Green marketing in an emerging economy: Exploring attitudes of Mexican consumers

Maria Cristina Iliescu
La Salle University in Mexico City
Mexico

Research article
Received: January 21, 2020
Accepted: May 11, 2020
Available online: August 31, 2020

Abstract

The purpose of this research is to improve the comprehension of the influencing or inhibiting factors of eco-friendly consumption in an emerging economy. Online survey and focus group were used to study 297 Mexicans with different incomes from two neighbourhoods of Mexico City. Then, the Chi-Square test has been used to relate demographic variables to the consumer segments. The findings highlight the following dominant themes related to hesitation in the adoption of green behaviours: price and perceived quality, trust and credibility, and lifestyle. Overall, deeply rooted habits and traditions seem to resist eco-friendly behaviours. The elements that drive consumers from positive attitudes and intentions to the actual adoption of green practices are a combination of perceived personal benefits, decreased perceived risk and uncertainty, and a sense of control over costs. To build green responsibility, it appears imperative to calibrate consumer knowledge and offer affordable lower-priced alternatives for the low-income market segments, which constitute the vast majority of the population in emerging economies.

Key words: Consumer behaviour, Eco-friendly consumption, Emerging market, Generations, Green products, Mexico.

Green marketing en una economía emergente: Explorando las actitudes de los consumidores mexicanos

Resumen

El propósito de esta investigación es mejorar la comprensión de los factores que influyen o inhiben el consumo ecológico en una economía emergente. La encuesta en línea y el grupo focal se utilizaron para estudiar a 297 mexicanos con diferentes ingresos de dos barrios de la Ciudad de México. Luego, la prueba Chi-Square se ha utilizado para relacionar variables demográficas con los segmentos de consumidores. Los resultados destacan los siguientes temas dominantes relacionados con la vacilación en la adopción de comportamientos ecológicos: precio y calidad percibida, confianza y credibilidad, y estilo de vida. En general, los hábitos y tradiciones profundamente arraigados parecen resistir los comportamientos ecológicos. Los elementos que llevan a los consumidores de actitudes e intenciones positivas a la adopción real de comportamientos ecológicos son una combinación de beneficios personales percibidos, disminución del riesgo percibido y de la incertidumbre, y una sensación de control sobre los costos. Para construir una responsabilidad

ecológica, parece imperativo calibrar el conocimiento del consumidor y ofrecer alternativas asequibles a precios más bajos para los segmentos del mercado de bajos ingresos, que constituyen la gran mayoría de la población en las economías emergentes.

Palabras claves: Comportamiento del consumidor, consumo ecológico, generaciones, mercado emergente, México, productos verdes.

1 Introduction

Nowadays, there is an increasing demand for eco-friendly products. The 2017 Unilever report (Unilever, 2017) shows that 33% of consumers are now purchasing from brands according to their social and green influence, and more than one in five will keenly select brands that are transparent regards sustainability practices in their packaging and marketing. The analysis involved 20,000 adults from five different countries and investigated the way their choices are impacted by sustainability concerns both in-store and at home. Critically, the report then represented their claims against real purchase decisions, giving a more accurate picture than ever of what people are buying and the reasons behind it. Additionally, the analysis indicates that the tendency for purpose-led buying is more significant among consumers in emerging economies than in developed ones. Numbers show that 53% of customers in the UK and 78% in the USA feel better when purchasing products sustainably manufactured, whilst the percentage escalates to 88% in India and 85% in both Brazil and Turkey (Unilever, 2017).

Thus, attitudes linked to sustainable consumption should be researched confronting developed and emerging countries (Mont and Plepys, 2008). External elements such as culture, environmental structures and services in different countries have a significant role in consumers' behaviour regarding the ecosystem (Vicente-Molina et al., 2013; Ester et al., 2004). The actions in terms of energy and water consumption, food habits and cultural viewpoints from developing countries could be dissimilar from industrialised nations. For example, Unilever (2017) recognises two plausible motivations for consumers' higher effort on green buying in emerging economies compared to industrialised markets. Firstly, the direct exposure to the destructive effect of unsustainable business practices, among these, energy and water scarcities, food poverty and poor air quality. Secondly, the power of social norms. Hence, whilst Brazilian, Indian and Turkish people feel pressure from their family, friends and even their children to purchase greener, more socially responsible products, this sense of social scrutiny is less dominant in the UK and US. Taking into consideration these statistics, it is not surprising that brands are modelling their marketing campaigns around environmentalism, sustainability and corporate social responsibility.

Consequently, marketing concept identified as green marketing has grown over the past years and will not stop as more significant numbers of consumers worldwide become eco-friendlier (Ottman, Stafford, and Hartman, 2006; Peattie and Crane, 2005). Green marketing involves marketing products and services centred on environmental factors or awareness. Firms engaging in this concept re-think the entire process of the company's products, such as methods of processing, packaging, and distribution. The instinct to "go green" is gaining momentum. As a matter of fact, a recent tailor-made study carried out by the Global Web Index (Young, 2018) in the UK and America on a base of 111,899 Internet users aged 16-64, concluded that 'half of digital consumers say environmental concerns impact their purchasing decisions'. Moreover, as the statistics

revealed in the GWI study show, Millennials (aged 22-35) are more probable than any other generation to affirm that they would pay more for eco-friendly or sustainable products. More than 60% state this, compared to 55% of Generation X (aged 36-54) and just 46% of Baby Boomers (aged 55-64). Generation Z (16-21) are following closely behind the Millennials (58%), though, and numbers for this group are only expected to increase as its members' disposable income raises due to their entrance in the labour market.

