Exploring the impact of Tourist Green Marketing Mix on Purchase Intention (applied on Luxor city)

Ibrahim Mohamed Ahmed
Tourism studies Dep
Faculty of Tourism & Hotels, Luxor University

Sabreen Gaber Abdel-galil
Tourism studies Dep.
Faculty of Tourism & Hotels, Luxor University

Azza Maher Khalil
Tourism studies Dep.
Faculty of Tourism & Hotels, University of Sadat City

Fatma Youssef Abouzied
Tourism studies Dep.
Faculty of Tourism & Hotels, Beni Suef University

Abstract

The trend towards green marketing has grown among companies that wish to stay competitive in their respective industries, many organizations are making attempts to increase the environmental footprints of their business activities. The present study examines the impact of green marketing mix on purchase intention. The study data is collected using questionnaire that has completed by 410 tourists who visited Luxor. The results indicate that tourists' purchasing intentions are positively influenced by the green marketing mix and prefer it over the traditional mix. Finally, this study recommends switching to the use tourist green marketing mix in Luxor.

Keywords: Marketing, Green Marketing Mix, Purchase Intention, Luxor.

Introduction

Concerns over pollution and environmental degradation have grown ever since the environmental movement got its start in the 1960s. For instance, there was a 73% rise in the availability of greener products between 2009 and 2010(Berghoff & Rome, 2017). Environmental management has risen to the top of many company agendas as a result of growing environmental concerns and demand to act responsibly. As a result, a lot of businesses are working to strengthen their environmental stances by making their environmental initiatives public, the Sustainable Development Goals of the United Nations (2017) contain a goal to "ensure sustainable consumption and production patterns," which supports this trend (Szabo & Webster, 2021). Groening *et al.* (2018) stated that most consumers will choose an environmentally superior product over a subpar one. Therefore, marketing green products and services necessitates different tactics than selling non-green products and services.

The term "green marketing mix" refers to a set of marketing tools and components that enable a business to meet its objectives and satisfy its

target market while minimizing its negative environmental impact. Green marketing mix programs are created to help the business achieve its financial and strategic goals. Green marketing programs describe environmentally friendly marketing activities, green product, price, place, and promotion are the components of the green marketing mix. This means that each of the four major marketing mix programs (product, price, place, and promotion) can be designed and carried out in ways that are less harmful to the environment(Nguyen-Viet, 2023).

The governorate of Luxor is situated in Upper Egypt's southernmost section. Luxor's developments date back to the pre-history eras. The city is one of the world's most renowned and magnificent cities. The city has a long history. Luxor has attracted the attention of international organizations concerned with human heritage, including UNESCO. The governorate has been designated as an open museum as part of a comprehensive development strategy(Amara, 2022).

Previous studies indicated the important role that the green marketing mix plays in influencing the purchase intention, such as the study of Mahmoud (2018); Ahmed (2023); Pushpanathan (2020).

In addition, the present research can be a foundation for reducing the negative impacts of tourism activity on the environment. Combined with future research, this study could have significant implications for replacing all traditional factors that negatively affect the environment during the management of tourism activity, with this aim in mind, this study attempts to explore the impact of the green marketing mix in Luxor city on tourists purchase intention and answer the following research question ‘‘To what extent does tourist green marketing mix effect tourists' purchase intention?’’

