The Impact of Green Marketing on Green Consumer Behaviour in Jordan

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Abstract
These days, businesses are conscious that they cannot carry on without being aware of environmental problems. Firms generally face more limited natural resources, and must develop new or alternative ways of marketing. This is how green marketing comes into view, as it looks at how marketing activities utilize those limited resources while satisfying consumers' wants—both of individuals and industry—as well as achieving the organization's objectives.

The general purpose of this study is to discuss the impact of green marketing strategies on green consumer behaviour in Jordan. This study used the quantitative method to gather accessible data from the study sample. The variables present in this study are marketing mix (product, place, price, promotion), and green consumer behaviour. The Partial Least Squares (PLS) approach as a statistical method was used to analyse the data. The population of the study is 2000 daytime visitors of a traditional day in two Amman malls, from which a sample of 500 randomly distributed questionnaires was analysed, according to 32 items. Results indicated that three out of four variables had a statistically significant relationship to green consumer behaviour. The exception was for the green price factor, which did not show a discernible statistical impact.

Keywords: green marketing (GM), green marketing mix, green customer behaviour

1. Introduction
There is much to learn about the specific impact on Jordanian consumers of eco-friendly, or “green”, products, and how they are marketed to them. It may be intuitive to assume that a specialized “green marketing” effort would have an effect on the perception and, thus, the behaviour of a typical consumer, whether positive or negative. This study proposes to lend evidence to this notion, and to explore the specific impact on different factors of the green marketing mix.

Green marketing, as a concept, is not just about promoting products or services with environmentally-friendly characteristics. It consists of all activities designed to create and facilitate any exchanges aimed at meeting human needs, so that these needs and desires are met with minimal adverse impact on the natural environment (Patnaik & Chopdar, 2013). It may involve brand modification and changes in the manufacturing process. It generally involves taking a different perspective on marketing, conscious of the global consequences of a certain brand and its ability to meet customer needs with minimal damage to the environment (Yazdanifard & Mercy, 2011).

Recent interest in green marketing has increased how corporate strategy practices will affect company performance. Green marketing is known to satisfy environmentally-conscious customers by promoting products that are said to not cause significant damage to the environment (Cronin et al, 2011). Although some consumers may have a preference for eco-friendly products, green consumers may still have difficulty distinguishing between eco-friendly and non-friendly products (Eneizan, et al, 2016).

With the above in mind, this study aims to answer the question of how green consumer behaviour, as gleaned from a sample of Amman mall shoppers, may or may not be impacted by the factors of product, price, place, and promotion. The study will show that not all factors have a statistical impact. This paper will arrive at its findings.
by first discussing associated literature on the subject. It will also shed some light and context on the tested variables or factors, as well as what is already known about green consumer behaviour. Having established that background of research knowledge, the research methodology and results will be described, and the conclusion discussed.

2. General Literature Review

In this section, a thorough review of green marketing in its different aspects, as presented by the literature, will be discussed. This will serve to add some necessary context to the terms and concepts that are key to the study, as well as to show the importance of such a study. The following sub-sections will break down the subject by discussing literature on concepts, benefits, challenges, and perspectives of green marketing.

2.1 Green Marketing Concepts

Marketing is the process that involves reaching and retaining customers, and building a long-term relationship between the organization and the customer. It integrates every aspect of the business, including pricing, promotional efforts, placement and the actual development of the product or service (Michael, 2003).

Green as a term is used to describe an “environmentally-friendly” thing, resource, or product that recognized as not causing environmental damage. For example, green energy refers to renewable, or sustainable, resources such as solar energy (Arli et al., 2017).

When exploring green marketing, other terms may come up that seem synonymous with it, but which may be used for different aspects, or more specific fields of study: ecological marketing, environmental marketing, and sustainable marketing. As an example, ecological marketing is used strictly in the course of identifying environmental problems, such as pollution and extinction of energy sources. (Durmaz et al, 2016). Thus, it is prudent to use the correct general terminology in searching for and discussing this subject matter.