Besides, it is noteworthy to mention that if Millennials are more sensitive than ever about their buying behaviours revealing their beliefs and values, and Generation Z are right behind, a long-term transformation has a good chance of taking place. Regardless of the numerous investments of several enterprises in green production and marketing, for example, Wal-Mart devotes $500 million annually on the development and implementation of green technologies (Fetterman, 2006), consumers do not purchase Green Products as frequently as expected (Gleim et al., 2013). One of the reasons may be related to difficulties to identify market attitudes. Comprehending better consumer's attitudes would help producers, marketers and policymakers to encourage consumer behaviours that are less toxic toward the environment (Lin and Huang, 2012; Suki and Suki, 2019).

Thus, companies, before positioning their eco-friendly offer, need to properly segment the market according to different stages of pro-environmental buying behaviour and subsequently focus on the greener customer segments (Schlegelmilch, Bohlen, and Diamantopoulos, 1996). Moreover, the difficulties in identifying apt market attitudes are related to the use of inappropriate or limited segmentation measures (Schlegelmilch, Bohlen, and Diamantopoulos, 1996). Measures such as socio-demographics and personality are widely used. However, the former showed limited utility since a weak relationship has been identified between demographic variables and green consumer behaviour (Akehurst et al., 2012). The latter, instead, has been found to be slightly more appropriate due to better connections to individual's environmental consciousness (Tseng and Hung, 2013).

Still, Hooley and Saunders (1993) recommend the usage of personality variables for market segmentation according to behavioural criteria with discretion; as in many occurrences, personality metrics are most probably used for portraying segments once they have been categorised on some different premise. It is very conceivable that behaviour and purposes for it will shift within segments outlined on the basis of character attributes alone. A newer segmentation model is presented by Gonzalez et al. (2015) to complement the previous research. The authors identify ecological or non-ecological consumer segments based on their type and strength of environmental behaviour. Therefore, the theoretical structure that informs their segmentation study is based on hierarchy-of-effects models such as the knowledge-attitudes-behaviour (KAB) model. Particularly, demographic variables, social and environmental values, and perceived consumer effectiveness of environmental-friendly behaviours are displayed as antecedents for eco-friendly actions such as reducing, reusing, recycling and green products purchasing. Therefore, a better investigation of the particular aspects affecting consumers' purchasing behaviour towards green products is essential (De Medeiros and Ribeiro, 2017; Sangroya and Nayak, 2017).

Schlegelmilch, Bohlen, and Diamantopoulos (1996: 37) affirm that "when the environment surged in importance, rather than cut down their consumption of products, consumers began to seek out environmentally-friendly alternatives in preference to their usual product purchases. Hence the 'green' consumer was born." The psychological benefits and the aspiration to be acknowledged as Green Products consumers

can be more significant than the functional characteristics of the products such as price and quality (Lin and Huang, 2012). The absence of knowledge about Green Products appears to be the chief obstacle to the purchasing of these goods, so consumption decision is then centred only on economic aspects (Ritter et al., 2015; Suki and Suki, 2019).

Thus, this paper seeks to research the influencing factors of green marketing on Mexican consumer behaviour, a significant emerging economy with considerable environmental challenges, but also enormous potential for green innovations and improvements. The importance of Mexico is emphasised by being part of the ten emerging and growth leading economies (EAGLEs) that are predicted to lead global growth for the next ten years (Wassener, 2010). Furthermore, numerous banks and professional services, including Goldman Sachs and PricewaterhouseCoopers Economics, forecast that Mexico will become the world's fifth-largest economy by 2050 (Gonzales et al., 2015).

Previous qualitative research display that environmentally friendly behaviours in Mexico appear to be rooted in the traditional heritage of savings and prudence rather than based on strong environmental values (Carrete et al., 2012). Still, the authors discover a significant quantity of heterogeneity in the Mexican consumer market for green behaviours; additionally, they analyse the underlying mindsets toward the environment. For instance, although part of the interviewed subjects exhibited environmentally friendly behaviours founded on a genuine pledge to the natural ecosystem, another set of wealthier buyers appeared to partake in recycling and green product buying primarily to imitate lifestyles from industrialised nations. In contrast, the last segment comprehending the "bottom-of-the-pyramid" consumers researched possible ways of saving money in reducing, reusing and recycling (Gonzales et al., 2015).

This research aims to investigate the drivers that stimulate sustainable attitudes as well as Green Products consumption, taking into consideration socio-economic structures and individual options, choices and personal values. The actual literature lacks studies focused on the attitude of Mexican consumers concerning Green Products. For this reason, this study contributes to the discussion of developing global approaches by considering a local perspective.

Materials and Methods

Survey

The scope of the survey is to highlight the elements that drive the consumption of Green Products, among these were considered personal or psychological characteristics (quality of life, environmental consciousness and social context), and external characteristics (quality and price, the marketing characteristics, and the information/knowledge of its quality). Moreover, factors such as emotional affinity towards nature, personal circumstances, ethical values and personal norms were taken into account as well in the creation of the survey. The ultimate question is: Is it hard to be a consumer of green products? The answer has to be researched in the habits of consumers in order to identify the reasons certain consumers engage in green behaviours and others do not. For this purpose, five hypotheses were formulated.

Improving the quality of life has been discussed by González et al. (2015) to be a motivating factor in engaging environmentally friendly behaviours in emerging countries. Moreover, Akehurst et al. (2012)

recognise that quality of life has been impacted by the current technological and industrial revolution, particularly on environmental preservation. Increasing public support has been shown for matters such as global warming, acid rain, deforestation, fossil fuels depletion, ozone layer reduction, air and water pollution. These factors led to the formulation of the first hypothesis:

H1: *The quality of life of consumers positively influences green consumption*.

Quality of life has been affected by environmental degradation; a possible trigger for degradation has been identified in nations' economic development (Veeravatnanond et al., 2012). Still, being the impact of human activities globally apparent, environmental challenges ought to be associated with the environmental conscientiousness of the individual. Environmental consciousness refers to the capacity of minimizing environmental effects by reshaping daily habits and may be influenced by cognitive, attitudinal and behaviour components (Schlegelmilch et al., 1996). Hence, the second hypothesis is:

H2: *The environmental conscientiousness of consumers positively influences green consumption*.

