# Influence of Factors in Green Advertising upon Purchase Intentions- A Study of Pakistani University Students

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## *Abstract*

*This research paper determines the factors responsible for influencing purchase intentions of consumers towards green products through environmental or green advertising. The major purpose behind study was to instigate a new vision into marketers of various products, services or brands in Pakistan, which would help them fundamentally in devising attractive and more effective green advertising strategies. Based onto findings from the previous similar studies, a research model was conceived and developed. The model was tested on a sample of 150 university students in Sahiwal city of Pakistan, selected through convenience sampling technique. The data after collection was tested statistically in SPSS 18.0 version software. The statistical tools of mean, correlation and regression analysis were employed to test the developed hypotheses. The findings were found statistically significant and positive for all three independent variables having strong impact upon purchase intentions of consumers towards green products. The results indicate that Pakistani university students have a positive attitude towards green advertising and preferred to purchase green products as a consequence. The pragmatic attitude of Pakistani consumers has led towards the deduction that, marketers/ advertisers of green products should convey abundant information regarding both extrinsic and intrinsic attributes of a green product. This would eliminate all fears or skepticism regarding acceptability of green products. The prominent limitations of the study are small sample size, focusing only on the university students in Sahiwal, and the results of the study may not be generalized upon all populations. The study shall help marketers in closely comprehending the attitudes of Pakistani customers towards green products in Pakistan, in order to devise effective green marketing strategies.*

**Key Words:** *Attitudes towards green products, Green Aadvertising, Purchase Intensions.*

## Introduction

In contemporary times, the world is obsessed with the "Green" issue. The visible logic behind "Going Green" is the strong adverse impact of rapid emergence of factors such as global warming and uncontrollable population growth, which has led to the almost extinction of reservoirs of natural resources and a potential threat to the future and prosperity of human species (Sevil, 2011). Green marketing has gone through transformational stages since 1975, when a pioneer workshop was arranged and executed by the American Marketing Association with the title of "ecological marketing practices for the sustainable development of the world". In today's' times, all businesses seek ecological responsibility as the critical success factor for any uphill marketing or management challenge ahead. A revolutionary change was brought about in 1980's, when marketers had to specifically build systematic mechanisms for ensuring customer satisfaction and loyalty in the context of  rapidly increasing consumers of eco-friendly products (Ottman, 1993). Green marketing plunged its way high into western economy in the year 2000, after a highly aggressive response from customers in the 1990s (Ottman, et al. 2006). As a consequence, the number of consumers motivated towards purchasing eco-friendly products has increased manifold.

Firms were bound to adopt or in certain cases adapt towards the "green strategies", in order to cope up with the increasing awareness of consumers concerning the environment and its sustainability. (Ginsberg & Bloom, 2004). Apart from adopting and adapting the "green strategies", firms had to rationally inculcate sound and credible environmental claims into advertising messages and communication, in order to differenciate from competitors and may possibly gain a competitive advantage through it (Conolly & Prothero, 2003). It can be asserted that a well crafted and equally wll executed strategy of green positioning can help significantly in communicating that edge to the consumer via establishing a far more preferrable yet favorable brand perception. Past studies clearly relate the existence of green products, and the appropriate segments exhibiting a high level of responsiveness towards them in terms of preferring green products over regular non-green products. Marketers once come up with creative yet novel advertisements depicting "green products", it becomes the obligation of customer to be able to differentiate between a variety of competing brands and products based onto his/ her choice. According to (D, Taghian, Lamb, & Perotiatkos, 2007), from consumer likibility point of view, a number of options regarding environmental advertising can be entertained.

Like rest of the world, the Asian side is no longer spared from the on-going threats of global warming, population explosion and other such environmental threats faced by the citizens and domestic government (Lee, 2008). Pakistan, an underpriviledged Asian country is a victim of harmful pollution of both water and air, extremely high noise pollution in the form of a never-ending traffic. There has been a stark increase in awareness towards environmental issues and terrors, which has potentially triggered the government as well local citizens to realize the magnitude and worth of this grave issue (Mustafa, 2006). Generally speaking, people are Pakistan eagerly speak up and react in reponse to green issue advertising appeals. The latest evidence comes from the efforts of Pakistani citizens in revitalization of the Hudaira drain, which happened to be a River Ravi tributary surging in between Pakistan and India (Mustafa et al., 2007).