Líšková et al. (2016) states that, in the general view of the literature, Green marketing should be:

- Intuitive – must address lack of tendency to change shopping habits. Buying organic or sustainable products is inherently more difficult than traditional products.
- Integrative - must take into account and combine the benefits of trade, technology, social impacts, marketing, and the environment.
- Innovative - create new and innovative products in the implementation of effective green marketing in the business.
- Invitational – actively invite consumers to buy environmentally-friendly products.
- Informative- disseminate information through environmental education and awareness raising.

The picture with regards to adoption of green marketing is not always rosy, however. A given organization may use green marketing as a preventative strategy in times of crisis, or as protection from competition, rather than as an over-arching philosophy. Although environmentally-conscious activities are promising and sustainable, efforts to promote them are sporadic and temporary, for fear of being regarded negatively in relation to competition through green activities (Lotf et al, 2018). Still, companies are now more inclined to see that green marketing creates an opportunity to build innovative products that meet customer needs, giving them a competitive advantage. Thus, Lotf et al. state that it enhances the tangible direct benefits offered to the consumer, and supports positive environmental activity.

Coincidentally, studies of the impact of religiousness on an individual’s behaviour have become increasingly important to this subject; and specifically because the majority of the world population belongs to one of two major world religions (Hope & Jones, 2014). In general, similar findings were found in both samples of Muslim and Christian consumers, where intrinsic religiousness has a positive impact on pro-environmental identity, attitudes towards environmental issues, and subjective norms about the environment. (Hope & Jones, 2014).

2.2 Green Marketing Benefits

Although it represents a paradigm shift to organizational thought and procedures, green marketing actually provides many benefits to businesses. Depending on the organizational perspective, these may include the following (Durmaz & Yaşar, 2016).

- Reduces production costs by reducing waste, saving energy, and reusing materials
- Provides a desirable “leading business” label
• Builds a favourable public relations message and mission profile, providing more attention to corporate social responsibility
• Environmentally-conscious approach reduces long-term health risks, as problems resulting from industrial pollution can be reduced
• Protection from legal penalties
• Achieves long-term growth along with profitability
• Opens up new markets for products, resulting in a competitive advantage
• Engenders in employees a sense of corporate pride and responsibility for working in an environmentally responsible company
• General environmental sustainability, innovation and stock building.

Nemli (1998) more succinctly states that green marketing offers a lot of benefits to businesses, in that it may increase productivity, reduce waste, and save energy. This is due to the fact that when companies develop more specific environmental strategies, improve public relations, and pay attention to CSR, it generally tends to reduce long-term risks.

2.3 Green Marketing Challenges

It is tempting to view the idea of green marketing as a fairly straightforward and highly-applicable practice—especially in light of the growing popularity of environmentally-conscious ideas. Yet, while it is true that green marketing is a fairly familiar phenomenon because an increasing number of consumers are aware of environmental issues, there are some indications that it could be dangerous (Bukhari, 2013). Many potential obstacles may arise that must be overcome. One of the main extra challenges is that companies using green marketing must ensure that their activities do not mislead consumers or industry, and do not violate any of the regulations or laws dealing with environmental marketing. This may be a difficult proposition because a company would want to present its product, and therefore itself, in a wholly positive light, and not present any facts that may counter that notion— but failing to do so can be ethically and financially problematic, to say the least.

The other obstacle companies must deal with is the fact that consumer perceptions are sometimes incorrect. When companies try to become socially responsible according to current social perception, they may run the risk that today's environmentally-responsible action will be harmful in the future (Bhatti, 2016).

Of course, this assumes that such marketing is done ethically and with genuine intent, but that may not always be the case. Eneizan et al. (2016) identified the following flawed strategies, used in “successful” marketing campaigns, that may misuse the essence of green marketing:
• Green Selling: only describing products as environmentally-friendly to increase their sales effectively
• Green Spinning: using public relations officials to counter criticism
• Green Harvest: only adopting green marketing methods to reduce operating or production expenses
• Marketing Compliance: complying with certain standards to evade government sanctions.

However, even when genuine intent is present, there are challenges that may be faced. A study by Abzari et al. (2013) lists such potential problems to implementing green marketing and solutions:
• Green alternatives may not be better in terms of how they function for the consumer
• Green alternatives are expensive
• The designations, according to the claims that they protect the environment may not be convincing
• Finding green alternatives is difficult.