Furthermore, customers view Green Products as less efficient than non-green products, suggesting that as they have an inferior yield, they may necessitate vaster amounts to achieve the equivalent outcome (Lin and Chang, 2012). The perceived quality of a product, counting Green Products, directly affects the intent to purchase (Tseng and Hung, 2013). The price of Green Products and additional costs related to their consumption similarly impact purchasing decisions (Gleim et al., 2013). These elements supported the formulation of the third hypothesis:

H3: *The perceived quality of Green Products and their prices positively influences green consumption*.

Cherian and Jacob (2012) have suggested that consumers generally have little knowledge about Green Products; however, information regarding their benefits in the framework of the society, health and environment is essential for encouraging consumption. Similarly, Chekima et al. (2016) emphasise the influence of eco-labels on green purchasing behaviours. Still, non-green buyers compose a substantial portion of the market and are typically not concerned in the environmental consequences caused by higher consumption; they do not show interest in receiving information about these products (Cherian and Jacob, 2012). Additionally, if Green Products are perceived as too difficult to obtain this will negatively influence a green purchasing behaviour (Tan, Johnstone and Yang, 2016). Such aspects sustained the existence of the following hypothesis:

H4: *The advertisement and the market-availability of Green Products positively influence green consumption*.

Finally, green consumption may be influenced by social aspects; the conduct of the consumer group; and the individual, social, and economic life of the purchaser (Spangenberg et al., 2010). A study carried out in Malaysia by Suki and Suki (2019) clearly states that encouragement from the social context of the consumer contributes to the development of green purchasing behaviour in a developing nation. As Ester et al. (2004: 45) observe "cultural value changes have provoked public expression of concern and determined their willingness to make sacrifices and to undertake actions to help protect the environment". Thus,

H5: *The social context of the consumer positively influences green consumption*.

The survey consisted of two sections: the first part aimed to segment the respondents according to demographic aspects. These aspects comprehended gender, age, education, income, employment, and household composition. The second part had the scope to assess the elements that drive green products' consumption by using a five-point Likert-style scale ranging from 1 (strongly disagree) to 5 (strongly agree). Moreover, all the respondents were reassured of their anonymity.

Sample

Non-probability purposive convenient sampling method was used to construct the sample of the analysis. Being the target population heterogeneous and widespread two main criteria were set at the beginning for the choice of the elements: socioeconomic status and educational level; then elements were interviewed based on their availability. Since bigger cities in developing economies commonly symbolise the most considerable effect on the natural environment, data has been collected from students and employees of a private university in Mexico City and the inhabitants of the nearby districts (Condesa, Roma). These particular areas have been selected as it can be expected that the inhabitants living in these neighbourhoods may have higher purchasing power, based on the cost of living in these areas. Being rents in the Condesa neighbourhood among the highest in the city and the average cost of a night out is at least $ 600 MXN (Dada Room, 2018). The average price to rent an apartment in Condesa is $ 31.000 MXN. These can vary from $ 18.000 to approximately $ 50.000 MXN. The average purchase price of an apartment in this neighbourhood is $ 7.000.000 MXN; however, it can range from $ 3.000.000 to nearly $ 20.000.000 MXN (Vivanuncios, 2019).

As a result, a total of 297 responses have been collected; 49.8% of females and 50.2% of males composed the sample. Concerning age and education, 26.6% of the respondents were younger than 21 years (Generation Z), 42.1% were between 22 and 35 years (Millennials), 20.9% were between 36 and 54 years (Generation X), 8.8% were between 55 and 64 years (Baby Boomers), and 1.7% were 65 years or older (Silent Generation). Further, 4% indicated elementary school as their highest level of education, followed by high school (16.8%), undergraduate degree (37.5%), postgraduate degree (14.8%), technical studies (17.2%), PhD (8.4%) and other studies (3%). As for the monthly income, 29 per cent declared between $ 0 and $ 7.000 MXN, followed by 14.5 per cent between $ 7.000 and $ 12.000 MXN, 18.5 per cent between $ 12.000 and $ 35.000 MXN, 12.8 per cent between $ 35.000 and $ 85.000 MXN, and finally, 25.3 per cent declared more than $ 85.000 MXN. Regarding the level of green consumption, 16.4% of respondents had never consumed Green Products; 35% rarely consumed Green Products; 39.4% occasionally consumed Green Products; 16.8% habitually consumed Green Products; 2.4% always consumed Green Products.

After receiving the results of the survey, a focus group was used to explore, identify and understand what consumers' perceptions of green products and green behaviours were and what shaped these perceptions. Twenty-two pre-screened, qualified respondents among the population of a private university in Mexico City were invited to take part in a two-hour long session focus group. The focus group has been used for its capability to investigate complex behaviours and motivations due to its extensive use of group interactions, which allowed new insights to become apparent. It is relevant to mention that the scope of the focus group was only to reinforce the findings and the perspectives arose from the survey, and it has been used as a tool of discussion of the dominant themes emphasised in the results of the study.

Chi-square test

The primary phase in characterizing the segments consists of relating demographic variables to the consumer segments. The variables used in this analysis are gender, age, education, marital status, and income. Descriptive statistics have been used for this purpose and in particular, the Chi-Square test.

Chi-Square test, also known as Pearson´s Chi-Square test, is a nonparametric or free distribution test, considered as one of the most useful statistic methods (McHugh, 2013). Chi-Square test assesses whether an

association exists between two variables by comparing the observed frequency and to the frequency that would be expected if the variables are independent of each other. The test is represented as follows:

$$\chi^2 = \sum \frac{(f_0 - f_e)^2}{f_e} \quad (1)$$

where χ^2 is the Chi-Square value, f_0 is the observed frequency, f_e is the expected frequency.