For international marketers, there exist multiple opportunties since Pakistan is an emerging market in terms of environmental products, technologies and services. Owing to Pakistan's large population, marketers should focus greatly onto understanding the attitude of customers in the perspective of preferences and non-preferences of advertising messages related to eco-friendly or green products. This would help marketers in a profitable way towards capturing a potentially large, yet untapped market of green products in Pakistan. Conversely speaking, the reality is contrary to this fact, since a lot many areas have literally been ignored in the context of environmental research in countries such as India and Pakistan. Therefore, in order to enhance the existing body of knowledge, systematic research is required. The potential benefits of conducting research in the area of eco-friendly products would be:

o   In Asia, the number of studies conducted in the background of environmenta friendly products has been too low as compared to their western counterparts (Lee, 2008).

o   There are almost none whatsoever research contributions in Asian nations, upon determining potential significant factors contributing towards success of green advertising in positively affecting the consumer purchase intentions.

o   From the context of Pakistan only one study was conducted by (Ahmad, Shah, & Ahmad, 2010). The results revealed that Pakistani consumers are environmentally conscious towards effect of grren advertising. There was more impact TV advertisements found upun consumers as compared to print ads, in the area of green product advertising.

This research paper would be a very effective source of first hand information for both local as well as foreign marketers of green products. It would give a direction onto what is in and what is out in the perspective of appealing green products successfully to the Pakistani consumers. The research study overcomes the gap existing, by studying carefully the buying behavior of customers towards green products, especially from the viewpoint of advertising strategies essential to attract people towards green products. The study shall provide a new vision and insight to the local and international marketers in better understanding the changing needs of the Pakistani target markets.

## Literature Review

The research studies conducted on attitude towards advertising reveal it to be a construct with multiple sides (Andrew, 1989). In the world of intense ad competition, its' not that easy to break the clutter, and let your message be the only one to be heard by the target audience. Therefore, advertisers face a real tough time in getting their messages noticed in front of the customers if they shortfall in creativity and innovativeness. Nevertheless, a lot many customers still consider advertising messages a nuisance rather a source of important or beneficial information (Commins, 1996). Conversely speaking, advertisers spend a lot of time in crafting the right kind of message, carrying claims which would yield the least skepticism and chances of risk. Past literature indicates that a variety of green advertisements presented to customers gained differential responses too in the form of positive or negative feedback (Ong & Phau, 2007). Based onto past findings, the first hypothesis of the study can be formulated as:

H1: Consumers having positive attitudes towards advertising would respond positively towards advertising of green products.

Ronnie & Dahlia Darmayanti (2012),  conducted a similar empirical investigation upon university students of Jakarata. The objective of the study was to find the factors which influence green purchase behavior of customers. Through convenience sampling, 200 students were selected from various universities of Jakarata. Data was collected through self-administered questionnaire, whereby respondent's response was measure on 5-point likert scale. Data was analyzed through SPSS software by using t-test hypothesis technique. Findings revealed that perceived seriousness of environmental problems, environmental concern and perceived environmental responsibiloty were the variables which had a significant and positive relation with green purchase behavior.

The rapid emergence of environmental problems at global upfront, has shifted the lifestyles of consumers due to increased awareness on multiple environmental issues. At the moment, people voluntarily indulge in practices where minimum damage is caused to environment because of their acts. Still it is not the norm of every customer or organization. Smart marketers have measured this change of attitude in consumers and are trying to make a niche in the green product business. Jacob & Jolly (2012), undetook a study where they examined the concept of green marketing and the various consumer attributes affecting green marketing practices. Based onto their research, they presented a conceptual paper by studying all past

literture. Their findings suggested that in an era of such high consumption, consumers should indulge in buying green products, but to little or lack of awareness of environment friendly products as well as business practices, still companies and customers are far away from manufacuting and buying eco products. They recommended immediate start of green marketing practices at all levels of organizations.

Information regarding environmental concerns is generally of two types: the first concerning the consumers to be imparted knowledge upon the multifaceted effect of the product they claim "green product" upon the environment, second the "green product" being manufactured in a way which causes little or no damage to the environment. This remains the sole responsibility of the marketers to disseminate such important piece of information in a very effective yet creative manner. The purpose again is to let the customer realize the importance of such information being conveyed to him/ her (D'Souza et al., 2006). In order to shop healthy, consumers seek authentic and sound information through advertisements (Chan, 2004). This is the basis of the second hypothesis of the study:

H2: Consumers in quest of more information in environmental advertisements are more inclined towards purchasing green products.