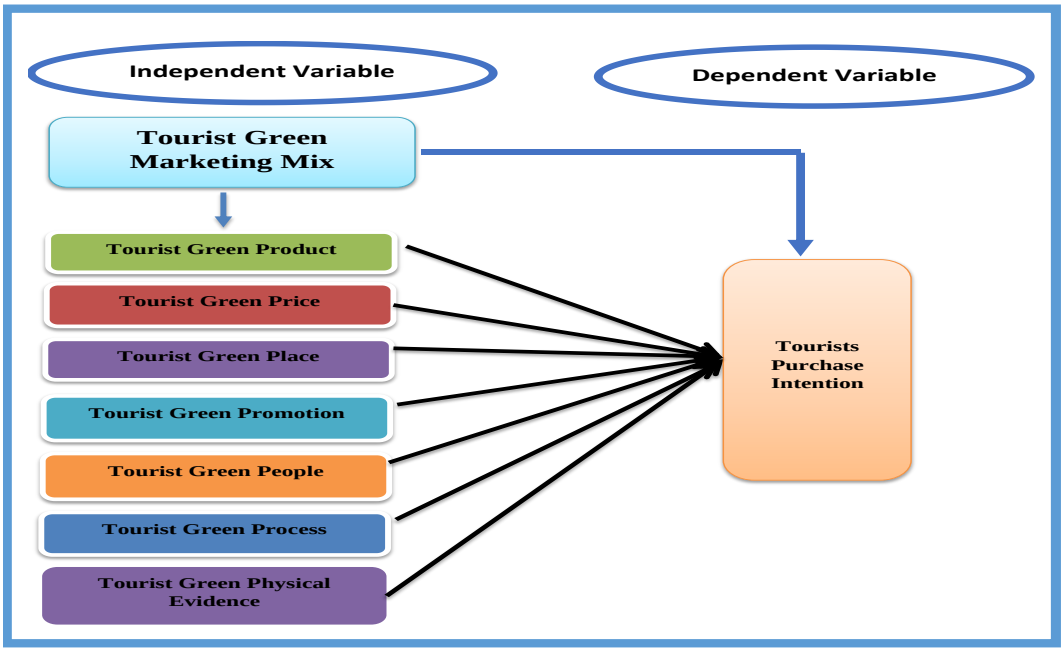

Figure 1: Conceptual Framework

Theoretical Background

Green Marketing Mix

Green marketing mix can be defined as the pledge of an organization for the production of harmless, biodegradable goods and services by engaging recyclable and eco-certified packaging, sustainable manufacturing and use of energy efficiently. These marketing practices minimize the ecological impression of a product during its lifetime(Mehraj & Qureshi, 2020). While Mahmoud (2019) mentioned that the primary goal of the green marketing mix (hereafter green marketing mix) is to protect or improve the environment by saving resources, lowering pollution, and decreasing waste. In other words, customers seek answers to issues that occur from behaviors related to products. As a result, the components of green marketing mix can be seen as a multidimensional construct in accordance with earlier definitions of green marketing. Green marketing mix consists of marketing tools and elements that allow a firm to serve the target market and achieve organizational goals without harming the natural environment(Mukonza & Swarts, 2020). The following are the elements of the green marketing mix:

Tourist Green Product

Chung (2020) described eco-friendly products as Products designed to reduce the consumption of natural resources and minimize adverse environmental impacts throughout the whole life-cycles of these goods are referred to as environmentally safe products that can support the long-term goal of protecting and preserving our natural habitat. A green product is defined as one that was manufactured using toxic-free ingredients and environmentally friendly measures and that has been certified as such by an acknowledged organization. A green product is defined as "a product that was manufactured using toxic-free ingredients and environmentally friendly measures, and which is certified as such by an acknowledged organization"(Dewi et al., 2020, P.160)

Tourist Green price

According to Tsai *et al.* (2020) green pricing takes into consideration the people, planet and profit in a method that takes care of the health of employees and communities and ensures efficient productivity. Mukonza and Swarts, (2020) referred to green pricing as the price particular in the light of company's policies with regard to environmental consideration imposed by rules and corporation instructions or its initiatives in this regard.

Tourist Green place

Green place is about managing logistics to cut down on transportation emissions, thereby in effect aiming at reducing the carbon footprint is related to distribution gates use that deal with green products, which are suitable for customers, in terms of facilitating their delivery, and to secure cycling procedures conducting inside environmental conditions and requirements(Tsai *et al.,* 2020).

Tourist Green promotion

Offering accurate product information in a way that respects the materialistic and moral interests of consumers is known as "green promotion." It entails arranging promotional tools like advertising, marketing materials, signage, white papers, websites, public relations, sales promotions, direct marketing, on-site promotions, videos, and presentations with consideration for people, the environment and profits(Mahmoud, 2018).

Green People

Larashati *et al.* (2018) explained that people are those who are involved in the establishment of green services/products, the provider should have a green mindset to be implemented in their activities.

Green Process

Xie *et al.* (2019) found that green processes have a positive impact on green products, they can improve the company's financial performance. Thus, green product innovation also mediates the relationship between green

processes, financial performance and green technology innovations have received constant attention from the business sector in recent years(Raja, 2020).

Green Physical Evidence

Green buildings are one example of green physical evidence, green building is becoming a trend in the construction industry today. In a green building, all stakeholders, including architects, contractors, engineers, and other parties need to work together to build green design and construction (Ahn *et al.*, 2016).

Figure 2: The 7PCS of green marketing mix.

Tourist Purchase Intention

According to Wang and Li (2022) tourists' purchase intention does not always lead to purchase behavior since there are significant differences in their influencing factors and mechanisms of formation, the formation of purchase intention is a more rational process, which is influenced by external factors related to information and quality through trust and avoiding cognitive dissonance (internal factors). Moreover, purchase intention (PI) indicates the degree of consumer feeling how confident they are to buy a product or service, PI is perceived as the key predictor of actual behavior that raises a better opportunity to predict overt purchase behavior (Martins *et al.*, 2019).

Methodology

Questionnaire Design

The data collection tool of the current study relies on designing a questionnaire directed to tourists who visited Luxor. Questionnaire was

designed in order to collect some statistical data about the characteristics of the respondents and the impact of tourist green marketing mix on their purchase intention.

Tourists' questionnaire consists of nine sections:

Section A: Demographic and Functional Information

The questions included four items which are gender, age, level of education and level of annual income.

Section B: Tourist Green Product

This section assesses the level of "Tourist Green Product" importance for tourists to take the decision of travelling, section consists of 6 items which were developed based on (adapted from) Canöz (2022) and Choudhary *et al.* (2019).

Section C: Tourist Green Price

This section assesses the level of "Tourist Green Price" importance for tourists to take the decision of travelling, section consists of 5 items which were developed based on Bonn *et al.* (2016) and Yang *et al.* (2021).

Section D: Tourist Green Place

This section assesses the level of "Tourist Green place" importance for tourists to take the decision of travelling, section consists of 4 items which were developed based on Ibnou-Laaroussi *et al.* (2020) and Ottman (2017).

Section E: Tourist Green Promotion

This section assesses the level of "Tourist Green Promotion" importance for tourists to take the decision of travelling, section consists of 5 items which were developed based on Sng *et al.* (2021) and Fairweather *et al.* (2005).

