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Factors Influencing the Green Purchase Intention Among Consumers: An Empirical Study in Algeria

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Abstract

The main objective of the study is to investigate factors influencing the green purchase intention of Algerian consumers using the Theory of Planned Behavior (TPB). Furthermore, it aims to examine the impacts of subjective norms, consumer attitude, environmental knowledge, and green label variable to the consumer purchase intention. The authors proposed the model of TPB that combines three constructs namely attitude, subjective norms, and perceived behavioral control. The subjective norms and consumer attitude variables were directly adopted from the TPB Model. In addition, environmental knowledge and green label variables were added based on the review of the literature. The study was conducted based on the quantitative approach, with data collected through a self-administrated questionnaire that resulted in 350 responses of Algerian consumers from Algiers town. The empirical findings of this study supported only three hypotheses and did not find evidence to support one. Subjective norms, environmental knowledge, and green label variables positively and significantly influenced the green purchase intention, whereas the consumer attitude did not show any significant influence on Algerian consumers' purchase intention. In conclusion, green label and environmental knowledge were resulted to be the most influential factors that impact the green purchase intention of Algerian consumers. The findings from this study can improve the forthcoming research in related topics and help the marketers develop their Algerian marketing strategies.

Keywords: attitude, subjective norm, environmental knowledge, green label

Introduction

The concept of green consumerism refers to green sensible consumption and is considered one of seventeen goals of sustainable development, where the consumers believe that the consequences of environmental purchasing, followed by the utilization and disposal of different products and services must be done correctly followed by environmentally responsible approaches (Moisander, 2007). However, consumers have the opportunity to reduce the negative impact on the environment and avoid environmental degradation by adopting green consumption techniques and only buying green products and services (Arvola et al., 2008; Ellen et al., 2006; Liu et al., 2012; Vermeir & Verbeke, 2006).

Even with the increased environmental awareness and green demand trends, only 3% of the total market share is represented by eco-friendly products and services (Bray et al., 2011). These results indicate that consumers nowadays are still ignoring the environmental consequences of product acquisitions, as green considerations may not have major pressures on the purchase decision (Mohr et al., 2001). Although 67% of the consumers have illustrated an optimistic perception towards purchasing green products, only 4% were validated to have generated any purchases of green products and services (Hughner et al., 2007). Even though many large studies have researched consumer green consciousness and awareness (Diamantopoulos et al., 2003; Schwepker & Cornwell, 1991), as well as the behavioral consumption patterns of consumers (Follows & Jobber, 2000; Lee, 2009), the knowledge and information involving factors influencing the green purchase intention of consumers are still limited and ambiguous.

The worldwide environmental awareness has prompted the Algerian authorities to shift their activities into more eco-friendly ways. Since 2000, the authorities have shown major support for green projects by launching responsible initiatives and measures toward the environment. Nowadays, the country is considered one of the countries that work hard to accomplish a green economy by diversifying the responsible economy and enhancing productivity within environmental challenges (Northey, 2016). However, Algeria is striving to enhance its green initiative with a sustainable concept and to renovate the economic structure of the country (Bouraiou et al., 2020; Northey, 2016). Nevertheless, despite all these efforts and initiatives that have been taken by the country, the knowledge about green behavioral trends is still limited, as commented by Ayoun and Ghallab (2017). The study reported that most of the studies about consumer behavior and especially on factors influencing the consumers' green behavioral intention were conducted in Maghreb countries. Therefore, most Algerian companies adopt green marketing strategies from the western and European countries, as there is a lack of information and experience about the Algerian consumers' green behavior (Ayoun & Ghallab, 2017). Thus, this paper determines and examines the different factors that influence the green purchase intention of Algerian consumers.

This study is carried out by adopting the theory of planned behavior (TPB), to obtain a structured clarification regarding the green purchase intention of Algerians, as the prior reviews and studies with the Algerian context do not involve research on factors influencing the green purchase intention using the TPB model. Moreover, the lack of proper knowledge and actual green purchase intention inconsistency creates a gap in the research. Hence, the purpose of conducting this research is to close the research gaps to recommend and explore a conceptual model that considers the different prerequisite factors that may influence Algerian consumers' purchase intention toward green products.

The main contribution of this study is by enriching the literature review on theoretical consumer behavior in the Algerian context. Besides, the study's findings will help marketers and organizations understand customers' behavioral dimensions and thus implement the procedures required for their orientation. Knowing these factors will attract more marketers and firms, ultimately developing and improving green promotion to increase green customers' frequentation.

