

The Factors Influencing Consumer Behaviour in the Purchase of Green Products in Windhoek, Khomas Region of Namibia

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Abstract

It is a global concern that environmental sustainability is in danger. Climate conditions in most parts of the world cannot sustain agriculture and livestock, while water and energy shortages remains a huge challenge. While enjoying products and services offered in the market, consumers should protect their environment and maintain a healthy life style by purchasing green products which are environmental friendly. Prospective green consumer's expression of interest in green products is not converted into actual purchase. The objective of this study is to examine the factors that influence consumer behavior in the purchase of green products. The study adopted mixed methods and a sample of 120 respondents was considered. SPSS was used for analysis. Qualitative data was analyzed using thematic analysis. Statistical significant association was found between the purchases of green products with the eight main predictors which are; Environmental attitudes, perceived effectiveness of environmental problems, perceived environmental responsibility, green products labelling, green product features, green product certification, environmental benefits of green products, governments concern about the environment. The study found a negative association between purchase of green products and consumers knowledge about environmental benefits. By gathering this information, marketers would be able to understand the factors which influence consumers in the purchase of green products. They would also be able to formulate various strategies to effectively attract more green consumers to purchase green products as part solution for environmental protection. The legislators, national policy makers and environmental activists could utilize this information to promote a positive green consumerism.

Keywords

Advertising, Green product, Purchasing, Consumer Behaviour, Environment, Environmental Friendly

Introduction

There is heightened global concern on the behaviour of customers, the products and services they acquire on the market to promote environmental sustainability. Customers are encouraged to protect their environment and maintain a healthy life style by purchasing green products which are environmental friendly. Despite the global call for customer awareness when selecting products on the market, prospective green consumers' expression of interest in green

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products is not converted into actual purchase. The purpose of this paper was to determine the factors which influence consumer's behavior in the purchase of green products in Windhoek, Namibia. Albino et al. (2009) define green product as that product designed to minimize its negative environmental impact-during its whole life cycle, in particular, the renewable resources used should minimize toxic materials, ensure that renewable resource takes place in accordance with their rate of replenishment. Similarly, Chen et al. (2006) define green products as green development that tackles ecological issues through product design and innovation. Therefore, awareness on the green products must have an influence customers' responsibility to purchase green products.

Ottman (2011) points out that majority of consumers show interest and express their desire to buy green products but only 15% actually purchase the green products, 85% of consumers do not actually purchase green products. Grail reports that "although 85% of consumers claim to buy green products but fewer than 8% actually do" (Entine, 2011).

Prospective green consumer's expression of interest in green products is not converted into actual purchase. Previous studies show that the market share of environmental friendly products which are also known as green products is only 1% as compared to conventional products. This is a troubling revelation and the aim of the study is to find out the factors which influence consumers to the purchase of green products.

The concern is that consumers are giving up on green products, consumers are not convinced that by purchasing green products they can actually make any significant contribution towards environmental conservation, it seems that green consumers are not stimulated to purchase green products. Could it be that marketers have failed to change consumer perception, attitude, psychology, consumption patterns, usage and responsible disposal patterns.

Namibia is the worst affected country by the problem of climate change in Southern Africa and it is typified as an arid country with drastic drought, increasing temperatures, insufficient rain, unsustainable agricultural activities, and the highest radiation, among other environmentally related problems such the occurrences of sea storms, floods, cyclones and life threatening weather conditions. These uncomfortable situations threatens human existence globally (Dopaco & Raposo, 2009; Barber, 2010; Okada and Mais, 2010).

The concern for climate change and environmental conservation is the greatest socio-corporate responsibility of the current era and green is considered as a core competency and a key success factor.

These environmental concerns promotes the need for green products. Thus, purchasing green products is a -part -solution to the bigger problem of climate change and environmental conservation. Every organization has a corporate social responsibility to satisfy human needs or wants with minimal detrimental impact on the natural environment Polonsky (1994). Nowadays, consumers prefer environmentally and socially responsible companies for their purchasing (Kalafatis and Pollard, 1999).

To promote the purchase of green products, it is therefore important for marketers to understand the factors which influence consumer behavior in the purchase of green products. The study aimed to answer the following research objectives:

1. To determine the factors that influence consumer behaviour in the purchase of green products in Windhoek, Namibia.
2. To determine the statistical relationship between factors such as Environmental attitudes, perceived effectiveness of environmental problems, perceived environmental responsibility, green products labelling, green product features, green product certification, environmental benefits of green products, governments concern about the environment, consumers knowledge about environmental benefits and the purchase of green products.