Section F: Tourist Green People

This section assesses the level of "Tourist Green People" importance for tourists to take the decision of travelling, section consists of 5 items which were developed based on Luu(2021) and Chou (2014).

Section G: Tourist Green Process

This section assesses the level of "Tourist Green Process" importance for tourists to take the decision of travelling, section consists of 5 items which were developed based on Mercade Mele *et al.* (2019) and Kluczek (2017) and Iravani *et al.* (2017).

Section H: Tourist Green physical evidence

This section assesses the level of "Tourist Green physical evidence" importance for tourists to take the decision of travelling, section consists of 6 items which were developed based on Reilly (2012) and Mahmoud (2018).

Section I: Purchasing Intention

This section assesses the impact of green marketing mix on Purchasing Intention, section consists of 6 items which were developed based on Kelly *et al.* (2007) and Mahmoud (2018).

Sample size and Data Collection

The sample size of the population was determined for a given population to become representative and ensure that results can be generalized to the whole population.

The researcher created a pilot study for the study questionnaires, which consisted of 45 tourists. The researcher conducted a pilot study within 45 tourists to validate the research questionnaire

Questionnaire Sample Size

Appropriate sample size of the study population was calculated using the Cochren, J. formula (Cochren, 1977) as follows:

$$n = \frac{z^2 \times \hat{P}(1-\hat{p})}{\varepsilon^2}$$

$$n = \frac{1.96^2 \times 0.5(1-0.5)}{0.05^2} = 402$$

Where:

n: appropriate sample size

Z: standard degree (1.96 at significant level of 0.05)

p: Sample proportion and neutral = 0.50

e: maximum allowed error (0.05 at significant level of 0.05)

Applying these values to the Cochren, J. formula reveals that the study sample size is (402) participants. However, the researcher distributed (420) questionnaires. After analysis, there were (10) questionnaires not valid for analysis; the valid is (410) with a respondent rate of (97.6%). The researcher applied a stratified random sample, each stratum is randomly sampled the data is classified into multiple subgroups (strata) based on common characteristics.

Questionnaire was distributed electronically and hard copy to tourists during the period from January 2024 to April 2024. A five-point Likert scale of agreement was used, where 1 means "Strongly Disagree", 2 means "Disagree", 3means "Neutral", 4 means "Agree" and 5 means "Strongly Agree".

Reliability

Table (1): Reliability Analysis of the tourists' questionnaire

The Axes	No. of statements	Alpha Coefficient
Tourist Green Product	6	.603
Tourist Green Price	5	.681

Tourist Green Place	4	.698
Tourist Green Promotion	5	.701
Tourist Green People	5	.675
Tourist Green Process	5	.691
Tourist Green Physical Evidence	5	.722
Purchasing Intention	6	.786
The Overall Cronbach's Alpha	**41**	**.683**

Reliability is the used measuring instrument stability and its consistency. Cronbach's α reliability coefficient was used to test the reliability of the questionnaire. The Cronbach's alpha for the variables of tourists' questionnaire rang from (0.603) to (.786). This Cronbach's alpha is good and above the advocated threshold of (0.6) (Gliem & Gliem, 2003). Thus, it can be concluded that the variables of tourists' questionnaire in this study have sufficient reliability.

Validity

Factor analysis shown in the following table attempted to identify key variables or factors that explain the pattern of correlations within a set of observed variables. Statistical loading should not be less than 0.6(Fabrigar *et al.*, 1999).

Table (2): Factor Analysis of the tourists' questionnaire

The Axes	No. of statements	Extraction
Tourist Green Product	6	.745
Tourist Green Price	5	.636
Tourist Green Place	4	.883
Tourist Green Promotion	5	.769
Tourist Green People	5	.788
Tourist Green Process	5	.880
Tourist Green Physical Evidence	5	.701
Purchasing Intention	6	.745
The Overall	**41**	**.998**

Factor analysis for the variables of tourists' questionnaire rang from (0.636) to (.883), as the factor analysis shown in previous table states that all variable of the study achieved a percentage bigger than (60%) Hence, it is statistically valid.

Data Analysis

To analyze the study data, SPSS(Statistical package for social sciences)V. 25. Was employed and the following statistical tests were used:

1- Reliability Test: It was used to measure the reliability of the study tool.

2- validity Test.

3- Frequencies, percentages, means and standard deviation: to describe the characteristics of the sample, and to determine the responses of the sample members towards all the axes of the study tool.

The mean value of the agree and disagree levels for Likert scale was as follows (Safwat *et al.*, 2022):

- Strongly Disagree (1: 1.79).
- Disagree (1.80: 2.59).
- Neutral (2.60: 3.39).
- Agree (3.40: 4.19).
- Strongly Agree (4.20: 5).

4- Correlation Coefficient: This is to determine the strength and direction of the relationship between the study variables.

5- Regression.

Results and Discussion

Demographic Data

Table (3): The demographic data

Variable	Response	Freq.	%	Rank
Gender	Male	174	42.4	2
	Female	236	57.6	1
	Total	410	100	
Age	Less than 30 years	120	29.2	3
	30 to 45 years	168	41	1
	More than 45 years	122	29.8	2
	Total	410	100	
Level of education	Below secondary school	12	2.9	5
	Secondary or technical education	16	3.9	4
	Intermediate qualification	50	12.2	3
	University or high institute education	264	64.4	1
	Postgraduate studies	68	16.6	2
	Total	410	100	
Annual income	Less than 18000$	116	28.3	2
	18000$:36000$	186	45.4	1

	More than 36000$	108	26.3	3
	Total	410	100	

According to "Gender", the percentage of males (42.4%) was less than that of females (56.6%). According to "Age", 41% of the sample respondents were 30 to 45 years old; (29.8%) of them were older than 45 years; and (29.2%) of them were younger than 30 years .

