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***Research paper***



# Influence of Advertising on the Adoption of Green Products: The Mediating Role of Innovativeness

**Hanane Ahlafi[1], Noura Ettahir[2], Abdelaziz Bahoussa[3]*, Mohammed Hassainate[4]**

[1] *Equipe de Recherche en Sciences de Gestion – Ecole Supérieure de Technologie de Salé-Mohammed V University in Rabat-Maroc, BP: 227 Salé Médina, Salé Morocco*
[2] *Equipe de Recherche en Sciences de Gestion – Ecole Supérieure de Technologie de Salé-Mohammed V University in Rabat-Maroc, BP: 227 Salé Médina, Salé Morocco*
[3] *Equipe de Recherche en Sciences de Gestion – Ecole Supérieure de Technologie de Salé-Mohammed V University in Rabat-Maroc, BP: 227 Salé Médina, Salé Morocco*
**Corresponding author E-mail: abahoussa@yahoo.fr*

**Abstract**

Ecology as a strategic variable has been the focus of interest for researchers since the early seventies (Marguerat & Cestre 2002). As early as the pioneering researches of Hénion (1976), Kassar Jian (1971), Kinnear and Taylor (1973) and Kinnear et al (1974), the ecological dimension had been integrated into the research and practice of management and marketing. In addition, some authors agree that different stakeholders such as consumers, NGOs, public authorities, advertisers and publicists are increasingly informed and aware about the importance of protecting their environment (Schlegelmilch & Pollack 2005).

However, some authors denounce the inaction of consumers although they are aware of the degradation of their environment. This passivity is explained among other things by the high price of green products compared to traditional products (Green Brands2011).

In this study, we first presented the research problem, and then we analyzed the works related to the typologies of green consumers and the main variables that we consider to be determinants of the adoption of so-called green products. Finally, we exposed the research hypotheses, the conceptual model, highlighting the mediating role of innovativeness in the relationship between the attitude towards advertising and the adoption of green products.

***Keywords***: *green advertising, green marketing, green products adoption, innovativeness, involvement level, need for unicity*.

## 1. Introduction

The purpose of the present study was to analyze the influence of the perception of green advertising on the consumer's attitude toward the adoption of new products from an ecological brand. Indeed, the study of the behavior of green consumption (Ethicity Survey, 2011) is considered as an area of growing academic interest.

In addition, research conducted on the attitude of individuals towards environmental issues has highlighted the link between attitude and notions such as belief, the degree of knowledge, intentions and behaviors of the consumer (De Gerus2013).

In addition, we note that some companies make honest green campaigns, others take advantage of these systems and "surf" on the green wave by making false advertising. In this context, some stakeholders (consumer associations, NGOs) rightly identify these deceptive practices, which can feed illegitimate ecological perceptions in the mind of the credulous or inexperienced consumer (De Gerus 2013).

The purpose of this study was to explore the impact of green advertising attitudes on the adoption of green products by focusing on the mediating effect of consumer innovativeness between these two variables and, secondly, to verify the existence of the moderating effects of the need for uniqueness and the implication in all the links of the causal model.

## 2. Typology of green consumers

In terms of the marketing literature, we have noticed the existence of several types of segmentation of consumers who express environmental concerns and who are ready to adopt eco-responsible behaviour. In what follows, we will limit ourselves to two types of consumers according to their sensitivity to the environment.

### 2.1. Typology BVA

The BVA study of 1991(Peixoto, 1991), for its part, suggests a typology of consumers according to their attitude towards the environment. The study distinguishes five segments called "eco groups" with different characteristics according to the segments of green products and according to their degree of involvement:

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- The eco-responsible (18%);
- The "écohard" (15%);
- The "disillusioned" (25%);
- "eco-confident" (22%), and
- The "eco-distants" (20%).

### 2.2. Typology ADEME and ETHICITY

For this study, we focused on a more recent study conducted in 2006 by ADEME and Ethicity. The purpose of this study was to enable companies to adapt their strategies in order to guide and improve their actions in terms of sustainable development. Thus, this study made it possible to establish a typology of consumers according to their degree of expectation in terms of sustainable development and the specific actions that they would be likely to make in favor of sustainable development.
This typology consists of 8 types of citizens:

1. The "Twentieth century: Do not think about it, act at home" (7.4%).
2. "Ego happiness: think pleasure, act for oneself"(9.1%).
3. "Citizens of the world: Think global, act global"(21%).
4. "Activists: Think global, act social". (14.6%).
5. The "Conservatives: Think national, act at home" (12.9%).
6. "Neighbors: Think local, act local" (13.3%).
7. "Pragmatics: Think planet, act realistic" (13%), and
8. "Frivolous: Think of yourself, do not act" (8.6%).

