Purchasing behaviour for environmentally sustainable products: A conceptual framework and empirical study

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\section*{ABSTRACT}

Although there are some instances of prior research on the relationship between attitude and purchase intention for environmentally sustainable products, literature is scant about mediating role of attitude on the relationship between environmental knowledge and purchase intention for environmentally sustainable products. Following the theory of planned behaviour, this study develops and tests a conceptual framework, which provides several insights. First, the attitude towards environmentally sustainable products mediates the relationship between environmental knowledge and purchase intention. Next, this mediated relationship is moderated by the environmental knowledge. Third, the subjective norm is not significantly related to the purchase intention - contrary to established findings - in a collectivistic culture considered in this study. And last but not the least, the direction of subjective norm as a moderator on relationship between environmental knowledge and attitude is not supported. The findings of this study offer some important guidance for marketing theory, retailing practices for environmentally sustainable products and public policy.

\section*{1. Introduction}

World commission on environment and development (1987) has recognized sustainable development as the compelling impetus enabling fulfilment of the requirements of the present generation without hampering the ability of future generations to meet their needs. The responsible extraction of the natural resources with a concern for future generation has eventually presented a magnanimous challenge for business entities who often grapple with a need to strike a balance between growth and environmental concerns. Charting a growth trajectory damaged with definite resources requires all stakeholders, including manufacturers, marketers and retailers to align their business activities in line with the basic philosophy of environmental sustainability. Since social and environmental activists sometimes hold marketing to be responsible for unsustainable consumption leading to unbalanced growth, marketers need to show some real commitment regarding actions aligned with environmental concern (Kahle and Gurel-Atay, 2013). Under such developing scenario, environmentally sustainable products may attain sacred connotation since such products are supposed to be environment-friendly, environmentally superior and ecologically safe (Chan, 1998; D’Souza, Taghian, Lamb, and Peretiatko, 2007). It is, however, worthwhile to understand at this stage that all such attributes attached to environmentally sustainable products may get wasted unless the relevant human behaviour is not aligned with it. This concern is more pronounced because environmental issues are intrinsically dependent on commensurate human behaviour (Gardner and Stern, 2002; Baca-Motes et al., 2013). Such behaviour, to some extent, is manifested by environmentally conscious consumers in their purchasing activities (Laroche et al., 2001) backed with their urge for the protection of the environment (Keegan et al., 1995), thus providing some important signals to the researchers and marketers. In many of the instances, consumers visualize the alignment of self-image related to environmental concerns with the concern of the firms towards environmental sustainability (Kahle and Gurel-Atay, 2013).

Behavioural factors have been explored at length in the extant literature. Several researchers have explored the role of attitude as the predecessor of willingness to purchase environmentally sustainable products (Barber, Taylor, & Strick, 2009), as the consequence of belief for renewable energy (Bang, Ellinger, Hadjimarcou, & Traichal, 2000), as an antecedent of environmental behaviour (Kaiser, Wölfling, & Fuhrer, 1999) and as a perceived ecological value in the context of green consumption (Koller, Floh, & Zauner, 2011). The role of environmental concern on public health (Royne et al., 2011) and the role of environmental consciousness in green product use (Ying-Ching Fung and Chiu-Chi, 2012) have also been explored in the literature. A few researchers have also found varying degree of the relationship between attitude and environmental behaviour (e.g., Barker, Fong, Grossman,
Quin, and Reid, 1994). The research on such a diverse topic of environmentally conscious purchase behaviour by consumers has, to some degree, culminated into commensurate offerings by retailers in developed economies. This retail behaviour is evident from products like organic and sustainable line of clothing by Patagonia, American Apparel and Nau, environment-friendly bath and body care products by Lush, and non-toxic cookware and organic groceries by Walmart.