2.4 Green Marketing Perspectives

Recently, more companies have increased their focus on green marketing to do business sustainably. They assume that by promoting environmental benefits as their core values, consumers will associate these values with the brand and be loyal to it. However, there is more than one way to look at how marketing works, and what approaches in environmental promotion are advisable. In this section, two perspectives on the marketing question, and how they may affect the green marketing process, will be discussed: the consumer’s and the organization’s.
2.4.1 Consumer Perspective

In the reviewed literature, it was found that there are no discernible gender difference in environmental attitudes, and the direction of green products. In fact, a large number of studies have found little or no relationship between demographic characteristics, environmental attitudes, and behaviours because demographic variables have less explanatory power than psychological variables. For the purpose of this study, it is helpful to note that there is not any statistically significant correlation between consumers' attitudes to environmental protection and their attitude to green products (Chen & Chai, 2010).

However, findings show that there is a significant correlation between consumers' attitudes to the role of government and their attitude to green products. Many people have high environmental concerns, but believe that conservation is primarily the responsibility of government (Saxena & Khandelwal, 2008). It was found that there is no significant correlation between age and how much green marketing motivates consumers to change their consumer behaviour, if the impression is green products are not affordable, not easily accessible, or not adequately promoted (Govender, 2016).

In their study, Saxena and Khandelwal (2008) present some useful take-home points on green marketing through the consumer perspective.

- Research results show that consumers have a strong positive attitude towards green marketing.
- More recently, consumers have become more aware of environmental issues.
- The trend for the future points to more consumers preferring green products.
- Companies building a green image are seen as having a clear advantage in the market.

2.4.2 Organization Perspective

Companies around the world may adopt environmentally-friendly practices in an effort to improve their image and financial performance. Existing studies have identified several perceived benefits of adopting green marketing strategies for businesses (Yazdanifard & Mercy, 2011):

1. It increases the revenues of certified companies by improving the efficiency of their resources, increasing their savings, and increasing their profitability
2. It enhances their competitive advantage over non-green companies
3. It increases their earned social goodwill, while abiding by the law and improving their work processes
4. It improves the overall image and reputation of adopting companies among their target customers

However, companies that adopt these strategies may also suffer many setbacks, depending on their commitment or approach to adoption. It is worthwhile to note those challenges to better understand any organizational reluctance towards green marketing, and all it entails. First, incremental marketing costs may involve a scattered market approach. Second, a weak commitment to green practices may cause consumers to lose confidence in a company. Third, improper application of these strategies may lead to decreased corporate status. Some studies have also shown conflicting views of green marketing by suggesting that most investors do not consider the practice much appreciated (Eneizan et al, 2016); and this may partially contribute to the above setbacks.

3. The 4P's of Green Marketing Mix

In green marketing, the perception is that consumers are willing to pay more money in order to maintain a cleaner environment. It just has to be marketed informatively and attractively enough to justify that added cost. To that effect, each company has its own preferred marketing mix. Some have four points they adhere to, while others have seven points to the marketing mix. The four points (4 P's) of green marketing are those of traditional marketing: product, price, place, and promotion. On top of those, the 7 P’s also include: packaging, positioning, and people (Mahmoud, 2018).

This section will discuss the 4 P’s and how they may relate to green marketing, as these will be the variables tested in the study.

3.1 Product

The ecological objectives in product planning are to reduce resource consumption and pollution, and to increase the conservation of scarce resources. The aim is to identify customers’ environmental needs and develop products to address these needs, or to develop environmentally-responsible products that have a smaller carbon footprint than competitors (Steiner, 2015). The increasingly wide varieties of products on the market that support sustainable development, and which are good for the triple bottom line include (Zhang & Basson, 2012):
• Products that can be recycled or reused
• Efficient products, which save water, energy or gasoline, and money
• Products that reduce environmental impact
• Products with environmentally-responsible packaging
• Products with green labels, as long as they offer substantiation.