Research Questions

To focus on a limited point of this research, specific questions have been prepared to conduct and provide the details needed for our study; the following are the research questions for this study:

- What is the impact of consumer attitude on the purchase intention of Algerian consumers?
- What is the impact of subjective norms on the purchase intention of Algerian consumers?
- What is the impact of environmental Knowledge about green products on the purchase intention of Algerian consumers?
- What is the impact of eco-label products on the purchase intention of Algerian consumers?

Literature Review

Green Consumer Characteristics

Green consumer characteristics are listed below:

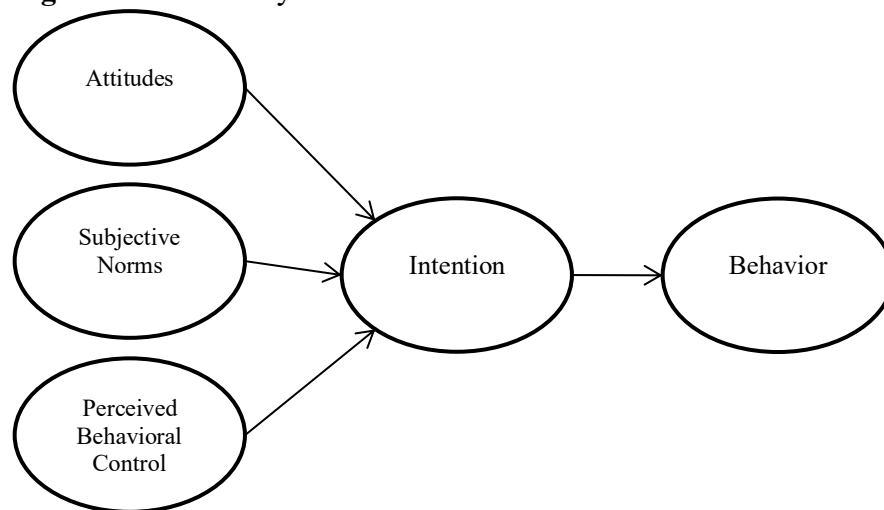
- *Gender*: Women are more altruistic, Prosocial, and Empathetic in terms of environmental problems (Conraud-Koellner & Rivas-Tovar, 2009).
- *Age*: The age dimension has a significant influence on green consumer perception, younger people are more aware of the environmental issues and more supportive of the concept of sustainable development. (Witek & Kuźniar, 2021).
- *Educational background*: According to Dimitri & Dettmann (2012), a person with higher education is more motivated to purchase green products than a person with a low educational level.
- *Income*: Various studies reported that there is a positive significant relationship between Income and the intention to purchase green products (Loureiro & Lotade, 2005). People with better financial situations demonstrate a deeper interest in environmental issues and they are more willing to purchase green products.

Theory of Planned Behavior (TPB)

According to the TPB proposed by Ajzen (1991), the individual's intention is a construct highly related to attitude, subjective norms, and perceived behavioral control factors. This intention construct refers to the assessment to perform a particular behavior at the stage of planning and seeking. However, the TPB is considered one of the most significantly used theories in assessing and studying consumer green intention (Alam & Sayuti, 2011; Haro, 2016; Yadav & Pathak, 2016). Ajzen (1991) confirmed that this theory could perceive behavioral control, subjective norms, and attitude factors in evaluating consumer intention.

According to the TPB, the intention of the individual is envisaged by the perceived behavioral control, attitude, and subjective norms (Ajzen, 1991). Thus, in this research, the construct of perceived behavioral control was replaced by two external constructs, namely environmental knowledge and green label (Joshi & Rahman, 2015; Nia et al., 2018). Figure 1 represents the original TPB by Ajzen (1991). Two main variables, namely, attitude and subjective norms are adopted from this theory.

Figure 1. The Theory of Planned Behavior Model



Source: Ajzen, 1991

Green Purchase Intention

All definitions give one similar significance, which is the willingness of an individual to take into consideration and demonstrate a preference for green products, rather than classical or conventional products (Ali et al., 2011; Aman et al., 2012; Nik & Rashid, 2009). However, this intention reflects favorable and unfavorable behavior of an individual toward a specific object, which is highly related to the positive or negative perception about the object, and the willingness to give a premium value (Zeithaml et al., 1996). A study was conducted on Algerian consumers to determine the factors that influence the intention to purchase green products. However, the study has determined the existence of a significant relationship between environmental concern and purchase intention (Troudi & Bouyoucef, 2020).

Consumer Attitude

Consumer attitude refers to the preferences of consumers to an object and is usually expressed as like or dislike (Ajzen, 2001). This term reveals the tendency of an individual to behave in certain sense toward favorable or unfavorable objects or situations. Many researchers have validated the significant relationship between the attitudes of the consumer with the behavioral intention. Furthermore, the relationship can be changed due to the influences of other events or factors (Fishbein & Ajzen, 1975). Moreover, the findings from a quantitative study conducted about green purchase intention revealed a positive influence of the consumer attitude on the intention to purchase green products (Mohd Suki, 2016). In the Algerian case, a study was conducted on the intention to purchase green food, which has resulted that there is a positive relationship between the consumer attitude and his intention to buy green food in presence of environmental concern as a moderating (Troudi & Bouyoucef, 2020).