Concerning the respondents' "Level of education", the majority of the respondents graduated from university or high institute (64.4%), followed by those with postgraduate studies (16.6%), intermediate qualification (23.2%), intermediate qualification (12.2%), Secondary or technical education (3.9%), and finally below secondary school.(%2.9)

Furthermore, regarding the respondents' "Annual income", the majority of the respondents earn 18000$:36000$ (45.4%), followed by those who make less than 18000$ (28.3%). On the other hand, the percentage of those who earn more than 36000$ is (26.3%).

Descriptive Analysis of the Study Variables

Tourist Green Product

This section displays mean and standard deviation of "Tourist Green Product".

Table (4): Descriptive analysis of "Tourist Green Product"

Tourist Green Product	Mean	SD	Rank
You prefer to buy green products in Luxor city.	4.25	.92	3
Green products help in protecting nature in Luxor city and reducing environmental damages.	4.57	.66	1
Green products strengthen your emotional bonds.	4.10	1.06	5
Using green products leads to some changes to the product (design - packaging - improvement of operations), causing increasing the value of the product.	4.20	.89	4
Using green products leads to advantages such as being free from toxins and being environmentally managed.	4.47	.76	2
Various green product practices help stimulate the tourists to visit the destination and recommend it to others.	4.03	1.00	6
Overall	4.27	.58	

Table(4) displays the descriptive statistics (means and standard deviations) of the variable "Tourist Green Product". As illustrated in Table (3.2), the total mean value for "Tourist Green Product" is (4.27) with standard

deviation (0.58). Therefore, it can be inferred that the level of "Tourist Green Product" is significantly important for tourists .

In addition, results show that the item "Green products help in protecting nature in Luxor city and reducing environmental damages" has achieved the highest mean (4.57) with standard deviation (0.66). On the other hand, the "Various green product practices help stimulate the tourists to visit the destination and recommend it to others" has achieved the lowest mean (4.03) with standard deviation.(1.00)

The previous results agree with Amberg and Fogarassy (2019), Schileo and Grancini (2021), and Canöz (2022) that people prefer green products rather than other traditional products.

The previous results also indicate the importance of selling and displaying green products and services that are environmentally friendly. Likewise, tourists' support for green products in their answers has demonstrated that they prefer them to traditional products; thus, their purchase intentions may be affected positively by those green products.

Tourist Green Price

This section shows the mean and standard deviation of "Tourist Green price".

Table (5): Descriptive analysis of "Tourist Green Price"

Tourist Green Price	Mean*	SD	Rank
Pricing policies related to environmental considerations positively affect you and stimulate your trust.	4.30	.84	1
When the price of the green product is high because it is environmental, this does not prevent you from buying it.	3.95	1.07	5
The high price of the environmental product leads to an improvement in performance/design/appearance.	4.06	.98	3
When the value and quality of products are equal, the environmental benefits are the decisive element.	4.29	.87	2
Reliance on local resources to manufacture green products stimulates the intention to buy due to reducing the price.	4.04	.98	4
Overall	4.13	.56	

Table(5)discusses the descriptive statistics (means and standard deviations) of the variable "Tourist Green Price". As illustrated in Table (3.3), the total mean value for "Tourist Green Price" is (4.13) with standard deviation (0.56). Therefore, it is inferred that the level of "Tourist Green Price" has significant degree of importance for tourists .

Furthermore, the results show that "Pricing policies related to environmental considerations positively affect you and stimulate your trust" has achieved the highest mean (4.30) with standard deviation (0.84). On the other hand,

the statement "When the price of the green product is high because it is environmental, this does not prevent you from buying it" has achieved the lowest mean (3.95) with standard deviation (1.07). This result indicates that there may exist some challenges related to pricing.

These results agree with what was concluded by Yue *et al.* (2020) and Gelderman *et al.* (2021) that green prices usually stimulate purchase intention.

The numbers presented in the previous table related to the green price indicate that tourists have appositive attitude towards the importance of green price and the existence of fair and fixed prices for tourism products and services. This attitude may positively impact their purchase intentions.

Tourist Green Place

Table(6) presents the mean and standard deviation of the "Tourist Green Place".

Table (6): Descriptive analysis of "Tourist Green Place"

Tourist Green Place	Mean*	SD	Rank
The tourist green place positively affects marketing the tourist product in Luxor and stimulates you.	4.08	.79	2
The benefits of using a green place related to reducing carbon emissions affect positively the tourist destination.	4.04	1.08	3
The distribution gates of the green place are suitable for you.	3.97	.95	4
Using the green place helps with delivering the green products and reduces your effort to get them.	4.25	1.70	1
Overall	4.08	.73	

As shown in Table(6), the total mean value for "Tourist Green place" is (4.08) with standard deviation (0.73). This result reveals the degree of importance of "Tourist Green Place" for tourists to take the decision of travelling.

