

## Exploring Mexican consumers' purchase intention toward green products: The role of green self-identity

### Explorando las intenciones de compra de los consumidores Mexicanos hacia los productos verdes: El rol de la auto-identidad verde

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#### Abstract

The objective of this work was to explain the intention of purchasing environmentally friendly products from the perspective of the theories of consumer behaviors. This research proposes the concept of green self-identity and the environmental values as the antecedents of the purchase intention of green products. The study applied a quantitative approach. The data of a survey applied to the segment of young consumers was used to provide empirical support to the theoretical model proposed. The results of the study confirm that environmental values are a precedent of the green self-identity, a bi-dimensional concept that mediates the effect of environmental values on the purchase intention of green products. The green self-identity has also a direct effect on the intentions of young consumers to buy more green products. These findings are relevant to firms to promote the development of the green market by inspiring the green self-identity of young consumers.

**Green self-identity, Environmental values, Green products**

#### Resumen

El objetivo de este trabajo fue explicar la intención de compra de productos amigables con el ambiente desde el enfoque de las teorías de conducta del consumidor. Esta investigación propone el concepto de auto-identidad verde y valores ambientales como antecedentes de las intenciones de compra de productos verdes. El estudio utilizó un enfoque de investigación cuantitativo. Los datos de una encuesta aplicada al segmento de consumidores jóvenes se utilizaron para dar apoyo empírico al modelo teórico propuesto. Los resultados obtenidos confirman que los valores ambientales son un precedente de la auto-identidad verde, un concepto bi-dimensional que media el efecto de los valores ambientales sobre las intenciones de comprar productos verdes. La auto-identidad verde además tiene un efecto directo sobre la intención de los consumidores jóvenes por adquirir más productos verdes. Estos hallazgos son de utilidad a las empresas para impulsar el desarrollo del mercado verde a través de alentar la auto-identidad verde de los consumidores jóvenes.

**Auto-identidad verde, Valores ambientales, Productos verdes**

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## 1 .Introduction

The concern of individuals about the deterioration of the environment has increased with the COVID-19 pandemic, since the appearance of the virus is associated with the emergence of humans into the habitat of wild animal species with which there was no interaction (OECD , 2020; Shalini et. Al., 2020). Recent studies (Kearney, 2020) indicate that approximately 6 in 10 consumers (55%) still intend to buy sustainable products that contribute to reducing human impact on the environment. In 2018, American consumers spent \$ 128.5 trillion on fast-moving sustainable consumer goods (Nielsen, 2018). According to the analysis of the Sustainable Business Center (Ho, 2019), 50% of the sales of 71,000 SKUs of consumer packaged goods from 2013-2018 correspond to sustainable products. The growth in the consumption of environmentally friendly products is not exclusive to the United States of America (USA) as reported by Nielsen (2019), but is also extensive to developing countries. The extension of the market for sustainable products requires a more in-depth understanding of what factors influence the selection of “green” products by consumers (Baldi, Bertoni, Migliore; & Peri, 2019; Sesini, Castiglioni & Lozza, 2020).

The objective of this work is to explain the purchase intention of green products from the perspective of consumer behavior theories (Khare & Vaershneya, 2017; Thøgersen, 2017). Specifically, this research proposes a model based on the concept of consumer self-identity and environmental values that organizations can use to stimulate the interest of individuals in purchasing green products (Nath, Kumar, Agrawal, Gautam, & Sharma, 2013) . The available literature shows that the concept of self-identity is a good predictor of the purchase behavior of sustainable products and brands (Belk 1988; Carfora Caso, Sparks, & Conner, 2017; Tung, Koenig, & Chen, 2017) since influences people's ideas and feelings, influencing their purchasing decisions. The green or pro-environmental self-identity of an individual is defined as the perception they have about themselves to support the environment and express it in some way. Previous studies confirm that green self-identity is a good predictor of pro-environment behaviors (Khare, 2015; Whitmarsh & O'Neill, 2010).

This work proposes that green self-identity is determined, among other factors, by the environmental values of the individual. From an academic perspective, the study is one of the first to explore the concept of green self-identity in Mexico. From a practical point of view, the results of the research carried out can be used to promote green products by appealing to people's green self-identity and environmental values. The following sections describe the basic concepts that are proposed as predictors of the purchase intentions of sustainable products, the research hypotheses are formulated and the conceptual model that is empirically validated with data from a survey applied to young people from a university is presented. private with presence throughout the Mexican Republic.