The thinking of consumer in terms of the extent to which they can contribute something vital to environment through their actions is called the perceived effectiveness of environmental behavior. Previous literature indicates that perceived effectiveness of environmental behavior is positively correlated to the purchase intentions of customers (Lee, 2008). This leads to the $3^{rd}$ hypothesis of the study:

H3: Perceived effectiveness of environmental behavior will increase consumer's purchase intentions towards green products.

## Theoretical Framework

The schematic diagram given below shows the research model of this study consisting of dependant or predictor variable of purchase intentions of consumer and independent or criterion variables of attitudes towards advertisements, information in advertisements and perceived effectiveness of environmental behavior. This model was adapted from (Ahmad, et al. 2010). The research model proposed positive impact of all independent variables upon dependant variable.
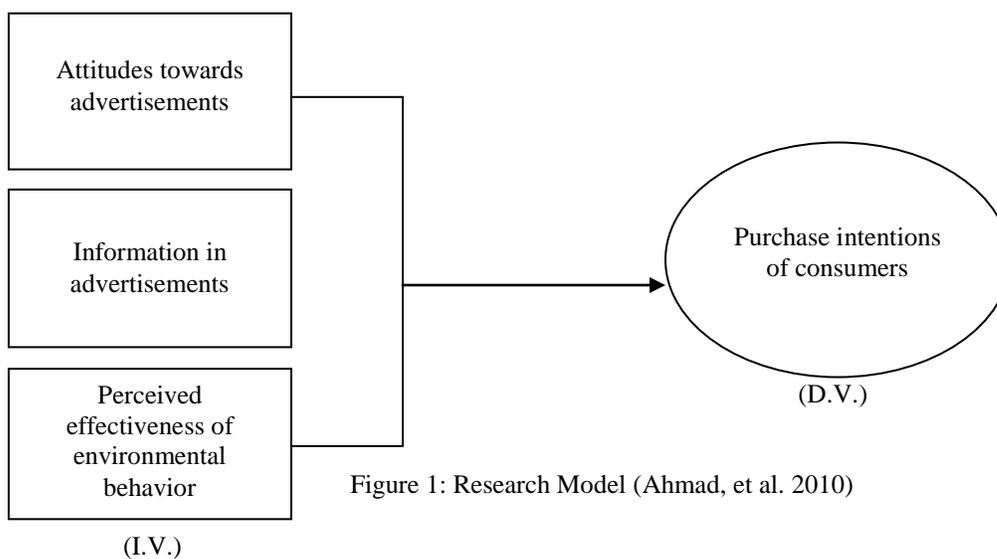


Figure 1: Research Model (Ahmad, et al. 2010)

## Research Methodology

The study undertakes quantitative approach as adapted from (Ahmad, et al. 2010). The above constructed hypotheses shall be tested in a careful manner by application of statistical tools. The data collection methods are both primary and secondary. All secondary data is based onto the above literature review, whereas primary data shall be collected via self-administered questionnaires from the repondent.

### Data Collection Methods

The logical reasoning behind using survey research method is that population is large, and only a portion of population called sample is to be surveyed. This particular study employs quantitative methods to describe the specific attributes of the sample, and generalize these findings onto the population in the latter part of the research. It involves inspecting the specific relationships of variables with each other. Survey research does not require a lot of investment and can be administered through minimal charges. Survey research has significance since it is able to gauge and scrutinize that part of information regarding customer attitudes which most probably observation research techniques fail to do so (McIntyre, 1999).

The instrument to be used is self-administered questionnaire, which contains 25 questions based onto four constructs of attitudes towards advertisements, information in advertisements, perceived effectiveness of environmental behavior and purchase intentions of consumers. The questionnaire is measured through 5-point Likert scale (1= strongly disagree, 2=disagree, 3-uncertain, 4=agree, 5= strongly disagree). At the end of questionnaire there are certain demographics questions such as age, education level and income level of respondent. The scales used in this particular study have been adapted from (Chan, 2004; Teng, Laroche, & Zhu, 2007; Tan & Chia, 2007).