In addition, the results indicate that "Using the green place helps with delivering the green products and reduces your effort to get them" has achieved the highest mean (4.25) with standard deviation (1.70). On the contrary, "The distribution gates of the green place are suitable for you" has achieved the lowest mean (3.97) with standard deviation (0.95).

The above-mentioned results go in line with the results found by Lisi *et al.* (2020) and Ibnou-Laaroussi *et al.* (2021) that applying environmental practices in the place results in multiple benefits.

The answers received from the study sample on this axe related to the green place reflect tourists' agreement on the importance of the green place in the tourism marketing mix. This, in turn, indicates the extent to which tourists' intentions are positively influenced when the place offers, sells, or displays green and environmental tourist products or services.

Tourist Green Promotion

This section presents the mean and standard deviation of "Tourist Green Promotion".

Table (7): Descriptive analysis of "Tourist Green Promotion"

Tourist Green Promotion	Mean*	SD	Rank
Relying on tourist green promotion in Luxor stimulates you to visit the tourist destination and motivates you to buy green products.	4.24	.83	1
Providing real information about products strengthens emotional bonds.	4.07	.89	5
Green promotion includes activities that consider people, the planet, and making profits and helps achieve sustainability, which affects you positively.	4.15	.80	2
The use of environmental labels stimulates you to visit the tourist destination.	4.14	1.12	3
Marketers that understand the requirements of a green tourist and meet them in green ways have a positive impact on you.	4.11	1.07	4
Overall	4.14	.52	

As illustrated in Table (7), the total mean value for" Tourist Green Promotion" is (4.14) with standard deviation (0.52). Therefore, it is inferred that the level of Tourist Green Promotion is remarkably important for tourists.

Moreover, the results reveal that the statement "Relying on tourist green promotion in Luxor stimulates you to visit the tourist destination and motivates you to buy green products" has achieved the highest mean (4.24) with standard deviation (0.83). In contrast, "Providing real information about products strengthens emotional bonds" has achieved the lowest mean (4.07) with standard deviation (0.89).

In fact, such results align with the results mentioned about green promotion by Mahmoud (2019) and Liao *et al.* (2020) who explained that relying on green promotion motivates customers.

This demonstrates the importance of promoting environmentally friendly tourist products and services in an honest way reflecting

their actual reality, which highlights the positive impact of green promotion on tourists' purchase intentions.

Tourist Green People

Table (8) shows mean and standard deviation of **"**Tourist Green People".

Table (8): Descriptive analysis of "Tourist Green People"

Tourist Green People	Mean*	SD	Rank
The use of green people in marketing green products in Luxor stimulates you to visit the destination.	4.21	.85	2
Using Green people in green communication stimulates the development of tourist destinations.	4.24	.87	1
Organizations instilling a green mindset in people affect developing tourist destinations.	4.16	.92	3
Employees who are educated about and engaged in green issues help organizations drive tourism demand.	4.00	1.11	5
Training employees on environmental issues affects the organization's reputation and develops its competitiveness in attracting tourists.	4.09	.94	4
Overall	4.14	.76	

According to Table (8), the total mean value for "Tourist Green People" is (4.14) with standard deviation (0.76). Therefore, it is inferred that the level of "Tourist Green People" is notably significant concerning tourists' intention for travelling.

In addition, results show that "using Green people in green communication stimulates the development of tourist destinations" has achieved the highest mean (4.24) with standard deviation (0.87). On the other hand, the statement "Employees who are educated about and engaged in green issues help organizations drive tourism demand." has achieved the lowest mean (4.00) with standard deviation (1.11).

This table declares that the participants recognize the importance of those responsible for providing tourism products and services who have environmental awareness of and care about preserving the environment. This result explains the positive impact of green people on tourists' purchase intentions.

Tourist Green Process

This part shows the mean and standard deviation of "Tourist Green Process".

Table (9): Descriptive analysis of "Tourist Green Process"

Tourist Green Process	Mean*	SD	Rank
Using green processes in marketing products in Luxor positively affects the tourism destination.	4.01	1.07	4

Green technology innovations in organizations stimulate you.	4.10	.96	1
Green processes help in producing the same outputs with fewer inputs, which preserves the environment.	4.09	.98	2
Green processes lead to many advantages such as reducing waste and environmental consumption, and improving the company's performance.	3.96	1.05	5
The green strategy becomes applicable when giving priority to green processes.	4.05	.90	3
Overall	4.04	.78	

Table (9) displays the descriptive statistics (means and standard deviations) of the variable "Tourist Green Process". As shown, the total mean value for "Tourist Green Process" is (4.04) with standard deviation (0.78). This means that tourists have a positive attitude towards "Tourist Green Process".

According to these results, the statement "green technology innovations in organizations stimulate you" has achieved the highest mean (4.10) with standard deviation (0.96). On the other hand, "green processes lead to many advantages such as reducing waste and environmental consumption and improving the company's performance" has achieved the lowest mean (3.96) with standard deviation (1.05).

These results agree with Lisi *et al.* (2020) and Vrchota *et al.* (2021) who mentioned that the green process protects the environment and this encourages tourists to visit the destinations.

These results, which are based on the participants' answers to the part of the green process, indicate tourists' support for the green process and their desire for the process of manufacturing, presenting, displaying, and selling tourism products and services to be managed in an environmentally friendly manner. This pinpoints the positive impact of the green process on tourists' purchase intentions.

Tourist Green Physical Evidence

Table (10) presents the mean and standard deviation of "Tourist Green Physical Evidence".