- *H1*: Consumer attitude has a positive influence on the Algerian consumers' intention to purchase green products.

Subjective Norms

The concept of subjective norms refers to the consumer perception of the surrounding social pressure that may affect the performance of a specific behavior. The concept reflects social pressure and perception, which can persuade the individual to construct specific opinions or views, thus having a significant impact on the green purchase intention (Iranmanesh et al., 2016). This means that the persuasive or unconvincing actions of the surrounding people reflect the consumer's intention and consequently, the behavior (DeLamater & Myers, 2010).

Various researchers have reported a significant role played by the subjective norms in influencing green purchase intention (Öhman, 2011). However, evidence has shown that the subjective norms predictor could be used successfully to determine consumer intention to purchase green products (Taylor & Cosenza, 2002). These researches have investigated the effects and role of subjective norms in determining consumer intention toward green products. A study conducted on high school students in Vienna about their purchasing of organic food proved the significant impacts of subjective norms on organic food purchase intention (Gotschi et al., 2007).

- *H2*: Subjective norms have a positive influence on Algerian consumers' intention to purchase green products.

Environmental Knowledge

Environmental knowledge describes the range of information about the environment, its issues (i.e., unbalanced consumption of humans), and the preventive actions required to conserve and protect the environment, that is collected, organized, and evaluated by the individuals (Mostafa, 2009). Green knowledge is a crucial predictor of green purchase intention, as it has a significant influence on all the stages of the green decision-making process (Ukenna et al., 2012). Various researches supported this finding and agreed that environmental knowledge influences consumer purchase intention (Diamantopoulos et al., 2003; Laroche et al., 2001). A study investigated the relationship between green product purchase intention and environmental knowledge and was able to show the significance of the relationship (Aman et al., 2012). These results indicate that the consumer with a good level of green knowledge will also have a responsible intention towards the environment by purchasing green products (Chan & Lau, 2000). Therefore, the following hypothesis is developed as follows:

- *H3*: Environmental Knowledge has a positive influence on Algerian consumers' intention to purchase green products.

Green Label / Eco-label

The eco-labeling concept was created to provide customer information about the commitment of the product to protect the environment (Yücel & Ekmekçiler, 2008). The concept has multiple names like green labeling, eco-labeling, or eco-friendly label, but they are all referring to the products or services certification of eco-characteristics. The eco-labeling certificate is provided by a qualified authority recognized for its trustworthiness, transparency, and concern about the environment (Can Kirgiz, 2014). According to Nik & Rashid (2009), eco-labeling is considered a convincing instrument in informing customers about the environmental consequences caused by

their purchase decision. Various studies that have been conducted reported the significant role of eco-labeling in developing green consumption, as it is recognized as the trustful indicator of environmentally reliable products (D’Souza et al., 2006). Therefore, the study hypothesis is proposed as follows:

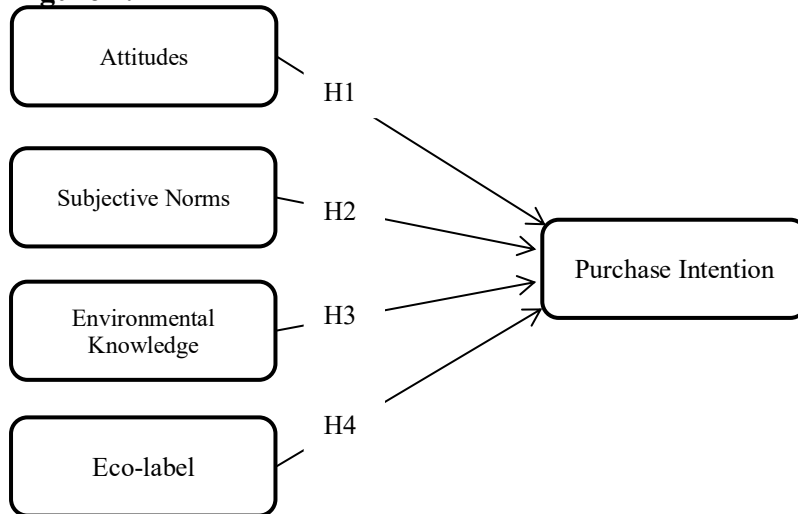
- *H4*: Green label has a positive influence on Algerian consumers’ intention to purchase green products.