### Population, Sampling and Sampling Procedure

The population is Central Punjab region of Pakistan. In Central Punjab, specifically Sahiwal area is targeted. The sample being selected would be inhabitants of Sahiwal city, specifically the university. Non-probability sampling approach is used in the study to select sample. The specific probability sampling technique used here is random sampling, since it is an easier yet more efficient technique to obtain respondent data through it. Those respondents from the population are selected in the samples whom are conveniently available (Luo, 2011). Roscoe (1975) suggested rules of thumb which can guide the particular researcher in determining the specific size of sample. A popular rule is to select the sample an n appropriate sample size, n>30<500. Following the Roscoe approach, total of 150 respondents were administered questionnaires for the purpose of data collection in Lahore. But out of 150, only 130 were reliable; since 20 respondents backed out in the screening question by saying they had not purchased any cosmetics in last few months. Data was collected in a short period of two days.

### Reliability of Instrument

Reliability is employed as a technique to ascertain all the measureable items' internal consistency in a questionnaire. The underlying objective is to examine if the items making up the construct are measuring what they are supposed to measure. Moreover it also measures whether the items have coherence with the construct. Statictically, the value of Cronabch's Alpha is referred, which should be upto 0.7 or more in order to be acceptable. It means high alpha is good. The reason of using Cronbach's alpha test is because it is easier to use in comparison to other estimates (e.g. test- retest reliability estimates) as it only requires one test administration. In this Cronbach's Alpha value for purchase intentions variable is 0.87, 0.823 for attitudes towards advertisements and 0.830 for information in advertisements and 0.88 for perceived effectiveness of

environmental behavior respectively. Therefore it can be affirmed that the items measuring constructs are reliable.

### Data Analysis Methods

The data in this research paper is analyzed through SPSS version 17.0, which is popular statistical software. The statistical tools utilized for analysis include linear regression analysis and correlation analysis as utilized by (Ahmad, et al. 2010; Jacob & Jolly, 2012).

## Results and Discussion

Generally speaking, correlation tehnique measures the strength of association existing among two or more variables. Therefore it can deduced that if one varibales changes, then some degree of change should be observed in the other varible as well, if this is observed then it means correlation exists among variables. Correlation is regarded as the link or association among variables. The relationship among variables is said to be signigicant, if correlation value 'r' is either exactly or approximately equal to 1 or -1. If this is the case, then it means a significant relationship is there, but it could be both positive or negative. On the other hand, if the value of correlatio coeffient is 0, this shows no relationship exist among the variable.

The table 1 given below presents the values of correlation coefficient at 0.01 level of significance. The correlation can be found significant only if p-value is less or equal to 0.01.

Table 1: Correlation of Variables

|  | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Attitudes towards advertisements | 1 |  |  |  |
| Information in advertisements | .714** | 1 |  |  |
| Perceived effectiveness of environmental behavior | .551** | .834** | 1 |  |
| Purchase Intentions | 0.787** | .834** | .845*** | 1 |

Level of significance= 0.01

From the above findings, it can be easily observed that there exists quite a strong correlation among all variables. Attitudes towards advertisements has significant but moderate relationship with dependant variable of purchase intentions (r=0.787**, p=0.000). Information in advertisements has significant as well strong correlation with purchase intentions variable (r=0.834***, p=0.000). Similarly, perceived effectiveness of environmental behavior has significant as well as strong correlation with purchase intentions (r=0.845, p=0.000). From, these results it can be deduced that consumers have quite high conscious level of perceived effectiveness of environmental behavior and consider green advertisement and green products as making a good difference in protecting the environment, hence they are inclined to try or purchase green products. All three hypotheses are proved correct.

### Regression Analysis

Predicting the value of dependant variable based onto one or more independent variables is called regression. Correlation measures the strength and degree of association between multiple variables. The regression analysis is used to predict the level of change in dependant variable, when it is impacted by independent variables. In other words, regression analysis is used to assess the variation in dependant variable due to multiple independent variables.

Table 2: Results of Linear Regression Analysis

| Serial No. | DV | IV | β | T | F | R² | Adjusted R² |
|------------|-----|------|-------|-------|---------|------|-------------|
| 1 | | ATA | .678 | 1.620 | | | |
| | | IIA | .478 | 6.367 | | | |
| | | PEEB | 0.876 | | | | |
| | PI | | | | 320.982 | .765 | .745 |

Where, ATA=Attitudes towards advertisements, IIA= Information in advertisements, PEEB= Perceived effectiveness of environmental behavior, PI= Purchase intentions.