## 3. Determinants of adoption behavior of green products

### 3.1. Need for uniqueness.

The need for uniqueness is to seek to be different and unique from others while remaining integrated in the social context (Snyder and Fromkin1980). The level of this need is different from one consumer to another and depends on its environment. Generally, this uniqueness behavior is translated into, for example, the choice of a new product, point of sale, community or group (Burns & Warren 1995).

In order to measure this construct Tian, Bearden and Hunter (2001) proposed a scale consisting of 31 items in three dimensions:
Non-compliance by a creative choice with 11 items;
Non-compliance by an unpopular choice with 11items;
And the avoidance of similarity with 9items.

### 3.2. Level of consumer involvement in sustainable development.

In this section, we will highlight the level of consumer involvement that we consider to be an important factor in the adoption of green products.

According to marketing literature, the level of consumer engagement in the field of sustainable development has an influence on its attitude (Giannelloni 1998, Marguerat & Cestre 2002). For this purpose, studies on consumer attitudes towards the environment reveal three types of behaviors structured in three dimensions:
Affective dimension: an individual can act according to his values, his level of commitment to respect the environment.
Conative dimension: some people act to provide an answer to environmental problems.
Cognitive dimension: according to one's knowledge of environmental problems, an individual may behave differently from the first two (Dembkowski & Hanmer-Lioyd1994).
For this research, it therefore seems appropriate to take into account the level of consumer involvement as a determinant of the adoption of ecological products. The concept of implication thus constitutes an essential concept of research on consumer behavior. Dussart (1983) stated that "consumer behavior research has a strong interest in measuring the level of consumer involvement in a systematic way even before testing any other hypothesis".
The study of this concept is complex in the way that there is no unanimous definition, but rather different visions. Among the definitions retained for this concept we find:
Antil (1984): "involvement is a level of perceived personal importance and / or interest aroused by a stimulus (or stimuli) in a particular situation".
Feick, Higie and Feick (1989): "involvement is the potential for stimulation of a product or activity, which causes personal relevance. It is intrinsically linked by the level to which the product or activity is related to the self-image or pleasure of thoughts about product use or engagement in an activity."
Zaichkowski (1985), the implication represents the "personal relevance, for a person, of an object, based on its inherent needs, values and interests".
And finally, we have Strazzieri and Hajdukowicz-Brisson(1995) who defined it as "an enduring disposition of an individual to allocate energy to all that relates to the object of the implication, due the potential for stimulation of this object, associated with its personal relevance to the individual. "
The different approaches of this concept have given birth to many and varied measuring instruments:
-The Laurent and Kapferer scale (1985) under the name of Profile of Involvement (PI), it contains 5 dimensions with 14 items:
The 'Interest' dimension with 2 items; The 'Pleasure' dimension with 3 items; The dimension 'Sign' with 2 items;
The dimension 'Importance of risk' with 3 items; The 'Probability of error' dimension with 4 items.
The Zaichkowsky (1985) scale under the name of Personal Involvement Inventory (IIP), it has a single dimension with 9 items.

The Strazzieri scale (1994) under the name of Interest Attractiveness (PIA), with 3 dimensions and each dimension includes two items: 'Personal relevance'; 'Interest' and 'Attraction to the object'.
The Richins scale (1987) composed of a single dimension with 4 items.

### 3.3. Innovativeness as a determinant of the adoption of ecological products.

Derived from the word "innovation", the innovativeness in the marketing literature has several meanings that are sometimes complementary, depending on the culture and environment of the authors.

