings of this research contribute to the literature on the influence of consumer perceptions on attitudes and intentions. The extremely substantial impact of attitude toward e-commerce and perceived risk on purchase intention suggests that these factors work predominantly via attitudes, which, according to the Theory of Planned Behavior (TPB), are the key determinants of buyer intentions.

The function of attitude toward e-commerce and perceived risk toward greenwash marketing and consumer purchase intention lends credibility to the Theory of Planned conduct, which regards attitude as a key mediator between belief and conduct. It also makes an important addition to the literature on green washing and sustainability goods and services by demonstrating that such a link with purchase intention is mediated by attitude.

5.2 Practical Implications

This research found that consumers' views of greenwash marketing in the tourism sector reduce their inclinations to participate in green buying. As a result, tourism companies should adhere to their environmental responsibilities and provide timely disclosures of relevant information. The development of the self-media age is closing the knowledge gap between businesses and consumers. The narrower the knowledge gap, the lower the likelihood of corporations gaining from opportunism. It implies that tourism management should understand that, although greenwashing may provide

some short-term advantages, it is not only unsustainable in the long run. As a result, corporations should decrease greenwashing and concentrate more on a practical approach to corporate environmental responsibility.

According to the study model, greenwash marketing has a strong beneficial influence on negative green buy intention by increasing green perceived risk, green customer confusion, unfavorable attitude toward e-commerce, and perceived risk. The tourism business will benefit by providing proper environmental statements, and the beneficial effects may be seen even in sales and market share. Companies are not required to use the dangerous practice of greenwashing. Environmental factors should be included in the businesses' marketing plans, which should highlight their environmental performance via pledges. There should be clear claims and pledges to improve environmental performance. A high level of confidence in green business statements is critical for establishing a favorable brand image.

This research investigates how green perceived risk, green customer confusion, negative attitude toward e-commerce, and perceived risk influence the link between greenwash marketing and negative green purchase intention. The results show that companies' greenwashing activity increases consumer uncertainty and perceived risk in terms of unfavorable attitudes about e-commerce, as well as perceived dishonesty, which impacts green buying intentions. In addition to maintain a great ecological reputation, organizations must improve their environmental practices. Companies would reduce greenwashing as the credibility of their environmental claims improved" (Chen et al. 2013). Companies encounter issues in providing proof to clients for their environmental claims without offering credible facts. In this regard, it is advised that businesses take all necessary steps to ensure that consumers are properly alerted, with the goal of reducing customer uncertainty regarding their green claims. In this regard, companies should not only claim environmental sustainability but also provide proof of eco-friendly goods.

These rules would reduce consumer uncertainty and perceived risk. As a result, companies are more likely to engage in green practices, which is associated with making green-related claims and increasing the desire to return to tourism. The study's results are likely to be beneficial to tourism managers, professionals, university students, and academics, as well as serve as a valuable reference for future work. Given the negative impact of perceived greenwashing and perceived risk on customer attitude, as well as their indirect influence on purchase intention via customer attitude, it is desirable that companies develop appropriate communication of eco-friendly product attributes to assist customers in reducing greenwashing and risk-related concerns.

Although the creation of sustainable services may have economic advantages, it must be accompanied by marketing tactics that will help promote such items, establish consumer trust, and overcome the negative views that they often generate. As a result, marketers must develop green marketing techniques that will help to increase green client purchase intentions. This should be accomplished by promoting product sustainability, which may include environmental advantages in addition to the packaging and materials utilized in the product.

To increase client, buy intention, green marketers must first establish brand image and trust. This may be accomplished by developing a strong brand identity, emphasizing

environmental stewardship, and encouraging sustainable product components. Policymakers should increase consumer environmental knowledge in order to improve the efficacy of green marketing in terms of purchase intention. It varies from educating customers about a product's environmental advantages to using sustainable materials and making environmentally responsible decisions.

5.3 Limitations and Future Research Directions

There are various limitations to this study. First, the sample is not completely random, because the poll was conducted online via a link provided via email or social media, omitting certain population members who do not use social media or are hesitant to access the link for fear of contracting a virus. This allows us to explain the sample's unique characteristics, such as its age and educational distribution. We thus advise against generalizing these results.

The present study may be expanded and improved in future research by adding other factors, including nations with varying degrees of development on other continents, and by investigating the actions of enterprises and consumers when contemplating specialized green marketing for items.

Another fascinating factor to explore is whether market channels, both virtual and non-virtual, influence customers' choices to purchase green goods. In the future, research may be conducted to determine if consumers' aspirations to buy green items convert into real behavior and performance. Researchers may go on to check additional mediating factors such as subjective norms and a variety of moderators, including brand green image, in order to widen and deepen research on the impact of perceived quality and price on consumers' green buying behaviors.

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