In all tests of significance, if $p \leq 0.05$, we can say that there is a statistically significant relationship between the two variables. Therefore, the three different levels of confidence have been developed: 90% (p=.1), 95% (p=.05) and 99% (p=.01).

For the calculations, the IBM SPSS statistics 26 software has been used.

Results

In the following section, we are presenting the most significant findings of the analysis regarding the stated hypotheses.

The Chi-square distributions suggest no statistically significant differences between the segments for gender ($\chi^2 = 2.872; p = .579$) when consuming Green Products. Similarly, there are no statistically significant differences between the number of daily sustainable actions performed and gender ($\chi^2 = 9.953; p = .127$). While, in the case of the relationship between the number of daily sustainable actions performed and green consumption, differences are observed ($\chi^2 = 83.830; p = .000$ ***). As we may notice, 12.8% of the frequent Green Products' consumers more than double their purchases as the number of daily eco-friendly activities increases.

Consumers' quality of life

H1: *The quality of life of consumers positively influences green consumption.*

Factors such as income, employment and self-satisfaction about income have been considered in the survey to evaluate consumers' quality of life.

According to gender, there is no statistically significant difference between the level of income and consumption (p=.322). This is true for both genders since there is no difference in consumption considering only females (p=.295) and the same considering only males (p=.104). Therefore, considering only the income factor, H1 is rejected. However, according to age, differences can be noticed in the case of Generation Z (16-21) (p=.054*), which represents 26.6% of our sample. Analysing the results, it is possible to observe that those declaring a lower income tend to buy less Green Products. This can be because 55.7% of Generation Z, with an income of MXN 0-7000, are still studying and without employment. Concerning the employment, similarly as before, no statistically significant difference has been observed among both genders (p=.431). Moreover, 63% of our sample is currently working. Therefore, the job is not an influencing factor; H1 is again rejected.

Nevertheless, when we asked if they considered their professional life and income/salary sufficient to satisfy their needs, a distinct pattern emerged among males (p=.047*). From the analysis of this tendency it becomes apparent that among those rarely (35.6%), occasionally (40.3%) and frequently (14.1%) buying green products, there is an increase in the consumption of Green Products as their self-satisfaction increases. Vice

versa, the lesser they are satisfied, the lesser they consume. Consequently, considering life self-satisfaction, H1 is not rejected.

Consumers' environmental conscientiousness

H2: *The environmental conscientiousness of consumers positively influences green consumption*.

The second influencing factor considered in the investigation was the consumers' environmental consciousness. Elements such as interest in environmental issues, waste reduction, concern about the future of the planet and degree of sustainable engagement have been taken into consideration in this part.

Concerning the interest in environmental issues, it appeared that, according to both genders (p=.001***), people reading newsletters or seeing reports about environmental problems tend to consume more Green Products. This is clear when seeing that 13.5% of the Green Products' frequent buyers increases its consumption by one third. Moreover, it has been noticed that this kind of behaviour is particularly true for Generation Z (p=.034**) and Millennials (p=.007***); as the frequent buyers of the former (8.9%) double up their consumption, while for the latter there is a significant increase considering both occasional (42.4%) and frequent (14.4%) buyers. Hence, being there present statistically significant differences, H2 is not rejected. Conversely, both females and males trying to reduce waste augment their green consumption (p=.000***). Among females (p=.045**), 16.9% of those frequently buying Green Products increased their consumption according to waste reduction, same for 10.1% of the occasional consumers. Among males (p=.022**), the most relevant increase in Green Products' consumption is the occasional buyers (40.3%), here half of them is influenced in their purchasing behaviour by waste reduction. Thus, H2 is again not rejected.

Moreover, within males, if they show concern about the future of the planet, they tend to buy more Green Products (p=.058*); as almost 9% of those who rarely purchase Green Products augment their consumption by almost one third. Equally, considering females, when they think their actions have an impact on the environment, they purchase more Green Products (p=.018**); in this segment appears that 18.2% of the Green Products' frequent buyers are influenced by their concern over the future of the earth. Again, H2 is not rejected. Lastly, those who buy green products always (2.4%) and frequently (16.8%) would stop buying products from enterprises damaging the environment. On the other hand, those who never buy (6.4%) green products would keep purchasing from those enterprises. This is true for both genders (p=.049**) no matter the respondents' age.

The perceived quality and prices of Green Products

H3: *The perceived quality of Green Products and their prices positively influences green consumption*.

The study highlighted that the perceived quality of Green Products does not statistically influence the frequency of buying according to age. However, there are differences in gender, as females (p=.034**) show willingness to purchase more Green Products when they perceive them to be of good quality. Additionally, among females, 35.8% think Green Products have good quality standards in Mexico, while 49.3% are neutral, and 14.8% believe the quality is low. Likewise, males' buying behaviour is influenced by product prices (p=.026**) in a statistically significant way. The consumption of those who buy frequently and occasionally (40.3%) increases if they believe a Green Product has a fair price. Similarly, also in Millennials, we may find differences according to their perception of prices (p=.079*); this may also be due to a lower purchasing power

in comparison with other generations. In general, just 22.2% of the sample thinks Green Products have a fair price in Mexico, in contrast with 42.8% who disagree and 35% which remain neutral.

Furthermore, we may observe that males who are rarely (35.6%) and occasionally (40.3%) buying Green products, would buy more if they had the same price as non-green products (p=.066*). According to age, the same effect also emerges among Millennials (p=.001***) and Silent Generation (65+) (p=.082*). In the case of the former, 30.4% of those who rarely buy Green Products declared that they would buy them more often if they had the same price as non-ecological and cheaper options. Conversely, according to gender, males' green consumption would also be positively influenced by a higher salary (p=.074*); as 18.8% of the rarer buyers would increase their consumption. According to age, the same effect is detected among Generation Z (p=.073*). In particular, Generation Z are more sensitive to prices since most of them (63%) are still studying and without a steady income. Being there statistically significant differences among all these elements, H3 is not rejected.