Table (10): Descriptive analysis of "Tourist Green Physical Evidence"

Tourist Green Physical Evidence	Mean*	SD	Rank
Travel agencies' use of the green physical evidence in marketing products in Luxor positively affects tourist destinations.	4.18	1.07	2

Relying on natural attractions and green environmental conditions lead to stimulating the demand.	4.15	1.02	3
The different forms of green physical evidence represent an element that enhances the image of the travel agency and doubles its value.	4.88	5.74	1
Green physical evidence helps to prove the good faith of the travel agency by providing a sample of what they buy.	4.12	.89	4
Green packaging and green branding are green physical evidence practices which are preferred by you.	3.90	1.01	5
Overall	4.24	1.40	

Table (10) reveals the descriptive statistics (means and standard deviations) of the variable "Tourist Green Physical Evidence". As clarified in Table (7), the total mean value for "Tourist Green Physical Evidence" is (4.24) with standard deviation (1.40). These results mean that there is a high positive impact of tourist green physical evidence on tourists' intention for purchasing packages.

Additionally, these results indicate that the statement "the different forms of green physical evidence represent an element that enhances the image of the travel agency and doubles its value" has achieved the highest mean (4.88) with standard deviation (5.07). Nevertheless, "green packaging and green branding are green physical evidence practices which are preferred by you" has achieved the lowest mean (3.90) with standard deviation (1.01).

The previous results show the importance of physical evidence that the tourist products or services are green, friendly, and preserves the environment, which represents the positive effect of green physical evidence on tourists' purchase intentions**.**

Tourist Green Marketing Mix

The following table shows the average mean and standard deviation of "Tourist Green Marketing Mix".

Table (11): Descriptive analysis of "Tourist Green Marketing Mix"

Tourist Green Marketing Mix	Mean*	SD	Rank
Tourist Green Product	4.27	.58	3
Tourist Green Price	4.17	.56	4
Tourist Green Place	4.37	1.37	2
Tourist Green Promotion	4.39	1.18	1
Tourist Green People	4.14	.70	5

Tourist Green Process	4.05	.74	6
Tourist Green Physical Evidence	4.27	1.39	3

Table (11) presents the descriptive statistics (means and standard deviations) of the variable "Tourist Green Marketing Mix".

The results reflect that "Tourist Green Promotion" has achieved the highest mean (4.39) with standard deviation (1.18). On the other hand, "Tourist Green Process" has achieved the lowest mean (4.05) with standard deviation (.74).

The previous results show the positive impact of "Tourist Green Marketing Mix" on tourists' purchase intention.

Purchase Intention

Table (12) displays the mean and standard deviation of "Purchase Intention" from the participants' point of view.

Table (12): Descriptive analysis of "Purchase Intention"

Purchase Intention	Mean*	SD	Rank
For future purchases, I plan to seek out green products.	3.92	1.10	4
For future purchases, I will take more time to search environmentally friendly alternatives to products that I typically buy.	3.85	1.16	5
I plan to buy green products on regular basis.	3.64	1.26	6
Promoting a green destination has a positive influence on my purchase decisions.	4.05	1.06	1
I will prefer green tourist destinations more than traditional destinations.	3.93	1.04	3
I would strongly recommend visiting green destinations to others.	4.00	1.17	2
Overall	3.90	0.87	

As observed in Table (12), the total mean value for "Purchase Intention" is (3.90) with standard deviation (1.87). Therefore, it is inferred that the level of importance of "Purchasing Intention" is high for tourists.

Results also reveal that the statement "Promoting a green destination has a positive influence on my purchase decisions" has achieved the highest mean (4.05) with standard deviation (1.06). On the other hand, "I plan to buy green products on regular basis" has achieved the lowest mean (3.64) with standard deviation (1.26).

It is noteworthy that these results agree with those stated by Mahmoud (2019), Liu *et al*. (2020) and Wang *et al.* (2020) that purchase intention is affected by green issues.

In addition, the previous results show the extent to which tourists agree that their purchase intentions are positively affected by the green marketing mix, and they prefer it to the traditional mix. Besides, they assure that there is a positive impact of the green marketing mix on tourists' purchase intentions.

Correlation between the Green Marketing Mix and Purchase Intention

The following test measures the extent of the correlation between all the elements of the green tourism marketing mix combined and the purchase intention. The results demonstrate a strong correlation between them, indicating that if the green marketing mix is fully available, it affects purchase intention strongly.

Table (13): Correlation between the green marketing mix and purchase intention

Variables	1	2	3	4	5	6	7	8	9
1-Green product	-								
2-Green price	.720*	-							
3-Green place	.657*	-165*	-						
4-Green promotion	.440*	-.119*	.933*	-					
5-Green people	.500*	.685*	-.008	.015	-				
6-Green process	.608*	.521*	.101*	.475*	.636*	-			
7-Green physical evidence	.240*	.549*	-.025	.085	.383*	.362*	-		
8-Tourist Green Marketing Mix	.683*	.686*	.547	.822	.785*	.725*	.683*	-	
9-Purchase intention	.703*	.433*	.064	.144*	.719*	.736*	.495*	.774	-
* **Correlation is significant at the 0.05 level.**									

The test measures the extent of the correlation between the tourist green marketing mix as a whole and purchase intention. Then, it investigates the extent of the correlation between each element of the tourist green marketing mix individually and the purchase intention.