The common belief about marketing, which includes concerns of developing a suitable supply chain, packaging, pricing, etc., is that it takes precedence over green marketing initiatives. However, that is slowly changing. People are beginning to realize their role and responsibilities towards the environment, thus companies are looking to gain an edge in the green market industry by trying to repack their products in more environmentally-friendly forms. They increasingly want to reduce waste and additives, and to turn their operations into more efficient and greener processes (Cherian & Jacob, 2012).

3.1.1 Green Product Manufacturing Process

To enhance perceived consumer effectiveness, companies should pay closer attention to manufacturing processes in order to create environmentally-friendly products—such as attaching environmental protection labels to green product packaging. Labels include specific environmental information, such as the resources saved and the reduction of carbon emissions. This information can inspire consumers to actively participate in environmental protection, while enabling consumers to see how much they may contribute to environmental protection by purchasing the product (Goh & Balaji, 2016). For this reason, consumers strongly prefer “environmental” packaging materials. However, it is important to note that although consumers generally prefer sustainable products manufactured, some population demographics will find this property more important when buying a commodity than others (Shamlou & Vakharia, 2018).

The objective in the product manufacturing process should be to mitigate all environmental damage caused by a company’s practices in the supply chain. This would provide external and internal benefits to the company. Thus, cost-effective “green” shipping practices may well become the new standard, as they promote the quantitative and qualitative success of the company as well as consumer desires (Shamlou & Vakharia, 2018).

The manufacturer also plays a vital role by selecting a green supplier, and by communicating with retailers their wishes to promote the green marketing process. In addition, recycling and re-collection are possible through an appropriate logistic system for the verse. It is also necessary for a company to provide information on green products to the market, and their contribution to environmental sustainability, so that consumers can understand the need for green products (Marchi & Zanoni, 2017).

3.2 Price

Pricing is one of the most basic and consumer-perceptible components of marketing mix. Price is an important element that, when manipulated well, can create the perfect combination of profits and returns, while other marketing elements may create costs (Awan, 2011).

The customer is compelled to pay a premium if there is a perception of the value of that additional product. This value may be enhanced by performance, functionality, design, appearance, or visual taste. Environmental benefits are usually inherently rewarding, but the aforementioned elements will often be key factors in deciding between products of equal value and quality. Moreover, environmentally responsible products can be framed as less expensive, when product life cycle costs are taken into account (Kumar & Kamalakkannan, 2012).

In some cases, green products are higher in price than “regular” alternatives. A high price compared to an alternative can actually be a key decision factor for some customers, confirming, perhaps superficially, the legitimacy of green products. Of course, others may not look at the price at all, such as consumers that actively search for and choose environmentally-friendly alternatives (Solvaiier, 2010).

Green confidence has a greater impact on green buying practices when the price is higher. This serves to remind marketers that establishing and maintaining a department for customer confidence during the process of communicating with consumers is highly recommended. They must know the level of confidence consumers have in products that are in line with their values, so that marketers can, accordingly, provide consumers with green products at different, but competitive, prices (Dehghanan & Bakhshandeh, 2014).

Most consumers will not be willing to pay a premium if there is no perception of the value of the additional product. This value may be perceived in terms of performance, function, design, visual appearance, or taste (Marchi & Zanoni, 2017). Conversely, Govender (2016) argues that price sensitivity in relation to green products
has been a prominent problem, but that there is no significant correlation between respondents’ age and price sensitivity to green products.

Interestingly, the studied price does not affect the relationship between perceived consumer effectiveness and green buying intent. This suggests that there is no significant difference between perceived consumer effectiveness and green buying intention, regardless of perceived price. In the process of communicating with consumers, consideration should be given to improving perceived consumer efficacy as much as possible, which helps to reduce consumer price sensitivity and increases green buying intent (Dehghanan & Bakhshandeh, 2014).

3.3 Place

Choosing where and when a product is made will have a huge impact on customer attraction, as will the choice of where and when the product is available have a huge impact on the clients being attracted (Garg & Sharma, 2017). This is because fewer customers will go out of their way to buy green products; and the green market, after all, is a smaller niche market. The chosen site must also be compatible with the image the company wants to display, and should distinguish the company from its competitors. This can be achieved through in-store promotions and visually appealing offers, or the promoted use of recycled materials to emphasize environmental benefits (Kumar & Kamalakkannan, 2012).