Among the earliest definitions of this construct is that of Rogers and Shoemaker (1971), which defines it as: "the degree to which an individual/consumer adopts a new idea / newness earlier than the rest of the members of a social system product". In other words, the innovativeness for these two authors is the capacity of the individual to adopt innovations early in relation to his environment.
We can group definitions of consumer innovativeness into three groups:
A group of authors who defines innovativeness as a personality trait that can be generalized to all new products, such as Midgley and Dowling (1978) and Le Louran (1997);
A second group that defines it as a personality trait specific to a specific domain, such as Goldsmith, d'Hauteville and Flynn (1998) and Goldsmith and Hofacker (1991);
And finally a group that defines it as a multiple trait that can be expressed by two types or three products is the case of Roehrich (1997).
In addition, the different approaches to consumer innovativeness have given rise to many and varied measuring instruments. Among the most used measurement scales we find:
The Goldsmith and Hofacker scale (1991) under the name of "Domain Specific Innovativeness: DSI", contains a single dimension with 6 items;
The Roehrich scale (1994), composed of two dimensions: hedonistic innovativeness and social innovativeness. It includes a total of 16 items;
The scale of Manning et al. (1995) contains two dimensions:
Independence in judgments and decisions (ICMG), with 6items;
The desire and desire to learn about new products
(CNS) consists of 5 items.
-The scale of Le Louran (1997) under the name Trend Scale to Global Innovate (ETIC) contains a single dimension with 11 items.

## 4. Research hypotheses and basic conceptual model

Through this literature, we developed a conceptual framework in which the choice of research variables were justified, the research hypotheses were outlined and the conceptual framework was specified. This enabled the development of the research model (Figure 1) and the study protocol.

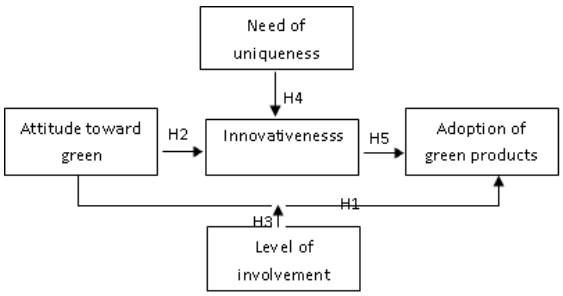



**Fig. 2:** Proposal of the basic conceptual model.

### 4.1. Variables of the basic model.

The purpose of this study was to explore the impact of green advertising on the adoption of green products. To do this we exposed the different variables of our model and their causal link:
Attitude towards green advertising.
***H1:*** The attitude towards green advertising has an effect on the adoption of green products;
***H2:*** The attitude towards green advertising has an effect on innovativeness. The scale used to measure attitudes towards advertising after advertising is Holbrook and Batra (1987). This scale is composed of 4 items to evaluate the attitude towards advertising (Aad) from a point of view of global judgments of advertising.
The four items on the Aad scale, developed by Holbrook and Batra (1987), are as follows:
Item 1: I like this ad / I do not like this ad;
Item2:I react favorably to this advertisement/I react unfavorably to this advertisement;
Item3:I have a positive feeling seeing this ad/I have a negative feeling seeing this ad, and
Item 4: this ad is good / this ad is bad.

### 4.2. Implication.

The study of consumer involvement has attracted the interest of several marketing researchers (Bloch 1981, Laurent & Kapferer 1985, Costley 1988, Valette-Florence 1989, Ben Miled-Cherif 2001, Borel 2001). Involvement, according to Houston and Rothschild (1978), is composed of three types: sustainable involvement, situational involvement and response implication. In our model, we retained the

concept of sustainable involvement that we considered relevant for green products. For Houston and Rothschild (1978), this type of involvement is defined as a stable and permanent state of the consumer towards a product or brand. Moreover, Strazieri and Hajdukowicz-Brisson (1995) presented the involvement as an enduring disposition of an individual to exert effort in order to procure an object for its stimulation potential and for its personal relevance to the individual. However, the meaning that we retained in our research for involvement is reflected in attitudes, intentions and concrete actions towards the protection of the environment. It is a permanent commitment in sustainable development. Therefore, we retained from the above the following hypothesis:

***H3:*** Consumer involvement has a moderating effect on the relationship between the attitude towards green advertising and the adoption of green products. To measure the level of consumer involvement in sustainable development, we used the scale proposed by Haws, Winterich and Naylor (2010). This six-item scale measures the consumer's level of commitment and awareness in protecting the environment. It is as follows:

For me, it is important that the products I use do not harm the environment.
I take into consideration the potential environmental impact of my actions when I have to make decisions.
My interest in an environment influences my buying habits.
I am concerned about the waste of our planet's resources.
I would describe myself as a person who respects the environment.
I am ready to make efforts to act in favor of the environment.