The results reveal a strong correlation between the tourist green marketing mix as a whole and the purchase intention (.774). In addition, there is strong correlation between some elements of the tourist green marketing mix, such as green process (.719) and green people (.736), and the purchase intention. However, a moderate correlation has been found between purchase intention and other elements such as the green physical evidence (.495) and green price (.433). Furthermore, a weak correlation has been detected between the two elements, green place (.064) and green promotion, and the purchase intention (.144). Thus, it is obvious that some elements have reflected a

weak or moderate correlation because they have not reached the ideal level that affects purchase intention.

These findings concur with a recent study by Mahmoud (2018) that reported the existence of a correlation between the seven components of the green marketing mix and the purchase intention.

Study Model

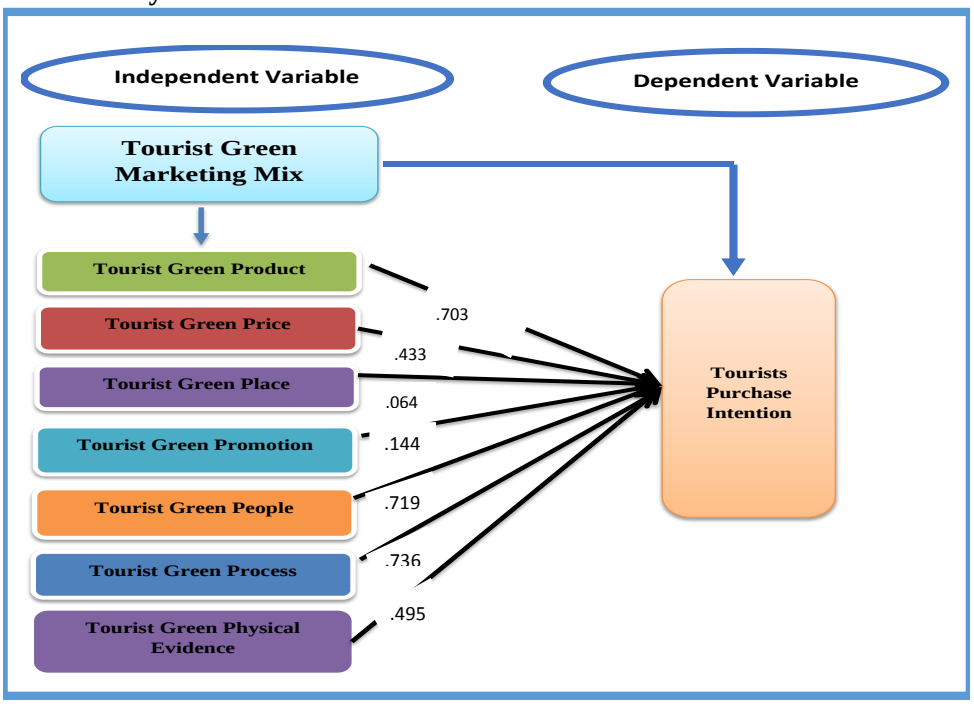

Figure 3. study model

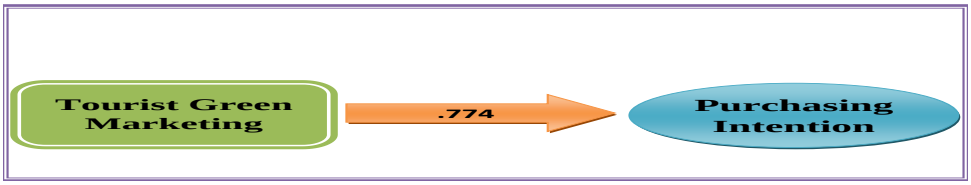

Figure 4: correlation between tourist green marketing mix and purchasing intention

The Impact of the Green Marketing Mix on Tourists' Purchase Intention

To achieve the second objective and answer the second research question of the study, the researcher has adopted the multiple regression coefficients, as shown in table (14)

Table (14): The impact of the green marketing mix in Luxor city on tourists' purchase intention

Dependent Variable			Independent Variables
			Green marketing mix
Tourists' purchase intention	R		.88
	R^2		.77
	Sig.		.00
	Constant		-0.41
			Sig. = 0.03
	B.	Tourist Green Product	B.= .39
			Sig. =.00
		Tourist Green Price	B.= - .35
			Sig. =.00
		Tourist Green Place	B.= .089
			Sig. =.00
		Tourist Green Promotion	B.= - .27
			Sig. = 0..00
		Tourist Green People	B.= .59
			Sig. = 0..00
		Tourist Green Process	B.= .47
			Sig. = 0..00
		Tourist Green Physical Evidence	B.= .12
			Sig. = 0..00

According to Table (14), it is clear that the coefficient of determination (R^2) is (0.77), suggesting that 77.1% of the variation of tourists' purchase intention was explained by independent variables. Obviously, only two variables have a negative impact on tourists' purchase intention: "Tourist Green Price" (B. = -0.358), and "Tourist Green Promotion" (B. = -0.27). Other variables have had a positive impact on tourists' purchase intention, where sig. values were less than (0.05). The following equation can be inferred to predict tourists' purchase intention based on the independent variables of study as follow:

Tourists' purchase intention = (0.39 * Tourist Green Product +0.08* Tourist Green Place + 0.59 * Tourist Green People + 0.47 * Tourist Green Process + 0.12 * Tourist Green Physical Evidence –0.358 * Tourist Green Price – 0.27 * Tourist Green Promotion) - 0.41

Sustainable manufacturing and use of energy efficiently, these marketing practices minimize the ecological impression of a product during its lifetime(Mehraj & Qureshi, 2020) .