A place does not necessarily have to be a cost factor, as there are several advantages to a location that can create certain revenues and results. This element of the marketing mix is treated on the "way of dealing with distance" (Awan, 2011).

The product should ideally be distributed away from pathological ducts, to be arranged in a proper and environmentally-safe place where there is lesser or no pollution. For green companies to be established and their prices to be competitive, companies and distributors must take care of environmental issues (Eric, 2007).

3.4 Promotion

Green promotion connotes the exchange and transfer of actual environmental information to consumers engaged in the company's activities. It is also associated with the interest of companies to protect natural resources for the purposes of attracting their target market (Shirsavar and Fashkhamy, 2013).

There are three types of initiatives to green advertising, according to Garg & Sharma (2017). One initiative may seek to emphasize the relationship between a product or service and the “biophysical environment”. Another may promote a green lifestyle by way of highlighting a product or service, while a third type would shine a spotlight on a company's environmental responsible persona. The actual methods of promoting products and services to target markets include paid advertising, public relations, sales promotions, direct marketing, and on-site promotions. The credibility of smart environmental marketers can be enhanced via sustainable marketing and communication tools and practices (Mohajan, 2012).

Green brand knowledge is found to be the most important determinant in the decision to buy green products. Knowledge of green brands has, in turn, increased consumer awareness of positive green marketing, and increased the interest in promoting the environment while preventing its degradation. Moreover, green brand knowledge also influences consumer attitudes towards green brands (Suki, 2016).

However, a study by Wang, Ma, & Pai (2019) found that there is a complex relationship between green product knowledge and green purchase intention; or, in other words, awareness of the green product has an important, indirect effect on the intention of buying green. Wang et al. also state that, with the help of social media, the government should focus on disseminating knowledge related to environmental protection, such as the number of resources that can be saved, and the amount of carbon emissions reduced when consumers use green products. This helps consumers believe that their green purchasing behaviour can alleviate or solve environmental problems, thereby enhancing the perceived consumer efficacy. Marketers can provide training to their employees, especially sales representatives. This is to provide them with the knowledge of how to promote the green product effectively by clearly presenting the main message to consumers (Mahapatra, 2013).

4. Green Consumer Behavior

In recent times, consumer interest in preserving the environment has increased, as did their awareness of the importance of green marketing. Hence, the demographic of "green consumers" has become more relevant to marketers. Green consumers are defined as consumers with environmental concerns, who have the initiative to take an interest in the environment when making purchase decisions, and who convert their behaviour into eco-friendly behaviour. Lately, green consumer numbers have increased, as consumers have become more aware of the environment, and have taken to looking more closely at the products they consume (Rahman, 2013).
Consumer thinking regarding the elimination and depletion of environmental resources through irresponsible activities has moved beyond typical perceptions about environmental protection, consumption patterns and procurement activities (Sharma and Air, 2012). Consumers who take into account the environmental impacts of their consumption patterns, and who are willing to change their purchasing behaviours, can be considered environmentally friendly consumers (Ritter et al., 2015). Belz, Frank, & Peattie (2009) describe such consumers’ consumption practices as compatible with environmental protection nowadays and for future generations. This may be conceptually attributed to shared consumer responsibility for addressing environmental problems through the adoption of environmentally-friendly behaviours, such as the use of organic products, clean and renewable energy, and the search for goods produced by companies that have a smaller, or no, carbon footprint. It can be said, then, that the purchase decisions tied to consumer enthusiasm can be traced to support for environmentally friendly companies (Laroche et al., 2001).

Kumar (2015) talked about customer awareness to green marketing, and that marketers should focus on green marketing, and must cultivate consumers who are willing to pay the right price for green products. In fact, Chan’s (2001) study on green consumption behaviour indicated that when consumers take a positive attitude towards green consumption, the attitude of green consumption can be converted to consumption intent; although he does note that this kind of intention may not successively lead to an effective shift to positive behaviour towards the environment.