The advertisement and market-availability of green products

H4: *The advertisement and the market-availability of Green Products positively influence green consumption*.

In order to evaluate the effect of information on the sample's purchasing behaviour, we investigated opinions about labels and packaging, advertising, presence in the market.

From the study, it transpired that, when analysing the labels and packaging of Green Products, customers who perceive the labelled information as reliable increase their consumption (p=.040**). More than 50% of the sample declared to pay attention to labels and packaging when deciding what to buy. According to age, the same effect is observable among Millennials (p=.095*) and Baby Boomers (p=.049*). Since, within the former 50.4% pays attention to labels, whereas within the latter, almost 54% do so. Hence, H4 is not rejected. Whilst, when considering advertising, there is no statistically significant difference between the quantity of advertising and green consumption. This observation is correct both in relation to gender (p=.265) and age (p=.264). Thus, H4 is rejected.

Furthermore, according to gender, males who buy Green Products rarely (35.6%) would buy more if they would find the products more quickly in the marketplace (p=.055*); this is also verified according to age when considering Millennials (p=.086*) and Silent Generation (p=.082*). When looking at Millennials, 25.6% of the rarer buyers would buy Green Products more often if they could find them more effortlessly, same for 4% of the frequent buyers. In general, 70.7% of the sample declared that they tend to have a lazy purchasing behaviour, which means that they tend to buy the most convenient and easy to find option according to their needs. Therefore, H4 is not rejected.

The social context of the consumer

H5: *The social context of the consumer positively influences green consumption*.

In line with this hypothesis, green consumers' social values and their contribution to future societies have been investigated in the survey.

From the study, it emerged that both genders are not influenced by how society would view them when purchasing Green Products (p=.300); as well as according to age (p=.300). Thus, H5 can be rejected. Conversely, believing that the consumption of Green Products is contributing to society now and in the future, is not having

a statistically significant effect on consumption (p=.132). Again, H5 is rejected. However, there is an exception when considering older generations, such as Generation X (p=.059*) and Silent Generation (p=.082*). As a matter of fact, 17.7% of the Green Products occasional buyers inside the 36-54 years old segment, increase their consumption when believing that is socially contributing. So, in this case, H5 is not rejected. When asking the subjects about the influence of religion in their purchasing habits, it emerged that there are no statistically significant differences, according to both gender and age (p=.589); then H5 is rejected.

Moreover, statistically significant differences have been detected among the total subjects controlling stress as a form of balance (p=0.071*); yet these differences are not so marked out when looking specifically just among the females (p=.489) or males segment (p=.246); hence, H5 is rejected. According to age, there is a peculiarity, as an increase in consumption is shown among Millennials (p=.059*); especially between those occasionally (42.4%) and frequently (14.4%) buying. Afterwards, when looking at subjects following health recommendations, considering gender, among males exist statistically significant differences (p=.075*). Within this segment, 8.1% of those frequently purchasing doubles its consumption when being sensitive about its health. In line with this trend, those believing that they are conducting a healthy lifestyle are keener to buy more Green Products (p=.000***). Such aspect is verified between both genders and all ages. Considering the total sample, 4.7% of the frequent buyers doubles up its consumption due to this influencing factor. Consequently, H5 is not rejected.

Discussion

Overall, this study contributes to an improved comprehension of the influencing or inhibiting factors of eco-friendly consumption in an emerging economy. By demonstrating that the primary triggers for green behaviours are focused on perceived quality and prices, environmental consciousness, available information and a healthy lifestyle; policymakers and marketing practitioners may then adapt their regulative actions, marketing offers, and communications consequently.

After conducting a focus group, certain aspects emerged about the Mexican consumer mentality. Among these, a concern about prices and purchasing power rather than environmental awareness was observed. As a matter of fact, it was stated that the average Mexican has never had the economic power to spend extra. Unfortunately, the problem is that many times the cheapest options are the ones that pollute the most. Therefore, it is difficult to expect a family to buy an expensive 40-pesos oil in a glass bottle which does not contaminate when there is a cheaper 10-pesos oil in a plastic bottle option. However, when achieving the economic power to buy it, then there comes the importance of the mentality, and the main question to answer is: *why they should buy items that do not pollute and are more expensive, instead of those that do pollute and are cheaper?* Hence, two possible solutions may be implemented; either invest time and money in promoting eco-friendly behaviours which would boost a change in mentality or, start producing cheaper eco-friendly options to compete with the products that Mexicans usually buy. Sadly, due to the modern economy, at the present moment, it is luxury to be able to take care of the environment in emerging economies. There is a major indication that a limited number of consumers will pay more for Green Products and that environmental behaviours in a particular framework do not essentially transmit to other frameworks (Summers et al., 2016). These findings are congruent with the results from Carrete et al. (2012) who state that Mexicans show a clear orientation towards convenience, as a consequence, they demonstrate that consumers are keener to

engage in green behaviours only when they perceive the economic benefit as greater than the non-monetary costs. Additionally, their study underlines that deeply rooted habits and traditions are hard to overcome.

An issue significant to companies is the price sensitivity and the related perceived quality of the products. Therefore, pricing should always consider the customers' willingness to pay, and, in particular, "Green Pricing" should counterbalance consumers' sensitivity to price against their keenness to pay more for products' environmental performance (Dangelico and Vocalelli, 2017). Groening, Sarkis and Zhu (2018: 1849) emphasise that "ceteris paribus, a majority of consumers will prefer an environmentally superior product over an inferior one; however, findings show that consumers often will not pay more for an environmentally superior product". In this merit, our research underlined a higher sensitivity being present in younger generations, particularly in the case of Millennials. These results corroborate those obtained by Carrete et al. (2012), which show that lower-income classes cannot afford to purchase Green Products if those result to be considerably more expensive than their mainstreams equivalents. They identify two possible solutions for emerging economies, depending on the targeted social class. In the case of middle and higher classes, marketers may offer more expensive Green Products focusing their positioning on the specific benefits of the product, such as being less toxic (Suki and Suki, 2019). By doing so companies would be able to create brand-differentiation in environmental-friendly segments of the market that would become, consequently, willing to pay more. On the other hand, when approaching lower classes, the challenge to overcome is offering affordable green alternatives that can induce family savings. Therefore, companies should carefully treat the pricing matter, as our results confirmed that consumers would actively increase their consumption when believing a Green Product has a fair price.