## 2. Literature Review

Madani & Rasti-Barzoki, M. (2017) point out that the continuous deterioration of natural resources and the increase in global environmental pollution due to the greenhouse effect has generated a worldwide awareness of caring for the environment. The recognition of the environmental problem led to the development and commercialization of environmentally friendly products as one of the sustainability proposals. Since the 80s, the countries and governments of the world have held various summits and signed treaties and agreements with the purpose of supporting sustainable development, preserving biodiversity, and contributing to the well-being of humanity. These include the Rio de Janeiro Summit (1992), the Millennium Summit (1992), the United Nations Framework Convention on Climate Change (1992), the Kyoto Protocol (1997), the Stockholm Convention (2001). ) and the Paris Climate Summit (2015) (Möbius, 2017).

Even from the approach of the Sociology of Religion, in the document *On the Care of the Common Home* (Francisco, Father, 2015), the destruction of the human environment is addressed, which should be protected and preserved by humanity as a whole to avoid its degradation.

Identity. The literature in Psychology recognizes that self-identity is a construct that predicts pro-environment intentions and behaviors (Whitmarsh, & O'Neill, 2010).

Self-identity refers to how the individual perceives himself / herself and seeks to incorporate a set of elements such as values, personal goals, habits and particularities, in her personality. Reed, Forehand, Puntoni, & Warlop (2012, p. 310) define identity as any denomination with which the consumer self-associates and which is suitable to show a clear image of how the consumer looks, thinks, feels and does. person. According to the Identity Theory, people are entities that self-regulate in order to confirm their identity. Therefore, people continually evaluate their actions using their internal standard of identity as a reference. To avoid identity conflicts and negative emotions, individuals try to show themselves to others in congruence with their self-identity, developing multiple identities according to the social situation, that is, they act as parents, friends, employees, etc. (Reed et al., 2012).

In the consumer environment, researchers (Belk 1988; Escalas, & Bettman, 2005; Gao, Wheeler, & Shiv, 2009) argue that people use their possessions and the brands they buy to create and strengthen their self-identities. For this reason, people buy and consume products and services that are consistent with their goals, affiliation needs, and self-affirmation (Townsend, & Sanjay, 2012). Under this premise, the purchase of green products is a way in which people distinguish themselves from others, acquire status and project their commitment to the environment (Khare, 2015), that is, they demonstrate their environmental self-identity by showing themselves in favor of protecting the environment (Van der Werff, Steg & Keizer, 2013).

The construct of environmental or green self-identity has been proposed as an antecedent, moderator and mediator of the relationship between other constructs and pro-environment behaviors. For example, Khare (2015) analyzed the influence that pro-environmental attitudes, personal norms, social influence, and green self-identity of consumers have on buying green products in India. Consumer self-identification with the sustainable attributes of a product turned out to be an important predictor of green product purchasing behaviors. Whitmarsh & O'Neill (2010) also concluded that green self-identity is a better predictor of the reduction in the use of water and energy, and the ecological purchase, than the constructs proposed by the Theory of Planned Behavior (TCP) (attitudes, subjective norm and perceived control).

Based on the evidence from the reviewed literature, the first research hypothesis is proposed:

H1. Environmental self-identity has a positive influence on the purchase intentions of sustainable products among young consumers.

Values. Personal values have proven to be a determining variable in the formation of environmental beliefs and attitudes derived from knowledge and experiences. According to the Value-Norms-Beliefs Model (VNC) towards the environment (Stern, 2000), values influence the way the individual processes the available information. When the information presented is congruent with individual values, the person will develop more favorable beliefs and attitudes that make it easier to modify behaviors or perform new behaviors (Groot, 2008). The VNC proposes a set of universal values of diverse nature: biospheric, social / altruistic and selfish. The biospheric values are related to the concern for the protection of non-human species and the biosphere; While social or altruistic values represent concern for the welfare of other people and selfish ones are self-oriented principles.

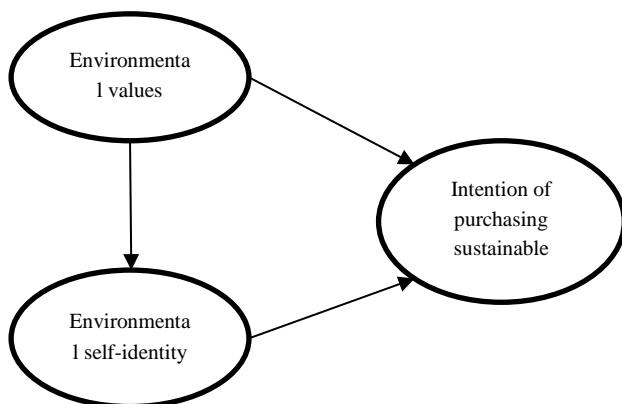
Gilg, Barr, & Ford (2005) studied the role that values play in the pro-environment behaviors of Devon residents in the UK. Based on the information collected, the research concludes that green behavior is a broad concept that includes a wide variety of actions, including the consumption of sustainable products. The people who responded to the survey were categorized according to their ecological lifestyles, their values and their sociodemographic profile, finding that those people who buy more sustainable products have a different set of values than the individuals who hardly buy green products. People who buy green products tend to have biospheric and eco-centric values that lead them to act in favor of the environment.