From the above table it can be concluded, that adjusted R² value of 0.745 indicates, that 74.5% change in dependant variable of purchase intention can be brought about by change in independent variables of attitudes towards advertisements, information in advertisements, and perceived effectiveness of environmental behavior. The ANOVA statistics (F= 2320.982, p= 0.000) show that the overall model is significant. In other words the multiple regression equation is statistically significant and helps in understanding the variable relationships. The coefficient of regression of attitudes towards advertisements is statistically, and reports that 67.8% variation in dependant variable of purchase intentions can be brought about by change in independent variable. Similarly β=6.367 reports relation between information in advertisements and purchase intentions significant, and 67.67% change can be induced in purchase intentions due to change in information in advertisements. On the other hand, β=0.876 of perceived effectiveness of environmental behavior indicates a significant relationship among variables, and a very strong change of 87.6% can be brought about in purchase intentions of consumers towards green products by degree of change in perceived effectiveness of environmental behavior.

It can be concluded from above findings and results that Pakistani university students have a very positive inclination towards effectiveness of environment conscious behavior, and are highly motivated to purchase green products. This shows that the existing green advertising strategies are synchronized with the needs of the customers. This study has relevant implications for marketers to establish strategies of green marketing, whereby the consumer is given more information about green products and their relevance to environment protectionism phenomena. This would greatly induce them to prefer green products over traditional products available in the market.

## Limitations and Future Direction of Study

The major limitation of the study was usage of random sampling technique due to short duration time. The results although are significant statistically and prove the findings and results of earlier studies, but still a better sampling technique could have assured more generalization results. The advertisement mediums have not been considered in this model, therefore there is high chance that findings may not equally apply on all advertisement mediums e.g., TV, internet, outdoor advertising, etc.

## References

Ahmad, H., Shah, I. A., & Ahmad, K. (2010). Factors in Environmental Advertising Influencing Consumer's. *European Journal of Scientific Research , 48* (2), 217-226.

Andrew, C. J. (1989). The dimensionality and beliefs towards advertising in general. *Journal of Advertising* , 26-35.

Chan, Y. R. (2004). Consumer responses to environmental advertising in China. *Marketing Intelligence & Planning* , 427-437.

Commins, D. (1996). Creative failures. *Ad/Media 7* , 35-45.

Conolly, J., & Prothero, A. (2003). Sustainable consumption. *Consumption, Consumers and the commodity discourse 4* , 275-291.

D, S. C., Taghian, M., & Lamb, P. (2006). Green product and corporate strategy: an. *Corporate Communications: An international Journal* , 162-173.

D, S., Taghian, M., Lamb, P., & Perotiatkos, R. (2007). Green products and corporate strategy: an empirical investigation. *Society and Business Review* , 144-157.

Ginsberg, ,. M., & Bloom, P. (2004). "Choosing the right green marketing strategy. *MIT Sloan* , p. 46.

Jacob, C., & Jolly, J. (2012). Green Marketing: A Study of Consumers' Attitude towards. *Asian Social Science , 8* (12), 1911-2025.

Lee, K. (2008). Opportunities for green marketing: young consumers. *Marketing Intelligence , 26*, 573-586.

McIntyre, L. J. (1999). The practical skeptic: Core concepts in sociology. *Mountain View* . CA: Mayfield Publishing.

Mustafa. (2006). Pakistan, India join hands to clear Hudiara Drain.

Ong, D., & Phau, I. (2007). An investigation of effects of environmental claims in promotional message for clothing brands. *Marketing Intelligence & Planning* , 772-788.

Ottman, A. J. (1993). *Green Marketing: Challenges and opportunities for the new marketing age.* New York: McGraw-Hill.

Ottman, A. J., Stafford, R. E., & Hartman, L. C. (2006). Avoiding green marketing myopia:ways to improve consumer appeal for environmentally preferable products. *Environment 48* , 22-36.

Ronnie, I., & Dahlia Darmayanti, M. (2012). The Influence Factors of Green Purchasing Behavior:.

Sevil, Z. (2011). A Theoretical Approach to Concept of Green Marketing. *Interdisciplinary Journal of Contemporary Research in Business , 3* (2), 1808-1804.

Souza, C. D., Taghian, M., & Lamb, P. (2006). Green product and corporate strategy: an empirical investigation. *An international Journal 11* , 162-173.

Tan, S. J., & Chia, L. (2007). Are we measuring the same attitude? Understanding media effects on attitude towards advertising. *SAGE Publications* , 353-377.

Teng, L., Laroche, M., & Zhu, H. (2007). The effect of multiple-ads and multiple-brands on consumer attitude and purchase behavior. *Journal of Consumer Marketing* , 27-35.