In our study, we investigated opinions about labels, packaging and advertising. In these regards, it resulted that customers who perceive the labelled information as reliable increase their consumption. Being this finding congruent with previous research in Mexico (Carrete et al., 2012), it showcases an opportunity for companies to focus their communication strategies on providing reliable and easily understandable information on the practical benefits of Green Products. Moreover, similar results have been obtained in other emerging countries (Chekima et al., 2016). As Ottman, Stafford, and Hartman (2006: 24) state, "Green Marketing must satisfy two objectives: improved environmental quality and consumer satisfaction". Consequently, companies should focus on marketing messages connecting green products with desired consumer value, as efficiency and cost-effectiveness, health and safety, performance, symbolism, convenience, bundling (Holbrook, 2005). Effective green marketing requires the application of sound marketing principles with the intent to increase the appealability of the products to consumers (Groening, Sarkis and Zhu, 2018). To successfully achieve such outcome, it is of fundamental importance to construct the communication strategies based on three essential principles: consumer value positioning, calibration of consumer knowledge and credibility of product claims (Ottman, Stafford, and Hartman, 2006).

First and most important step is the identification of the consumer value positioning. Here some suggestions may be to design green products to perform as well as or better than alternatives; target relevant consumer market segments; broaden the mainstream appeal by building consumer-desired value into eco-friendly products (Holbrook, 2005; Ottman, Stafford, and Hartman, 2006). Then, calibrate consumer knowledge. Educating consumers with marketing messages that connect green products attributes with desired consumer value is the first approach to take into consideration, especially in an emerging market (Mishra and Sharma, 2010). Subsequently, design green products' attributes as solutions for consumer needs;

and afterwards, create engaging and educational internet sites about green products' desired consumer value.

Additionally, companies need to be aware of the credibility of product claims, as controversies may always affect the consumer's perception. A growing number of customers has become sceptical about the environmental performance and benefits of Green Products due to widespread concern over the dissemination of false or ambiguous environmental information by firms (Goh and Balaji, 2016; Tan, Johnstone and Yang, 2016). As Green Marketing faces the challenge of designing and marketing original Green Products combined with persuading the buyers to ponder several other stakeholders, human and non, and intangible issues such as the future while paying more for commodities which might not be eco-manufactured by an enterprise with possibly dishonest incentives (Groening, Sarkis and Zhu, 2018). With this purpose, employing green products and claiming related consumer benefits that are specific, meaningful, unpretentious, and qualified may result effective (Ottman, Stafford, and Hartman, 2006; Tan, Johnstone and Yang, 2016). An example of a practical application might be usage scenarios, which often appeal to the mind of the final customer. Moreover, procuring product endorsements and eco-certifications from trustworthy third parties, and educating consumers about the meaning behind those is an effective method for building credibility around the company and the product (Dekhili and Akli Achabou, 2014; Sharma and Kushwaha, 2019). Dangelico and Vocalelli (2017) assert that ecolabels represent an important promoting tool in Green Marketing, as they can support product differentiation and reassure customers. Additionally, their study identifies the consumer's lack of knowledge as a significant problem. Therefore, ecolabels represent an informative instrument for augmenting the awareness about green issues, while, at the same time, encourage manufacturers to justify and take responsibility for the environmental impact of their products. Our results underlined that green consumers would stop buying products from enterprises damaging the environment, comparable with the findings reported by similar studies in Malaysia and India (Suki and Suki, 2019; Kautish, Paul, Sharma, 2019). On the other hand, those who never buy eco-friendly products would not be impacted and keep purchasing from those enterprises. Lastly, encouraging consumer evangelism via consumers' social and web communication networks with compelling and engaging information about green products; as the word-of-mouth marketing helps to develop stronger beliefs towards a product (Saravanan and Saraswathy, 2017).

To conclude, when targeting specific customer segments, it has been noticed that the tendency to purchase more Green Products is displayed among those who value a healthy lifestyle. Our results showed, in fact, an increase of more than 50% in consumption in such a case. Therefore, when building communication strategies, it is essential to focus on buzzwords and facts that trigger the attention of health-conscious consumers. As Ottman, Stafford, and Hartman (2006) underline, health and safety became important choice considerations as a rising fear of overexposure to toxic chemicals, hormones, or drugs in ordinary products has become more and more relevant. Green Products can be marketed as the perfect alternative since they are cultivated or designed to minimise or eliminate the use of toxic agents and adulterating processes. Regarding the use of buzzwords, the Shelton Group (Shelton, 2015) conducted a study in 2015 analysing the perception of people towards green and sustainable matters, including the language implemented by marketers in their promoting purposes. Their investigation concluded that when it comes to advertising products with an environmental benefit, words do certainly matter.

Limitations of the study

Foremost, although the theoretical model is robust and well-grounded, a replication of the study or further testing using different sample and cultures could be conducted to corroborate current investigation discoveries. Hence, this analysis is founded on a relatively small sample of inhabitants in an emerging economy selected through a non-probability method, and the results might not be representative of the whole Mexican population or of other less developed countries. Nonetheless, developing markets typically have reasonably high growth rates followed by a fast degradation of the surrounding environment. Hence, our study could point out problem areas where high levels of progress may be achieved by using quite a few financial resources. Additionally, our respondents all live in Mexico City, which is known to be a highly crowded and diverse urban area, and we failed to analyse consumer attitudes between the distinct districts. Therefore, existing differences across the vast number of areas composing the city, in order to be able to generalize the results, research should be done among all districts. Likewise, the findings cannot be generalised to all Mexico, as the inhabitants of the capital may have dissimilar habits from the whole population.