Methods

Research Design

This study’s objective is to empirically assess the factors that influence the purchase intention of Algerian consumers toward green products using the TPB proposed by Ajzen (1991). The study’ framework has been developed using four significant variables involved in the conception; the intention to purchase green products which include the attitude toward the green products, the subjective norms to purchase green products, the environmental knowledge related to purchasing green products, and the involvement of eco-label in purchasing green products. However, the suggested research model in this study has been developed from a comprehensive evaluation of previous research. Based on the variables of TPB and the review of the literature, four independent variables and one dependent variable are included in the model of this study. These variables are, attitude, subjective norms, environmental knowledge, eco-label (green label), and purchase intention. Figure 2 depicts the framework of the study.

Figure 2. Theoretical Framework of Intention to Purchase Green Products



Instruments

To study the determinant factors that have influenced green purchase intention, the quantitative method was adopted to develop a survey that was designed according to the TPB. The items in the survey were changed and adopted according to the research objectives. The questionnaire was designed with a combination of closed-ended and scale response questions. The closed-ended questions were implemented in the first part of the survey that focused on the respondent’s

characteristics profile. This part is considered as easy to obtain demographic information about the respondents, as it requires fewer interview skills and takes less time to carry out (Zikmund et al., 2009). More importantly, the first part was designed to collect data regarding the respondents' profiles by using demographic and special screening questions. A total of seven items were presented in the first part of the survey. Meanwhile, the second part was designed to collect data related to the study objectives. This part was divided into five sections. Each section was designed to assess the specific hypotheses, through the assessment of the variables, such as the consumer attitude, subjective norms, green label, and environmental knowledge variables (see Table 1). All the responses were measured using a 5-point Likert scale that set the agreement level of respondents as 1 = *Strongly Disagree*, 2 = *Disagree*, 3 = *Natural*, 4 = *Agree*, and 5 = *Strongly Agree*.

Table 1. Constructs Scale Items

No	Variable	Source
	<i>Attitude</i>	Choi, 2012; Westberg, 2004
1.	Choosing green products is a beneficial initiative.	
2.	Green products are favorable choice.	
3.	Green products are really important.	
4.	Overall, I will always choose green products.	
	<i>Subjective Norms</i>	Nia et al., 2018; Westberg, 2004
1.	My family members prefer purchasing green products	
2.	My friends' green purchase behavior influences my purchase intention.	
3.	Most people who are important to me intend to choose green products.	
4.	People I value the most would persuade my green purchase intention.	
5.	My subjective norms influence me to acquire a green purchase intention.	
	<i>Environmental Knowledge</i>	Yang et al., 2014
1.	I have knowledge about the advantages of green products.	
2.	I am knowledgeable that purchasing green products is a good initiative toward the environment.	
3.	I am knowledgeable that purchasing green products is a responsible step toward the environment.	
4.	I am knowledgeable about the negative impact of non-green products on the environment.	
5.	I am very knowledgeable about the environmental issues in Algeria.	
6.	My knowledge about green products influences my purchase intention.	
	<i>Eco-labeling</i>	Thøgersen et al., 2010
1.	I purchase green products that have Eco-label.	
2.	The Eco-label provides more information about the products.	
3.	I purchase only the green products that have an Eco-label certification.	
4.	I do not trust the green products that do not have an Eco-label.	
5.	I always choose the green products that have eco-labeling rather than green products that do not have.	
6.	The Eco-labeled products affect my purchasing intention.	
	<i>Purchase Intention</i>	Ayoun & Ghallab, 2017
1.	I am willing to purchase green products in the future.	
2.	I will definitely consider purchasing green products.	
3.	I will prioritize green products when shopping.	
4.	I will encourage people around me to purchase green products.	

Data Collection

The data was collected using the questionnaires distributed to approachable respondents in Algiers, the capital of Algeria. The questionnaire was distributed virtually using social media, such as Facebook, Instagram, WhatsApp, and other online platforms. The questionnaire was also distributed to the consumers who are identified as green consumers, i.e., who have purchased green products or intend to purchase green products. A total of 350 questionnaires were collected from the selected respondents. However, only 340 of them (97.14%) were deemed suitable to be used in the data analysis process after screening. Notably, the study population covered the consumers

who possess green purchase intention in Algeria, whereas the targeted respondents of this study were those consumers who have expressed green demand.

The descriptive statistics were calculated using frequencies and percentages to obtain the characteristic information of sample respondents. Next, the respondents' profile was checked by asking a few screening questions (see Table 2) to ensure they met the characteristics of the target sample. Out of the 340 respondents, 183 (52.3%) had purchased green products in the last years, while 167 (47.7%) of the respondents did not purchase any green products. Moreover, only 5% did not show any interest in purchasing green products, while 95% showed interest in their future purchases. These percentages show that the targeted sample is appropriate for the study.