Considering the context of developing countries like India, the literature is a bit scant. The existing studies primarily deal with issues like consumers’ attitude and behaviour towards green practices, green buying behaviour and opportunity and challenges in green consumerism (e.g., Prakash, 2002; Jain and Kaur, 2004; Jauhari and Manaktola, 2007; Mishra and Sharma, 2012). These studies have no doubt created a repository of knowledge about environmental consumerism in countries like India by providing some ideas to the retailers, but the literature holistically is void of studies discussing many contextual factors elaborating the predictive relationship between different behavioural factors which interplay during the process of adoption and purchasing of environmentally sustainable products. The literature on the relationship between various factors interplaying in the process of purchasing of environmentally sustainable products, for example, is not prolific on the relevant mediating and moderating factors.

Retail sector as a whole is growing as evident from the growth of Indian retail market, which is expected to grow at 14% to 15% per year through 2015 (Das, 2014). The growth of retail sector also necessitates the urgency of examining a theoretical framework which could broaden the scope of study on the subject by incorporating and understanding relevant variables related to buying behaviour for environmentally sustainable products, thus helping the retailers holistically to understand various nuances attached to it.

This study attempts to fill some of the gaps in the literature by developing a conceptual framework based on the theory of planned behaviour (Ajzen, 1991) which elaborates the direct, mediating and moderating relationship among factors like environmental knowledge, attitude, subjective norm and purchase intention for environmentally sustainable products. The study also looks at the strength of the mediating effect of attitude under the influence of environmental knowledge as a moderator. It further explores the role of the subjective norm as a direct and moderating variable in a collectivist culture considered in the research setting, thus providing an elaborate picture of the consumers’ buying behaviour for environmentally sustainable products –eventually providing some important ideas for retailers too.

The structure of the paper consists of a section on literature review and hypothesis leading to a conceptual framework followed by methodology and measurement. The section on empirical result discusses the findings of the measurement model and structural model. The methodology and measurement section is followed by sections on the discussion, implications and finally limitations and directions for future research.

2. Literature review and hypotheses

The basic framework of Theory of Planned Behaviour (Ajzen, 1991) was used in this study to examine the purchasing behaviour for environmentally sustainable products along with relevant mediating and moderating factors. Several researchers have used the Theory of Planned Behaviour for understanding the decision-making process concerning the ethical behaviour (e.g., Randall and Gibson, 1991; Lynne et al., 1995; Chang, 1998; Kaiser et al., 1999; Kelly et al., 2006; Vermier and Verbeke, 2008; Sidique et al., 2010; Ramayah Lee, and Lim, 2012). It is worth mentioning that purchasing of environmentally sustainable products or green products adding to environmental sustainability is also considered as an ethical decision or ethical principle (Hopfenbeck, 1993).

The Theory of Planned Behaviour provides a framework depicting relevant factors affecting the behaviour towards a particular issue. Many researchers have applied it in a variety of context related to environmental aspect of behaviour such as recycling (Chan, 1998; Shaw, 2008; Begum et al, 2009; Ramayah et al., 2012), water saving technology (Lynne et al., 1995), and environmental attitude (Kaiser et al., 1999). This theory also allows to explore the impact of some other contextual variables which might explain the behaviour significantly (Ajzen, 1991). This flexibility allowed us to examine the role of environmental knowledge as an additional variable affecting the consumers’ attitude towards environmentally sustainable products based on by some scholars (e.g., Kaiser et al., 1999; Ramayah et al., 2012).

There are many contextual factors which affect the motivation of the individuals to engage in environmentally conscious behaviour (Stern, 1999; Thogersen, 2007). An individual aspiring to engage in recycling, for example, need availability of recycling facility. Similarly, an individual intending to reduce pollution due to the abundance of cars on the road needs a good quality public transport as a replacement so that they could adopt and display their intrinsic behaviour towards the betterment of natural environment (Santos, 2008). It is also important to understand that the knowledge about a specific issue may help in shaping appropriate attitude, thus helping in the decision making more appropriately (Arbuthnot, 1977). Apart from this, subjective norm which is perceived to affect purchase intention independently (Robinson and Smith, 2002), also plays an important role in acting as a contextual variable having an effect on purchase intention.