5. The Research Methodology

The methodology used in this research study starts with a review of the previous literature on green marketing. The literature review served to verify the importance of using green marketing, extrapolated to hypothesize the relationship of the green marketing mix (the 4 P’s described above) to buying behaviours in the Jordanian markets of Amman. That research, and tools discussed within, is adapted to better explore green consumer behaviour in Jordan; or, more specifically, customer behaviours towards Green Markets in Amman, as certified for environmental conservation.

Through customer knowledge, this study mainly focuses on analysing variables that affect consumer choices. These include many variables that take into account aspects of the green marketing mix in this light. The quantitative method is used to gather accessible data from the study sample.

5.1 Population, Sample Size and Unit of Analysis

To be appropriate and precise in assessing the applicability of green marketing in Jordan, the researchers select customers who shop in green malls— which attract large numbers of customers on a daily basis. In this way, one can adequately judge typical customer behaviours in the buying process. The population of this study was comprised of 2000 daytime visitors of a typical day at the popular City Mall and Mecca Mall of Amman, Jordan. The actual sample size is 500 respondents to a questionnaire, with 32 items within. There were 600 randomly distributed questionnaires, of which 500 were completed, returned, and analysed.

5.2 Constructs Measurements Analysis

The researchers used smart Partial Least Square-Structure Equation analysis (PLS-SEM) software, or SmartPLS, in this study to inspect and analyse the data associated with the hypotheses. Hence, two corresponding stages were determined, as described by Anderson and Gerbing (1988), in mind of examining the content, convergent, and discriminate validity of variables; with data testing performed in relation to the hypotheses, and in configuration with the research model.

5.3 Path Loadings for the Proposed Model

Due to the path loading for all factors exceeding the value of (0.55), all factors were accepted for analysis (Falk and Miller, 1992). This can be seen in Table 1, which details five variables, namely: green product, green price, green place, green promotion, and green consumer behaviour. It also provides an overview of the path loading results for all of the items linked with the recommended model in this research.
Table 1. Path loading results for research model

<table>
<thead>
<tr>
<th>Variable</th>
<th>Item</th>
<th>Loading Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green product</td>
<td>GProduct 1</td>
<td>0.637</td>
</tr>
<tr>
<td></td>
<td>GProduct 2</td>
<td>0.823</td>
</tr>
<tr>
<td></td>
<td>GProduct 3</td>
<td>0.934</td>
</tr>
<tr>
<td></td>
<td>GProduct 4</td>
<td>0.665</td>
</tr>
<tr>
<td>Green price</td>
<td>Gprice 1</td>
<td>0.875</td>
</tr>
<tr>
<td></td>
<td>Gprice 2</td>
<td>0.925</td>
</tr>
<tr>
<td></td>
<td>Gprice 3</td>
<td>0.836</td>
</tr>
<tr>
<td></td>
<td>Gprice 4</td>
<td>0.842</td>
</tr>
<tr>
<td>Green place</td>
<td>Gplace 1</td>
<td>0.891</td>
</tr>
<tr>
<td></td>
<td>Gplace 2</td>
<td>0.854</td>
</tr>
<tr>
<td></td>
<td>Gplace 3</td>
<td>0.878</td>
</tr>
<tr>
<td></td>
<td>Gplace 4</td>
<td>0.866</td>
</tr>
<tr>
<td>Green promotion</td>
<td>Gpromotion 1</td>
<td>0.890</td>
</tr>
<tr>
<td></td>
<td>Gpromotion 2</td>
<td>0.859</td>
</tr>
<tr>
<td></td>
<td>Gpromotion 3</td>
<td>0.738</td>
</tr>
<tr>
<td></td>
<td>Gpromotion 4</td>
<td>0.783</td>
</tr>
<tr>
<td>Green consumer behaviour</td>
<td>GCB 1</td>
<td>0.874</td>
</tr>
<tr>
<td></td>
<td>GCB 2</td>
<td>0.928</td>
</tr>
<tr>
<td></td>
<td>GCB 3</td>
<td>0.936</td>
</tr>
<tr>
<td></td>
<td>GCB 4</td>
<td>0.926</td>
</tr>
<tr>
<td></td>
<td>GCB 5</td>
<td>0.691</td>
</tr>
</tbody>
</table>

5.4 Research Quality Standards

5.4.1 Reliability and Validity Assessment

Reliability explains the extent to which the data collection method will produce stable findings. Validity tests whether the findings are really and adequately about what they are meant to be about, through checking the relationship between two variables (Alkhaffaf, Muflih, & Al-Dalahmeh, 2018).