Table 2. Respondents Profile Screening

Have you bought any green products in the last years?				
Answer	Frequency	Percent	Valid Percent	Cumulative Percent
No	167	47.7	47.7	47.7
Yes	183	52.3	52.3	100.0
Total	350	100.0	100.0	
Do you have the interest to buy any green products in the future?				
Answer	Frequency	Percent	Valid Percent	Cumulative Percent
No	17	5.0	5.0	5.0
Yes	323	95.0	95.0	100.0
Total	340	100.0	100.0	

Table 3 presents detailed analysis of respondents' profile. The number of female respondents was the same as the number of male respondents, with 170 respondents for each gender. Most of the respondents are in the age group between 18 and 29, with 79.4 percent recorded. However, out of the 340 respondents, only 297 were single with a percentage of 82.1, while the rest are married with a rate of 17.9%. In terms of the level of education, most of the respondents are highly educated, with 149 of the respondents holding a master's degree (43.8%), followed by a bachelor's degree at 29.4%. Moreover, 176 out of the 340 respondents were students (51.5%), followed by 98 employees (28.8%).

Table 3. Demographic Profile of the Respondents

Attributes	Category	Frequency	Percentage
Gender	Female	170	50.0%
	Male	170	50.0%
Age Group	18-29	270	79.4%
	30-39	52	15.3%
	40-49	5	1.5%
	50 and above	13	3.8%
Marital status	Single	279	82.1%
	Married	61	17.9%
Level of education	Diploma	41	12.1%
	Bachelor's degree	100	29.4%
	Master's degree	149	43.8%
	Ph.D.	50	14.7%
Occupation	Students	176	51.8%
	Employee	98	28.8%
	Entrepreneur	25	7.4%
	Unemployed	41	12.1%

Data Analysis

The multiple regression analysis was applied to assess the relationship between the independent variables –subjective norms, environmental knowledge, green label, consumer attitude, and the dependent variable –green purchase intention. This analysis is known for its accuracy in assessing the data related to social science, also referred to as the research scoop (Shabbir et al., 2010). Moreover, regression analysis is a technique used to measure the linear relationship between the predictors and criteria. This analysis is considered the widely applied analysis used in social science studies (Zikmund et al., 2009).

The item's reliability can be measured according to Cronbach's alpha value. Moreover, Cronbach's alpha value can be used to test the consistency level of measured items selected for each variable in the research (Hair et al., 2010). The value of alpha must be between zero and one, to confirm the consistency. The value near zero signifies that there is no consistency, while the value near one signifies perfect consistency (Tavakol & Dennick, 2011). Table 4 shows the Cronbach's alpha values for all the selected variables in the study. According to Nunnally (1967), the alpha value must be greater than the cut-off $\alpha > .6$ for each variable. Therefore, all the items in this study had recorded values of between .657 and .732.

Table 4. Reliability Analysis

Factor	No. of Cases	No. of Items	α
Consumer attitude	340	4	.707
Subjective norms	340	5	.709
Environmental Knowledge	340	6	.732
Eco-label	340	7	.696
Purchase intention	340	4	.657

Exploratory Factor Analysis

The exploratory factor analysis (EFA) is generally used to measure the relationship between the selected variables for the research (Pallant, 2007). EFA has a significant effect on the research analysis, as the test reduces all the items into strongly correlated groups and the group set known as component (Hair et al., 2012). The variables' correlation is a critical condition for the EFA, but this correlation must not be too high to prevent the occurrence of the multi-collinearity situation (Pallant, 2010).

Additionally, Bartlett's Test of Sphericity and the Kaiser-Meyer-Olkin (KMO) test must take place before proceeding with the EFA. Moreover, the value accepted for the test must be between zero to one. Ideally, the value closest to one is the most suitable. However, a value greater than .6 is qualified as appropriate for the sampling's adequacy (Hair et al., 2012). Table 5 present the KMO test results. The results showed the KMO value of .718, which is believed to be significant for KMO test, as the value was higher than the cut-off point required. Therefore, the research data were qualified and were suitable for the principal components analysis by indicating that there is an acceptable correlation between the variables. Thus, the researcher can proceed with EFA. In addition, the Bartley method was used to test the variance equality. For this study, the results from the Bartley test reported statistical significance, with a recorded Chi-square value of approximately 973.403 and a p -value of less than .001. Thus, this test was considered as successful as the value obtained was approximate .000 as it is shown in Table 5.