Conclusion

This research aimed to investigate the drivers that stimulate sustainable attitudes, as well as Green Products consumption, taking into consideration socio-economic structures and individual options, choices and personal values. It resulted that the elements that drive consumers from positive attitudes and intentions to the actual adoption of green behaviours are a combination of perceived personal benefits, decreased perceived risk and uncertainty, and a sense of control over costs. Taking the previous aspects into consideration, marketers are recommended to try to facilitate the comprehension of the consumer benefits of Green Products to promote the adoption of eco-friendly behaviours. To achieve such a result, it is crucial to identify the consumer value positioning and then adapt the communication strategies accordingly. To promote green responsibility, it appears imperative to calibrate consumer knowledge and offer affordable lower-priced alternatives for the low-income market segments, which constitute the vast majority of the population in emerging economies. Moreover, it is essential to stress the credibility of product claims; as trust and credibility are being some of the inhibiting factors towards the adoption of environmental-friendly attitudes.

Furthermore, assumed the fact that customers associate goods tagged as “eco-friendly” with high prices, future research could expressly address whether lower prices would be sufficient to rise purchase intentions and actual consumptions of Green Products. Moreover, in the future, we might focus on the consumer comprehension of environmental advertising and labelling claims. As there is spread confusion around green and sustainable perception; as most of the time, the actual issue is not whether consumers understand the concepts, whereas it is whether they think they understand them. Specific terms may have mass appeal for a majority of consumers, yet it is vital to take into account which particular target audience the company is trying to persuade.

Referencias

Akehurst, G., Afonso, C. & Gonçalves, H.M. (2012). Re-examining green purchase behaviour and the green consumer profile: new evidences. *Management Decision*, 50(5), 972–988. http://dx.doi.org/10.1108/00251741211227726

Carrete, L., Castaño R., Felix, R., González, E. & Centeno, E. (2012). Green Consumer Behavior in an Emerging Economy: Confusion, Credibility, and Compatibility. *Journal of Consumer Marketing*, 29(7), 470–481. http://doi.org/10.1108/07363761211274983

Chekima, B., Syed Azizi Wafa Syed Khalid Wafa, Igau, O.A., Chekima, S. & Sondoh, S.L. (2016). Examining green consumerism motivational drivers: does premium price and demographics matter to green purchasing?. *Journal of Cleaner Production*, 112, 3436–3450. http://dx.doi.org/10.1016/j.jclepro.2015.09.102

Cherian, J. & Jacob, J. (2012). Green Marketing: a study of consumers' attitude towards environment friendly products. *Asian Social Science*, 8(12), 117-126.

Dada Room (2018). *¿Cuánto cuesta vivir en la Condesa?*, Dada Room, [online], available: http://www.dadaroom.com/blog/cuanto-cuesta-vivir-en-la-condesa/ [20 Nov 2019].

Dangelico, R.M. & Vocalelli, D. (2017). 'Green Marketing': An analysis of definitions, strategy steps, and tools through a systematic review of the literature. *Journal of Cleaner Production*, 165, 1263–1279. https://doi.org/10.1016/j.jclepro.2017.07.184

Dekhili, S. & Akli Achabou, M. (2014). Eco-labelling brand strategy. *European Business Review*, 26(4), 305-329. https://doi.org/10.1108/EBR-06-2013-0090

Ester, P., Simões, S. & Vinken, H. (2004). Cultural change and environmentalism: a cross-national approach of mass publics and decision makers. *Ambiente & Sociedade*, 7(2), 45–66. http://doi.org/10.1590/s1414-753x2004000200004

Fetterman, M. (2006). *Wal-Mart grows 'green strategies'*, [online], available: www.usatoday.com [8 Sep 2019].

Gleim, M.R., Smith, J.S., Andrews, D. & Cronin, J.J. (2013). Against the Green: A Multi-method Examination of the Barriers to Green Consumption. *Journal of Retailing*, 89(1), 44–61. http://doi.org/10.1016/j.jretai.2012.10.001

Goh, S.K. & Balaji, M. (2016). Linking green skepticism to green purchase behavior. *Journal of Cleaner Production*, 131, 629–638. http://dx.doi.org/10.1016/j.jclepro.2016.04.122

González, E.M., Felix, R., Carrete, L., Centeno, E. & Castaño, R. (2015). Green Shades: A Segmentation Approach Based on Ecological Consumer Behavior in an Emerging Economy. *Journal of Marketing Theory and Practice*, 23(3), 287–302.

Groening, C., Sarkis, J. & Zhu, Q. (2018). Green marketing consumer-level theory review: A compendium of applied theories and further research directions. *Journal of Cleaner Production*, 172, 1848–1866. https://doi.org/10.1016/j.jclepro.2017.12.002

Holbrook, M.B. (2005). *Consumer Value: a Framework for Analysis and Research*, Routledge, London.

Hooley, G.J. & Saunders, J. (1993). *Competitive Positioning: The Key to Marketing Strategy*, Prentice-Hall International, London.

Kautish, P., Paul, J. & Sharma, R. (2019). The moderating influence of environmental consciousness and recycling intentions on green purchase behavior. *Journal of Cleaner Production*, 228, 1425–1436. https://doi.org/10.1016/j.jclepro.2019.04.389

Lin, P. & Huang, Y. (2012). The influence factors on choice behaviour regarding green products based on the theory of consumption values. *Journal of Cleaner Production*, 22, 11-18. https://doi.org/10.1016/j.jclepro.2011.10.002

Lin, Y.-C. & Chang, C.-C.A. (2012). Double Standard: The Role of Environmental Consciousness in Green Product Usage. *Journal of Marketing*, 76(5), 125–134. http://dx.doi.org.ezproxy.unibo.it/10.1509/jm.11.0264

McHugh, M. (2013). The Chi-square test of independence. *Biochemia Medica*, 23(2), 143-149. http://dx.doi.org/10.11613/BM.2013.018

Medeiros, J.F.D. & Ribeiro, J.L.D. (2017). Environmentally sustainable innovation: Expected attributes in the purchase of green products. *Journal of Cleaner Production*, 142, 240–248. https://doi.org/10.1016/j.jclepro.2016.07.191

Mishra, P. & Sharma, P. (2010). Green Marketing In India: Emerging Opportunities And Challenges. *Journal of Engineering, Science and Management Education*, 3, 9-14.