In addition, the green marketing mix consists of marketing tools and elements that allow a firm to serve the target market and achieve organizational goals without harming the natural environment(Mukonza & Swarts, 2020).

In fact, the tourism industry is not detached from this concept. Hence, this study contributes to explore the impact of applying the tourist green marketing mix on tourists' purchase intention in Luxor city. In addition, the study aims to measure the extent to which tourism in Luxor depends on the tourist green marketing mix, determine its advantages to promoting Luxor city, and explore the barriers to its application in Luxor. Moreover, the findings of this study have useful and practical implications for the governmental bodies responsible for the tourism activity in Luxor, the owners of tourism products and services, and all tourism decision makers in Luxor, especially with regard to implementing the tourist green marketing mix in Luxor.

In addition, based on the data analysis, there is an importance of selling and displaying green products and services that are environmentally friendly. Moreover, in their answers, the tourists have supported green products, which indicates that they prefer them to traditional products. Consequently, their purchase intentions are affected positively by those green products. Additionally, the tourists agree that the green price has a positive impact on their purchase intentions due to providing fair and fixed prices for tourism products and services.

Moreover, the study highlights the importance of those working in the tourism field and those responsible for providing tourism products and services who have environmental awareness of and care about preserving the environment. This result explains the positive impact of green people on tourists' purchase intentions. Additionally, the study supports the green process and tourists' desire for the process of manufacturing, presenting, displaying and selling tourism products and services to be managed in an environmentally friendly manner. This indicates the positive impact of the green process on tourists' purchase intentions.

Recommendations

Recommendations for the Ministry of Tourism

The necessity of shifting to relying on the Tourist Green Marketing Mix strategies by reformulating strategies in an environmental way and encouraging providers of tourism services and products to follow this approach, considering ensuring the sustainability of tourist destinations as much as possible in Luxor through applying the tourist green marketing mix in it, directing the purchase of services and products to be in local currency to enhance their value, considering the presence of maximum control over the prices of tourism products and services in Luxor, providers of services and products in Luxor must be made aware of the benefits of green pricing and all equipment and means in the tourist attractions must be environmentally friendly, and they should not negatively affect the value of the tourism product.

Recommendations for Tourism Services and Products Suppliers

Encouraging all service and product providers to ensure that their services and products are environmentally friendly via developing them appropriately, the product or service must satisfy the consumer's needs by preparing and presenting it to tourists in an environmentally friendly manner and according to their expectations, the green product must be free of any substances that may harm the health of the consumer, whether regarding its basic components or the methods of preserving or packaging it, the producer must reconcile environmental and social considerations and contributions, on the one hand, and achieve economic goals, on the other hand, when designing a product, both the results of marketing research the environmental requirements must be considered, green products must be characterized by their minimal negative impact on the environment, as they are quick to biodegrade, and do not leave negative effects during their decomposition, and are also composed of renewable materials, it is important that green products have “Ecolabels” that enable the consumer to easily identify them and the product's price must be worth its value; and green pricing should be the basic principle for the pricing of products and services in Luxor.

Future Research

This study has dealt with exploring the impact of Tourist Green Marketing Mix on purchase intention(Applied on Luxor City). Future research can address: discussing the impact of Tourist Green Marketing Mix on some

other variables such as the decision making, tourists' satisfaction and the period of stay.

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استكشاف تأثير المزيج التسويقي السياحي الأخضر علي نية الشراء(بالتطبيق على مدينة الأقصر)

إبراهيم محمد احمد
قسم الدراسات السياحية - كلية السياحة والفنادق - جامعة الاقصر

صابرين جابر عبد الجليل
قسم الدراسات السياحية - كلية السياحة والفنادق - جامعة الاقصر

عزة ماهر خليل
قسم الدراسات السياحية - كلية السياحة والفنادق - جامعة مدينة السادات

فاطمة يوسف أبو زيد
قسم الدراسات السياحية - كلية السياحة والفنادق- جامعة بني سويف

الملخص

لقد نما الاتجاه نحو التسويق الأخضر بين الشركات التي ترغب في البقاء قادرة على المنافسة في صناعاتها المعنية، وتبذل العديد من المنظمات محاولات كثيفة لزيادة البصمة البيئية لأنشطتها التجارية. تقوم الدراسة الحالية باستكشاف تأثير المزيج التسويق السياحي الأخضر على نية الشراء. تم جمع بيانات الدراسة باستخدام مجموعة من استمارات الاستقصاء التي تم توزيعها علي عدد (410) سائح قد قاموا بزيارة الأقصر. تشير نتائج هذه الدراسة إلى أن نوايا السياح الشرائية تتأثر بشكل إيجابي بالمزيج التسويق السياحي الأخضر ويفضلونه على المزيج التقليدي. أخيرًا، توصي هذه الدراسة بالتحول إلى استخدام المزيج التسويق السياحي الأخضر في الأقصر.

الكلمات المفتاحية: التسويق، المزيج التسويق السياحي الأخضر، نية الشراء، الأقصر.