Table 5. KMO and Bartlett's Test

KMO and Bartlett's Test		Value
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.718
Bartlett's Test of Sphericity	Approx. Chi-square:	973.4
	df:	91
	p-value:	.000

EFA was conducted using the Varimax rotation method, a method for principal components extraction (Malhotra & Birks, 2007). The evaluation takes into consideration the useful factor loadings that may be qualified as significant. Therefore, the value must be above .5, with an eigenvalue with cut-off point 1, especially for the case where the factor number is less than 30 and with commonalities of greater than .7. However, the cut-off value between .7 and .8 is considered suitable (Jolliffe, 2002).

According to EFA results, 12 out of 26 items were excluded, as these items did not meet the minimum requirements. Table 6 shows the results of the EFA. The rest of the items were categorized into five components that represent 63.6% variation of the measured variables (i.e., the consumer attitude, subjective norms, environmental knowledge, green label, and green purchase intention variables). The five factors were included with the factor loading, variance percentage, and cumulative variance. The subjective norms factor showed the highest total variance value of 22.2%, followed by the total variance value of the green label factor (15.2%).

Table 6. Exploratory Factor Analysis Results

Factor		AT	SN	EK	EL	PI
Consumer Attitude	AT1	.818				
	AT2	.759				
	AT3	.718				
Subjective Norms	SN1		.671			
	SN2		.622			
	SN3		.791			
	SN4		.717			
Environmental Knowledge	EK4			.784		
	EK5			.851		
Eco-labeling	EL3				.760	
	EL5				.826	
	EL7				.773	
Purchase Intention	PI3					.766
	PI4					.836
Initial eigenvalues		1.400	3.113	1.246	2.127	1.015
% of variance		9.998	22.233	8.898	15.196	7.251
Cumulative%		9.998	32.231	41.129	56.325	63.576

Multiple Regression Analysis

Table 7 shows the directions of the four hypotheses tested in this study. These hypotheses were summarized in a conceptual model (Figure 2). The findings reported that the highest Beta Coefficient value recorded was for the Green Knowledge predictor ($\beta = .299$), followed by the Green Label predictor ($\beta = .127$). On the other hand, the consumer attitude predictor recorded the lowest Beta Coefficient value of .104, followed by the Subjective Norms predictor ($\beta = .124$). However, the lowest Beta Coefficient value was recorded for the criterion variable.

Table 7. Multiple Regression Analysis

Variable	β_1	S.E.	β_0	t	p
(Constant)	3.320	1.255		2.647	.009
AT	.114	.067	.104	1.692	.092
SN	.098	.046	.124	2.157	.032
EK	.268	.052	.299	5.201	.000
EL	.070	.028	.127	2.457	.015

Table 7 also reports the p -values of the consumer attitude, environmental knowledge, subjective norms, and green label. Green knowledge is the most significant predictor ($\beta = .299$, $p < .000$), followed by the green label predictor ($\beta = .127$, $p < .015$), and the subjective norms predictor ($\beta = .124$, $p < .032$). On the other side, the consumer attitude predictor did not significantly influence the green purchase intention ($\beta = .104$, $p < .092$, $t = 1.692$), as the p -value of greater than .05 was recorded. Apart from the consumer attitude predictor, the rest of the three predictors have p -values of lesser than .05. The lowest p -value was recorded for the green knowledge predictor, with a significant p -value of .00, followed by the green label predictor with a p -value of .015. On the other hand, the highest p -value was recorded for the consumer attitude predictor, with a p -value of .092. The subjective norms, eco-labeling, and environmental knowledge predictors have p -values of lesser than .05; thus, these predictors have positive and significant influences on the green purchase intention. This indicates that any increases that occur to these predictors result in a significant increase on the green purchase intention.

ANOVA variance analysis was conducted to investigate the significance level resulting from the predictors on the criterion (Field, 2009), which is presented in Table 8. The value of the F -ratio was 23.02, with a recorded significant value of less than .05 ($p < .000$). Therefore, the F -ratio revealed that 23.02% of the green purchase intention variation is significantly resulted from the four predictors, namely consumer attitude, subjective norms, green label and environmental knowledge.

Table 8. ANOVA for Multiple Regression Analyses

Model		Sum of Squares	df	Mean Square	F	p
1	Regression	650.181	4	162.545	23.023	.000
	Residual	2365.172	335	7.060		
	Total	3015.353	339			

a. Dependent Variable: PI

b. Predictors: (Constant), EL, EK, SN, AT.