Research Methodology

The study adopted mixed- methodology, this is important to bridge the gap of information especially when one methodology is not sufficient to provide all the data that is needed for better understanding of the research problem (Creswell & Clark, 2007). Primary data was collected using a standardized interview guide and a structured questionnaire from 120 respondents of three age groups namely, young age, middle age and old age. The young were grouped under the age of 21, the middle between the age of 30 and the older consumers are categorized above the age of 50. None- stratified purposive sampling was used since the population drawn did not constitute a homogeneous group. Descriptive statistics, t-test and chi-square test for associations of continuous and categorical variables was performed using SPSS version 23. The predictors for purchase of green products were determined using bivariate and logistic regression analysis. Qualitative data was analyzed using thematic analysis.

Summary of the results and Discussion

After conducting logistic regression and bivariate analysis to determine the association between the predictors which influence consumer behavior and the purchase green products, the study found a statistically significant association between the purchase of green products with the following predictors; environmental attitudes ($p=0.843$), environmental benefits of green products ($p=0.439$), green product certification ($p=0.020$), green product features ($p=0.000$), perceived environmental responsibility ($p=0.000$), governments concern about the environment ($p=0.000$), perceived effectiveness of environmental problems ($p=0.048$) and with green products labelling ($p=0.001$), There was no association between purchase of green products and Consumers knowledge about environmental benefits ($p>0.05$). 0.899

Table 1 below shows results of a one sample t-test of factors which influence consumers to purchase green products. The null hypothesis for the mean of each influential factor question was set at > 2.5 . Results show that the mean influence levels towards the purchase of green were significantly above the threshold of 2.5 with the: labelling ($\bar{x}=3.392\pm 1.1832$ $t=8.255$, $p=0.001$), perceived environmental responsibility ($\bar{x}=3.575\pm 1.0742$ $t= 10.962$, $p =0.000$), green product features ($\bar{x}=3.3000\pm 1.2677$, $t=6.914$, $p= 0.000$), government's concern about the environment ($\bar{x}=3.3167\pm 1.335$ $t=6.703$, $p=0.001$), green product certification. ($\bar{x}=2.8167\pm 1.47234$ $t=2.356$,

p=0.020), environmental problems ($\bar{x}=2.750\pm 1.374$ t=1.994, p=0.048), environmental benefits ($\bar{x}=2.600\pm 1.412$, t=.777, p=0.437) an environmental Attitude ($\bar{x}=2.525\pm 1.4106$, t=.179, p=0.843). However the mean influence levels towards the purchase of green products was not statistically different from the threshold mean of 2.5 for: the knowledge about environmental benefits of green products ($\bar{x}=2.4833\pm 1.432$, t=.128, p=0.899).

The acceptable mean for factors which influence people to purchase green products in the table below was set > 2.5

Table 1. Factors which influence consumers to purchase green products

Table 1	Col 1	Col 2	Col 3	Col 4	Col 5	Col 6
1.	Factors influencing the purchase of green products	Mean/5±SD	t	df	95%CI	p-value
2.	I am influenced mostly to purchase green products by labelling	3.3917±1.18319	8.255	119	6778, 1.106	0.000*
3.	I am influenced mostly to purchase green products green product features	3.30000±1.267566	6.914	119	.57088, 1.029	0.000*
4.	I am influenced mostly to purchase green products by green product Certification.	2.8167±1.47234	2.356	119	.0505, .583	0.020*
5.	I am influenced mostly to purchase green products my perceived environmental responsibility	3.5750±1.07424	10.962	119	.8808, 1.269	0.000*
6.	I am influenced mostly to purchase green products by government's concern about the environment	3.3167± 1.33463	6.703	119	.5754, 1.0579	0.001*
7.	I am influenced mostly to purchase green products is my perceived effectiveness of environmental problems	2.7500± 1.37352	1.994	119	.0017, .498	0.048*
8.	I am influenced mostly to purchase green products by environmental benefits	2.6000± 1.41064	.777	119	-.1550, .355	0.439
9.	I am influenced mostly to purchase green products by Environmental Attitude	2.5250± 1.38396	.198	119	-.2252, .275	0.843
10.	I am influenced mostly to purchase green products by the information through advertisement	2.4833± 1.43183	-.128	119	-.2755/.242	0.899