2.1. Mediating role of attitude towards environmentally sustainable products

Fryxall and Lo (2003) defined environmental knowledge as a generalized knowledge base which is based on the facts, concepts and relationship between natural environment and its major ecosystems. There are a few studies which explored the role of environmental knowledge as a predictor of environmental awareness among individuals having a concern about degradation of the natural environment (e.g., Hines, Hungerford, and Tomera, 1987; Schahn and Holzer, 1990). It is important to mention that knowledge helps in understanding the appropriate ways to move towards a goal (Pellegrini, 2007). And thus, environmental knowledge, in the context of the present study, could prove to be an important prerequisite for the formation of attitude towards environmental issues (Kaiser et al., 1999).

Extant literature mentions and substantiates the empirical relationship between environmental knowledge and attitude as evident from the work of a few scholars (e.g., Maloney and Ward, 1973; Arcury, 1990). Despite a small number of studies showing a negative relationship between environmental knowledge and attitude such (e.g., Hassan et al., 2010), substantial evidence suggests the relationship between the two variables to be direct and positive (e.g., Begum et al., 2009; Diekmann and Preisendorfer, 2003).

Allport (1935) described attitude as a mental and neural state of readiness, which influences the response of the audience towards all objects and situations with which they are confronted. One extension of this phenomenon was aptly elaborated by Zelezy and Schultz (2000), who discussed it in the light of the attitude towards environmental concerns. They described it as the deep-rooted concept in a person’s self with a perception of the degree of bonding between self and the environment. Irland (1993) mentioned that consumers’ purchasing intentions are dependent upon their environmental attitudes. A few researchers pointed that a favourable attitude towards an environmentally sustainable product would lead to favourable purchase intention (e.g., Verbeke and Viane, 1999; Chan, 2001; Vermeir and Verbeke, 2006). The attitude was also found to affect a particular behaviour eventually strengthening the intention to perform that behaviour (Ajzen, 1991; Cheng et al., 2006).

Based on this discussion, we infer that the environmental knowl-
در اجرای درخواست شما مشکلی رخ داده است

با سلام متأسفانه مشکلی در فرم اجرای درخواست شما رخ داده است

همکاران ما در حال تلاش برای رفع این مشکل هستند

لطفاً درخواست خود را در ساعات دیگری مجدداً تکرار فرمایید و اگر باز هم یا این مشکل رو به رو شدید، از طریق فرم تماس با ما به واحدهایی اطلاع دهید

برای یافتن مطلب مورد نظر خود می توانید از روش های جستجوی زیر استفاده فرمایید:
جستجو در میان موضوعات
برای جستجو در میان موضوعات، به محض این که عبارتی حاوی را در فیلد زیر نویسید، موضوعهای مرتبط در درخت سمت چپ با رنگ متمایز مشخص می‌شوند.

جستجو...

جستجو در میان مقالات
اگر موضوع مورد نظر شما در لیست موضوعات اصلی وجود نداشت، با استفاده از فیلد زیر می‌توانید آن را در بین کل مقاله‌های سایت جستجو قرار دهید.

جستجو...

لیست درخاتی موضوعات
تماس با واحد پشتیبانی
همکاران ما در واحد پشتیبانی آمادگی دارند
تمامی درخواست‌های شما عزیزان را
بررسی نموده و در اسرع وقت رضایت
نمایند.

پیگیری خرید مقاله
پس از خرید هر مقاله، یک کد رهگیری
متحصن به فرد به شما تقدیم خواهد شد که
با استفاده از آن می‌توانید وضعیت خرید
خود را پیگیری فرمایید.
پیگیری سفارش ترجمه

با ثبت کد رهگیری پرداخت، می توانید سفارش خود را پیگیری نموده و به محض اتمام ترجمه، فایل ترجمه مقاله خود را دانلود نمایید.

کلیه حقوق برای «مرجع مقالات ISI در ایران» محفوظ است.