Discussion of the Hypothesis Testing

According to data analysis results, three independent variables were found to have significant roles in predicting the green purchase intention of Algerian consumers. The first hypothesis states that there is a significant relationship between consumer attitudes and the green purchasing intentions of Algerian consumers. However, this hypothesis was rejected because the results of the study found no evidence to support this statement. The relationship between consumer attitudes and green purchase intention turned out to be weak; measuring a beta value of .104 was recorded. In addition, the t -value was 1.692, while the p -value was greater than .05, thus the factor was considered non-significant. In conclusion, the first hypothesis was not accepted in this. Hence, the consumer attitude factor was found to have no significant influence on the green purchase intention of Algerian consumers. Previous studies supported these results, such as the study conducted on

Pakistani consumers (Hamid et al., 2012); the study by Lee (2009) conducted on consumers in Hong Kong.

The second hypothesis states the relationship between subjective norms and green purchase intention. The findings of the study revealed that the hypothesis was supported with significant results. The Beta Coefficient value was .124 and confirmed the positive relationship between the predictor and criterion. In addition, the *t*-value was significant at 2.157, while the *p*-value was greater than .05. These results proved that there is a positive significant relationship between the green purchase intention and the Subjective Norms factor. These studies were supported by previous research, such as the study by Öhman, (2011); and the study by Chen (2007) conducted about the green purchase intention of Taiwanese consumers.

The third hypothesis investigates the significant relationship between green knowledge and the green purchase intention of Algerian consumers. The findings of the study showed a positive and significant relationship between the intention to purchase green products and the environmental knowledge of consumers. The Environmental Knowledge factor recorded the Beta Coefficient value of .124, the *t*-value of greater than 1.96 ($t = 5.201$), and the *p*-value of .000. These results show a positive and strong significant relationship between green purchase intention and environmental knowledge. These results conformed with the previous research about green purchase intention, such as the study by Rahbar and Wahid (2011) conducted about green purchase behavior in Penang.

The last hypothesis that investigates the relationship between the green Label and green purchase intention was significantly accepted. The statistical results reported a significant relationship between the green-labeling and the green purchase intention of Algerian consumers. The positive relationship between predictor number four and the green purchase intention was supported by the Beta Coefficient value of $\beta = .127$. Moreover, the significance of the relationship between eco-labeling and green purchase intention was proven by a *t*-value of greater than 1.96 ($t = 2.456$) and a *p*-value of less than .05. Therefore, these results gave enough evidence to accept hypothesis four (H4). So, in conclusion, there is a significant relationship between green-labeling and the green purchase intention of consumers in Algeria. The findings of the study were supported by previous research such as Nik and Rashid (2009), which have conducted studies about green purchase intention and the influences of green label. A Summary of the hypotheses are provided in Table 9.

Table 9. Summary of the Proposed Hypotheses

Hypotheses	Decision
H1: Consumer attitude has a positive influence on the Algerian consumer’s intention to purchase green products	Not Supported
H2: Subjective norms have a positive influence on the Algerian consumer’s intention to purchase green products	Supported
H3: Environmental knowledge has a positive influence on Algerian consumer’s intention to purchase green products	Supported
H4: Eco-label has a positive influence on the Algerian consumer’s intention to purchase green products.	Supported

Discussion

The purpose of this study is to determine factors influencing the green purchase intention of Algerian consumers. Thus, the TPB proposed by Ajzen (1991) was used to formulate the conceptual model. The predictors chosen for the research were subjective norms, consumer

attitude, green labels, and environmental knowledge. The findings of the study revealed that the environmental knowledge factor is the strongest predictor for green purchase intention ($\beta = .299$, $p = .000 < .05$). This means that the knowledge about the environment significantly influences the consumers during their purchase decision. The intention of consumers with sufficient knowledge about specific products and the consequences resulting from purchasing the product will be significantly influenced by the level of knowledge (Moisander, 2007; Ukenna et al., 2012; Vantomme et al., 2005). Like the green label factor, a product with an eco-labeling is more attractive for green product-conscious customers. This means that the consumers believe that the presence of a green label is a trustable element, thus ensuring that the products were made with eco-friendly processes ($\beta = .127$, $p < .015$). Therefore, using eco-label on the products provides a source of trust and reliability for the customers, as the labeling reflects that the product purchased is produced under environmentally friendly conditions.

The subjective norms factor shows a moderate influence on the consumer green purchase intention ($\beta = .124$, $p = .032 < .05$). This means that the consumers might take into consideration the opinion and judgment of their surroundings, such as family, friends, and others. Positive opinions expressed by the social environment about specific products have a major influence on the purchase intention toward green products (Öhman, 2011; Taylor & Cosenza, 2002). Therefore, the subjective norms factor can be used significantly as a predictor to determine the green purchase intention of Algerian consumers.

The consumer attitude factor did not show any significant influence on the intention of Algerian consumers to purchase green products ($\beta = .104$, $p = .92$). Hence, the green attitude is not reflected in the consumers' actions. This means that when a consumer is exposed to a green product, his/her green attitude does not influence the intention to purchase this green product (Chen & Chai, 2010). However, the intention of purchasing green products is not critically related to this preconceived knowledge about the environment, as there are other primary factors such as price, availability, and quality that might influence the intention (Nik & Rashid, 2009).