In order to make sure the items in the survey could be considered both valid and reliable, Table 2 presents explanations to Cronbach’s Alpha, Composite Reliability, and Average Variance Extracted results for the entire model variables.

Table 2. Validity and reliability results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach Alpha (CA)</th>
<th>Average Variance Extracted (AVE)</th>
<th>Composite Reliability (CR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green product</td>
<td>0.708</td>
<td>0.731</td>
<td>0.689</td>
</tr>
<tr>
<td>Green price</td>
<td>0.892</td>
<td>0.757</td>
<td>0.926</td>
</tr>
<tr>
<td>Green place</td>
<td>0.898</td>
<td>0.761</td>
<td>0.927</td>
</tr>
<tr>
<td>Green promotion</td>
<td>0.835</td>
<td>0.672</td>
<td>0.891</td>
</tr>
<tr>
<td>Green consumer behaviour</td>
<td>0.861</td>
<td>0.689</td>
<td>0.910</td>
</tr>
<tr>
<td>Standard rates</td>
<td>&gt;0.65 (Nunnally &amp; Bernstein, 1994)</td>
<td>&gt;0.50 (Fornell &amp; Larcker, 1981)</td>
<td>&gt;0.65 (Nunnally &amp; Bernstein, 1994)</td>
</tr>
</tbody>
</table>
5.5 Discriminate Validity Test

Latent Variable Correlation result is determined in establishing discriminant validity. This implies that there is a need for a construct to share a larger portion of variance with its measures, as opposed to with any other construct incorporated within a specific model (Fornell & Larcker, 1981). The Latent Variable Correlations (Discriminant validity) findings can be seen in Table 3, below. The table details all variables, and shows how each presents with a significant degree of variance when compared with other variables. An acceptable discriminate validity is exhibited, with no occurrence of a correlation coefficient seen to exceed 1.0; and this ensures there is no presence of multicollinearity between variables. Essentially, if a correlation coefficient is seen to be more than 1.00, this would highlight a problem in multicollinearity (Hair et al., 2006).

Table 3. Discriminate validity

<table>
<thead>
<tr>
<th>Variable</th>
<th>Green consumer behaviour</th>
<th>Green place</th>
<th>Green price</th>
<th>Green product</th>
<th>Green promotion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green consumer behaviour</td>
<td>0.830</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green place</td>
<td>0.237</td>
<td>0.872</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green price</td>
<td>0.661</td>
<td>0.150</td>
<td>0.870</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green product</td>
<td>0.939</td>
<td>0.355</td>
<td>0.635</td>
<td>0.650</td>
<td></td>
</tr>
<tr>
<td>Green promotion</td>
<td>0.622</td>
<td>0.143</td>
<td>0.468</td>
<td>0.824</td>
<td>0.820</td>
</tr>
</tbody>
</table>

5.6 R-Squared Test

The use of the R-squared test was recognized as reasonable when it comes to explaining measurements and their interpretation. Table 4 shows the resultant value of the R-squared test. The R-squared value in this research study displays the extent of interpretation from green marketing mix dimensions to green consumer behaviour. The score is seen to suggest a tolerable prediction level at 0.989, as it surpasses the 25% threshold cited by Gaur & Gaur (2006).