### 4.3. Need for uniqueness.

Borrowed from the psychological domain (Snyder & Fromkin 2012), the concept of the need for uniqueness has been taken up in marketing by Tian, Bearden and Hunter (2001). Proponents of this stream of research consider that an individual needs both to be seen as similar and different from the members of his group. Indeed, its singularity is reflected in its uniqueness by adopting different values and behaviors without necessarily causing its rejection or isolation related to deviance (Snyder1992).

As mentioned above, three behavioral dimensions represent the need for uniqueness (Tian, Bearden & Hunter 2001): Non-conformity by a creative choice, non-conformity by an unpopular choice and the avoidance of similarities.

The "non-conformity by a creative choice" is the dimension most adapted to our study. Indeed, the consumer seeks social differentiation by adopting behaviors likely to be considered as the best by the members of his reference groups. This social distinction (McAlister & Pessemier 1982) is a consequence of the need for uniqueness, pushes the consumer to adopt new products. Hence, the following hypothesis:

***H4:*** The need for uniqueness has a moderating effect on the relationship between the attitude towards green advertising and innovativeness.

According to Tian Bearder and Hunter (2001), the measurement scale of the dimension "non-conformity by a creative choice" of the need for uniqueness is composed of eleven items that are as follows:

1. I collect unusual products to tell people that I am different.
2. I have sometimes purchased unusual products or brands to create a more distinctive personal image.
3. I often search for unique products or brands so that I create a style that is all my own.
4. Often, when buying goods, an important goal is to find something that communicates my uniqueness.
5. I often combine possessions in such a way that I create a personal image for myself that can not be duplicated.
6. I often try to find a more interesting version of the products in the industry because I like to be original.
7. I am actively seeking to develop my personal uniqueness by buying products or special brands.
8. Having an eye for products that are interesting and unusual helps me to establish a distinctive image.
9. The products and brands that I like best are those that express my individuality.
10. I often think about the things I buy and do in terms of how I can use them to shape a more unusual personal image.
11. I am often looking for new products or brands that will add to my personal uniqueness.

### 4.4. Innovativeness.

In the marketing literature, (Goldsmith & Hofacker, 1991; Cestre,1996), innovativeness is intimately linked to an innovative behavior that results in the propensity to seek or accept novelty.

In addition, the concept of innovativeness has several meanings, namely: the search for novelty, the acceptance of novelty, the intention of the purchase or the purchase of a new product.

As part of this research, we note that consumer innovativeness favors the propensity to adopt green products; hence, the following two hypotheses:

***H5:*** Innovation has an effect on the adoption of green products;

***H6:*** Innovation has a mediating effect between the at
titude towards green advertising and the adoption of green products.

Asmentionedabove,therareseveralscalesofmeasurementofinnovativeness. Our choice is focused on Le Louran's tool (1997), which is called Trend Scale for Global Innovation. It contains one dimension with 11 items her by presented:

1. I am the type of person who would try any new product at least once.
2. When I hear about a new product, I take the first opportunity to learn more about it.
3. When I see a new brand somewhat different from the usual brands, I try it.
4. I seek advice from those who have tried new products or new brands before buying them.
5. I attach great importance to the advice and my friends' regarding the purchase of a new product.
6. Before trying a new product, I try to find out what the people who own this product think.
7. I think it is useless to seek advice from those around oneself before buying a new product.
8. I prefer to pick a brand that I usually buy rather than try something I'm not sure about.
9. If I buy a new product, I only buy known brands.
10. I never buy something that I do not know by taking the risk of making a mistake.

11. I am very careful about trying new or different products.

## 5. Synthesis of research hypotheses

***H1:*** The attitude toward green advertising has an effect on the adoption of green products.
***H2:*** The attitude towards green advertising has an effect on innovativeness.
***H3:*** Consumer involvement has a moderating effect on the relationship between attitudes towards green advertising and adoption of green products.
***H4:*** The need for uniqueness has a moderating effect on the relationship between the attitude towards green advertising and innovativeness.
***H5:*** Innovation has an effect on the adoption of green products.
***H6:*** Innovation has a mediating effect between the attitude towards green advertising and the adoption of green products.

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