Conclusion

Overall, the analysis of the four constructs shows a total variance of 63.6% in the green purchase intention of Algerian consumers. The findings of this study provide evidence that the environmental knowledge, green labels, and subjective norms factors positively and significantly influence the green purchase intention of Algerian consumers. Meanwhile, the analysis of the consumer attitude factor also revealed a positive but weak relationship with the green purchase intention. Moreover, the consumer attitude factor does not have a significant influence on the purchase intention of Algerian consumers toward green products.

The environmental knowledge factor is the strongest construct among the other constructs, as it has the strongest significant influence on green purchase intention. This indicates that the knowledge of consumers about environmental issues and outcomes will influence their purchasing intention of a product. The green label factor is the second strongest influence, thus indicating that the green label on the product's packaging can motivate the purchase intention. Finally, the subjective norms factor is the last positive influential predictor that has a moderate significance on the green purchase intention of Algerian consumers. This indicates that family, colleagues, friends, and even the opinion or suggestions of the sales agents are significantly influential on the green

purchase intention. On the other hand, the consumer attitude factor is not considered a significant predictor, because it does not influence the green purchase intention.

Theoretical Implication

The TPB proposed by Ajzen (1991) clarified individual performance as a reaction to a specific situation. The conceptual model used for this study contains four constructs. The consumer attitude and subjective norms constructs were adopted directly from the TPB model, while the green label and environmental knowledge constructs were designed as a replacement for the perceived behavioral control in the TPB model. However, the consumer attitude factor was found to be non-significant, while the subjective norms factor was found to be significant and formed a positive relationship with the green purchase intention. This means that only the subjective norms constructed from the TPB model can be used as a predictor of green purchase intention. The consumer attitude construct was not significant in influencing the green purchase intention. Therefore, the next and future studies can exclude the consumer attitude factor in assessing the consumer green purchase intention. On the other hand, the environmental knowledge and green label constructs are used to replace the perceived behavioral control from the original model. These two constructs have the highest significance on the green purchase intention. This means that both constructs can be used successfully to predict the green purchase intention of Algerian consumers.

Managerial Implication

The study has proved that understanding customer behavioral intention can help marketing executives and managers to formulate and implement effective and efficient marketing strategies. So, the results and findings from this study can help marketing executives and managers understand Algerian consumers and make decisions accordingly. As green knowledge and eco-labeling were shown to be the highest influencers, the marketing executives should focus on the implications of consumer's ecological knowledge, the consequences of purchasing green. The subjective norms factor is the weakest factor that showed a significant influence on the consumers' green purchase intention. This means that green business marketers must address the implications by understanding the influences of family, friends, and the social environment in orienting the intention of the consumer to purchase green products.

To sum up, the study findings have concluded that the marketing executives and managers who promote green business and green products should be aware of factors that influence the green behavioral intention of their targeted customers. Therefore, their decisions and strategies must take into consideration the crucial roles of green labels, environmental knowledge, and subjective norms in influencing the consumers' green purchase intention.

Recommendation

According to the study results, the variable *consumer attitude* did not significantly influence consumers' green purchase intention. Therefore, upcoming studies can consider the weak relationship between consumer attitude and green purchase intention and examine how this relationship can be strengthened through the use of a mediator or facilitator. The potential future can consider the other factors that are not included in this study to have a deeper understanding of the other factors that can influence green purchase intention. The other factors include price,

environmental awareness, environmental concern, and others, as these factors have been revealed to be significant based on previous studies about consumer purchase intention conducted all over the world. Therefore, the literature in the Algerian context can be improved if these factors are included and are based on the Algerian consumer's setting. In addition, the study's findings only reported on the influential factors and did not explain how these constructs should be implemented. Therefore, implementing these factors in the green marketing components can be explored to help the marketer have a clearer idea.

Limitation of the Finding

The insights gained from the analysis might be limited due to the inevitable bias inherent in the self-reported analysis of the research. The study was conducted to identify factors influencing green purchase intention in Algiers, the capital of Algeria. Therefore, the research sample may have clustered qualified respondents as green consumers who have green intentions or have expressed green demands. Hence, the results may be different if the population of the research sample is changed. Algeria is a country with fantastic surface and diversity in different dimensions, such as cultural diversity. Therefore, the potential future study should expand the sample size by including other populations, to create a mutual behavioral intention that can apply to all the customers in Algeria. In addition, the quantitative method used in this study may limit some of the results as it was a predetermined cross-sectional survey, and respondents were forced to select their responses from established choices.

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