Table 4. R-Squared value

<table>
<thead>
<tr>
<th>Variable</th>
<th>R-squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green consumer behaviour</td>
<td>0.989</td>
</tr>
</tbody>
</table>

5.7 Hypotheses Testing

The researchers carried out a thorough, reasonable analysis, as detailed above, in order to present a sound conclusion pertaining to the findings and relating to the hypotheses. This is facilitated through the application of bootstrapping analysis in the SmartPLS software. Therefore, as can be gleaned through the completion of the test, the p value rate for all performance appraisal factors on employee work performance has been determined, as illustrated in Figure 1.
Figure 1. Bootstrapping (p-value) for green marketing mix factors on green consumer behaviour in Amman malls

Figure 1 displays the \( p \)-value rate, with the figure emphasizing the hypotheses testing in regards to four variables of green marketing mix on green consumer behaviour: green product, green price, green place, and green promotion. Table 5 provides an overview of the results.

<table>
<thead>
<tr>
<th>Hypothesis tested</th>
<th>T-value</th>
<th>Beta value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green product and green consumer behaviour ( (H1.1) )</td>
<td>11.684</td>
<td>0.457</td>
<td>0.000</td>
</tr>
<tr>
<td>Green price and green consumer behaviour ( (H1.2) )</td>
<td>0.888</td>
<td>0.030</td>
<td>0.448</td>
</tr>
<tr>
<td>Green place and green consumer behaviour ( (H1.3) )</td>
<td>2.554</td>
<td>-0.204</td>
<td>0.000</td>
</tr>
<tr>
<td>Green promotion and green consumer behaviour ( (H1.4) )</td>
<td>5.410</td>
<td>-0.564</td>
<td>0.008</td>
</tr>
</tbody>
</table>

As seen in Table 5, the results for \( H1.1 \) confirm that *green product* does influence green consumer behaviour in Amman malls at \((\alpha \leq 0.05)\). With regards to the statistical T-value, this was determined to be \( 11.684 \), whereas the Beta Value ratio was \( 0.457 \). This provides a clear outline as to the change of one amount of green product, inducing a change equal to \( (45.7\%) \) in consumer behaviour.

Moreover, \( H1.2 \) has also been clarified. The results in Table 5 show that *green price* does not influence green consumer behaviour in Amman malls at \((\alpha \leq 0.05)\). Specifically, the statistics show the T-value to be \( 0.888 \), whereas the Beta Value ratio was \( 0.030 \).

\( H1.3 \) has also been clarified, as seen in Table 5. The results show that *green place* does influence green consumer behaviour in Amman malls at \((\alpha \leq 0.05)\). The T-value was determined to be \( 2.554 \), whereas the Beta Value ratio was \(-0.204 \). This provides a clear outline as to the change of one amount of green place, inducing a negative change equal to \( (20.4\%) \) in consumer behaviour.

Finally, \( H1.4 \) has also been clarified. Table 5 results show that *green promotion* does influence green consumer behaviour in Amman malls at \((\alpha \leq 0.05)\). The T-value was determined to be \( 5.410 \), whereas the Beta Value ratio was \(-0.564 \). This provides a clear outline as to the change of one amount of green promotion, inducing a negative change equal to \( (56.4\%) \) in consumer behaviour.

### 6. Conclusions

This research study shows that there is a statistically-significant relationship between three forms of green marketing mix (green product, green place, green promotion) and green consumer behaviour. It also shows that such a relationship does not exist between the green price factor and green consumer behaviour.

To be specific, the findings show that green product had a positive change correlation with regards to green
consumer behaviour, whereas place and promotion were negatively correlated. These findings may suggest that consumer perception of eco-friendly products is generally high and positive. They also suggest that place and promotion factors are a worthwhile focus point for green marketers, as they do elicit a significant change in behaviour. As for the factor of green price, the findings seem to suggest that consumers that are environmentally-conscious are not deterred by having to pay a premium to keep in line with their green values. While it is possible that this may reflect on the financial demographic characteristics of green-conscious mall shoppers, this finding does line up with some of the previous literature on this matter (Solvalier, 2010; Kumar & Kamalakkannan, 2012; Dehghanan & Bakhshandeh, 2014).

The results may indicate that Green Marketing in these Jordanian shopping malls benefit from a great relationship between a consumer’s purchase decision as relates to perception of green products and green ads. This is corroborated by the findings of Tang et al. (2014). The green impact is present, and it is prudent for green marketers to manipulate it to the best of their abilities.

References


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