*= Significant p value by t- test at 95% confidence interval

*= Significant p value is set at level 0.05

Discussions

Factors which influence consumer behavior in the Purchase of Green products

In recent times, consumers are more apprehensive in their purchasing attitudes, preferences and have a great environmental concern (Sarigöllü, 2009). Nowadays, consumers prefer environmentally and socially responsible companies for their purchasing (Kalafatis and Pollard, 1999). Findings in Table 1 suggest that consumers are influenced mostly to purchase green products by labelling, which had the highest mean response. Closer scrutiny revealed that the motive behind green labelling was profiteering and had nothing to do with environmental concerns. Consumers have become “green sensitive” and skeptic about products which are colored green, packaged green, branded green and corporate buildings that are painted green and yet there is little or no environmental concern expressed through the products or services they deal with.

Previous studies study suggests coming up with honesty trusted eco- labelling as one of the ways to overcome the issue of confusing green labelling which makes the purchase of green products difficult, this is also supported by previous studies (D’Souza et al., 2006; Glegg, Richards, Heard, and Dawson, 2005).

Edward and Richard (1971) points out that consumer products with special features are only purchased by specific group of consumers with special needs. Environmental features are added selling point. Even though many people are aware about the environmental issues and are willing to respond by purchasing environmental friendly products or services, yet a survey result showed that only 8% respondents changed their purchasing behavior to benefit the environment (Our Green World, 2008). Consumer’s social responsibility is to always purchase products that have less environmental negative impact. Consumers prefer environmentally and socially responsible companies for their purchasing (Kalafatis and Pollard, 1999).

Many related studies by researchers have shown that purchase of green product was influenced by brand consciousness (Miller and Layton, 2001). In a similar study a multivariable relationship between green advertisement, buying behaviour and, green brand awareness were found to influence purchase of green products. Another study show that consumers are influenced to purchase green products by personal health care considerations, life style and status in life (Albayrak et al., 2013; Vermeir and Verbeke, 2004; Essoussi and Linton, 2010). Related study reveal that Environmental concern is the main factor influencing green product consumer decision making, but others factors such as green product consumer economic situation, green product consumer health, green product quality, greenwashing and the level of greenness also has significant influence on consumers decision making (Coleman et al., 2011; Lenidas et al., 2011).

The study reveals that Green product certification is an important attraction aspect which influence consumer behavior towards the purchase of green product. Related study has shown that Green product certification has become an important basis for the public to purchase green products for health and environmentally-friendly reason (Dong et al., 2019; Zhang and Li, 2021). As a result, green product certification is an important link between sustainable production and consumption. The results reveals that consumers will not buy green products on the basis of

environmental benefits alone. Product choice is still based on whether it meets consumer's basic wants and needs.

The Government has unmatched role in the influence of consumer behavior towards the purchase of green product. Government should encourage consumer's role in environmental conservation through green product purchase, this is backed up by the results from this study which show that government involvement is a strong predictor towards the change of consumer attitude on green products. It is recommended that the government should double their efforts to campaign for the environmental conservation through green products awareness, purchase and usage.

Managerial Implications of the study

The ministry of trade and industry is expected to encourage the importation and manufacturing of green products, ensure green certification, eco- labels and mandate green consumer policies to be a part and parcel of the requirements for all companies creating, offering or exchanging products and services of value.

Increasing the supply of environmentally friendly products through export financing of the locally manufactured green products, extension of working capital loans, introduction of subsidies to encourage economies of large scale production, increase of tariffs on harmful products to the environment, import tax differentiations on products that are not decomposable, biodegradable or recyclable will contribute towards lowering the rate of carbon dioxide and hence preserve the environment.

Marketers can learn from the study and formulate strategies they can use to market green products, increase green consumer education, increase the purchase of green products and how to tap the potential green product market niche of 2, 07 million markets in Namibia.

The study is beneficial to educate consumers on the role they can play to conserve environment through responsible purchase decision of green products. Green concept should be embedded within the conception of a new product development process throughout its lifecycle. It is expected that Green will be the centre of all organization processes policies and standards.

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