Mont, O. & Plepys, A. (2008). Sustainable consumption progress: should we be proud or alarmed?. *Journal of Cleaner Production*, 16, 531-537. http://doi.org/10.1016/j.jclepro.2007.01.009

Ottman, J.A., Stafford, E.R. & Hartman, C.L. (2006). Avoiding Green Marketing Myopia: Ways to Improve Consumer Appeal for Environmentally Preferable Products. *Journal of Environment*, 48(5), 22–36.

Peattie, K. & Crane, A. (2005). Green Marketing: Legend, Myth, Farce or Prophesy?. *Qualitative Market Research*, 8(4), 357–370. https://doi.org/10.1108/13522750510619733

Ritter, Á. M., Borchardt, M., Vaccaro, G. L., Pereira, G. M., & Almeida, F. (2015). Motivations for promoting the consumption of green products in an emerging country: exploring attitudes of Brazilian consumers. *Journal of Cleaner Production*, 106, 507–520. http://doi.org/10.1016/j.jclepro.2014.11.066

Sangroya, D. & Nayak, J.K. (2017). Factors influencing buying behaviour of green energy consumer. *Journal of Cleaner Production*, 151, 393–405. https://doi.org/10.1016/j.jclepro.2017.03.010

Saravanan, M. & Saraswathy, T.R. (2017). Evangelism As A Marketing Strategy- In The Challenging And Innovative Business Scenario. *Intercontinental Journal Of Marketing Management*, 4(6), 1-5.

Schlegelmilch, B.B., Bohlen, G.M. & Diamantopoulos, A. (1996). The Link Between Green Purchasing Decisions and Measures of Environmental Consciousness. *European Journal of Marketing*, 30(5), 35–55. http://dx.doi.org/10.1108/03090569610118740

Sharma, N.K, & Kushwaha, G.S. (2019). Eco-labels: A tool for green marketing or just a blind mirror for consumers. *Electronic Green Journal*, 1(42), 56-77.

Shelton, S. (2015). *Is green marketing jargon a deal-breaker for consumers?*, Shelton Group: Experts in Sustainability and Energy Marketing, [online], available: https://sheltongrp.com/is-green-jargon-a-dealbreaker-for-consumers/ [22 Nov 2019].

Spangenberg, J.H., Fuad-Luke, A. & Blincoe, K. (2010). Design for Sustainability (DfS): the interface of sustainable production and consumption. *Journal of Cleaner Production*, 18, 1485-1493. http://dx.doi.org/10.1016/j.jclepro.2010.06.002

Suki, N.M. & Suki, N.M. (2019). Examination of peer influence as a moderator and predictor in explaining green purchase behaviour in a developing country. *Journal of Cleaner Production*, 228, 833–844. https://doi.org/10.1016/j.jclepro.2019.04.218

Summers, C.A., Smith, R.W. & Reczek, R.W. (2016). An Audience of One: Behaviorally Targeted Ads as Implied Social Labels. *Journal of Consumer Research*, 43(1), 156–178. https://doi.org/10.1093/jcr/ucw012

Tan, L.P., Johnstone, M.-L. & Yang, L. (2016). Barriers to green consumption behaviours: The roles of consumers green perceptions. *Australasian Marketing Journal (AMJ)*, 24(4), 288–299. http://dx.doi.org/10.1016/j.ausmj.2016.08.001

Tseng, S.-C. & Hung, S.-W. (2013). A framework identifying the gaps between customers' expectations and their perceptions in green products. *Journal of Cleaner Production*, 59, 174–184. http://dx.doi.org/10.1016/j.jclepro.2013.06.050

Unilever (2017). *Report shows a third of consumers prefer sustainable brands*, [online], available: https://www.unilever.com/news/press-releases/2017/report-shows-a-third-of-consumers-prefer-sustainable-brands.html [10 Sep 2019].

Veeravatnanond, V., Nasa-Arn, S., Nithimongkonchai, W., Wongpho, B. & Phookung, K. (2012). Development of Risk Assurance Criteria to the utilization of natural resources and environment for sustainable development of life quality, economy and society in rural Thai Communities. *Global Journal of Human Social Science, Geography & Environmental GeoSciences*, 12, 189-195.

Vicente-Molina, M., Fernandez-Sainz, A. & Izagirre-Olaizola, J. (2013). Environmental knowledge and other variables affecting pro-environmental behaviour: comparison of university students from emerging and advanced countries. *Journal of Cleaner Production*, 61, 130-138. https://doi.org/10.1016/j.jclepro.2013.05.015

Vivanuncios (2019). *Costo de vida y precio promedio de las colonias de CDMX: Vivanuncios*, Vivanuncios Magazine, [online], available: https://blog.vivanuncios.com.mx/bienes-raices/comprar-casa/vivir-en-las-mejores-colonias-de-cdmx/ [21 Nov 2019].

Wassener, B. (2010). *New Term for Emerging Economies Is Suggested*, The New York Times, [online], available: http://www.nytimes.com/2010/11/16/business/global/16eagles.html?_r=0b [8 Sep 2019].

Young, K. (2018). *Consumers Going Green: Everything You Need to Know in Global Web Index*. [online], available: https://blog.globalwebindex.com/chart-of-the-week/green-consumerism/ [10 Sep 2019].