Gatersleben, Murtagh, and Abrahmse (2014) analyzed the effect that values, TCP constructs and identity have on pro-environment behaviors. Values were proposed as an essential component of identity, which was proposed as a mediator of the relationship between values and behaviors.

Based on information collected through a survey, the study confirms that biospheric and environmental values are significantly related to environmental identity and that the relationship between green values and behaviors is fully mediated by environmental identity. The research also concludes that environmental identity explains a higher proportion of the variability in the intention to practice ecological behaviors than the TCP constructs. These results agree with those reported by Dermody Hanmer-Lloyd, Koenig-Lewis, & Zhao (2015) who in their research shows that the pro-environment self-identity half, partially or totally, the relationship between the values of materialism, concern for the environment and social motivation for consumption and sustainable consumption behaviors. Even though these studies were carried out in countries with a history of caring for the environment, this study proposes that the relationships identified are also applicable to the case of Mexico. Therefore, the following two research hypotheses are formulated:

H2. Personal values, specifically environmental ones, influence the purchasing intentions of sustainable products among young consumers.

H3. Environmental self-identity mediates the effect that personal values have on purchasing intentions for sustainable products among young consumers (Figure 1).



**Figure 1** The influence of environmental self-identity in the purchase of sustainable products

### 3. Methodology

The study carried out is of a quantitative cross-sectional type. The stages of the methodology included the design of the multi-scale measurement and validation instrument that make it up, the application of a survey to young undergraduate university students enrolled in a private university with a presence throughout Mexico, and the analysis of the data using regression analysis supported by the statistical software MINITAB. Each of these stages is described below.

Design of the instrument for measurement and validation of metrics. A structured questionnaire was designed that integrates previously developed and validated scales to measure the three theoretical constructs of interest that are represented in the model in Figure 1. Environmental values were measured on the 7-item scale proposed by Gilg, Barr, & Ford (2005). Environmental self-identity was evaluated through 9 items adapted from the scale proposed by van der Werff et al. (2013) and Cook, Kerr, & Moore (2002). Finally, the intention to buy sustainable products was evaluated with 4 items derived from the scales summarized by Bemmaor (1995).

As the multi-scales used were transferred to the Mexican context, the EFA was performed to refine the scales and determine the convergent and discriminant validity of the measurement instrument. The principal components method was used to extract three factors, each associated with the three constructs of interest. However, the sedimentation graph and the magnitude of the eigenvalues ( $> 1$ ) showed that the solution in four factors was more adequate. Therefore, we proceeded to extract four factors and apply Varimax rotation to identify them.

The communalities for three of the items (items 1, 6, and 7) of the multi-scale designed to measure the participant's environmental values had very low communalities ( $< 0.3$ ), which is why they were eliminated from this second analysis. The percentage of the original variance explained by the solution in four factors after this elimination was 58.9%. The matrix of rotated loads is reported in Table 1. The communalities of the reagents retained are shown in the last column of the table. All the communalities were above 0.48 and all the loads of the items grouped in the same factor were above 0.5.

Additionally, the items had small loads ( $<0.3$ ) in other alternate factors to which they were assigned. These results support the convergent and discriminant validity of the scale (Morales-Vallejo, 2011).

The 9 items designed to establish environmental self-identity were grouped into two different factors. In the first factor, all the items that refer to how the person perceives themselves regarding an ecological lifestyle were assigned and in a second factor, the items related to how the person would like to be classified by others were grouped. Consequently, the environmental self-identity is concluded to be constituted by two dimensions: the perception of the individual regarding his environmental self-identity (IA perceived = IA1) and how the individual exposes his environmental self-identity before his social groups (IA before others = IA2).

Item	IA1	IA2	VA	IC	C
3	0.028	0.079	-0.647	-0.312	0.523
4	0.417	-0.054	-0.548	0.050	0.479
5	-0.136	0.307	-0.699	0.023	0.602
7	0.242	-0.078	-0.701	0.022	0.556
8	0.146	-0.008	-0.008	-0.695	0.504
9	0.302	0.672	-0.069	0.008	0.505
10	0.115	-0.075	0.041	-0.840	0.725
11	0.180	0.704	-0.308	-0.097	0.633
12	0.246	0.804	0.050	0.056	0.712
13	0.334	0.748	0.222	0.168	0.749
14	0.188	0.772	-0.189	-0.094	0.677
15	0.686	0.267	0.051	-0.011	0.544
16	-0.154	0.120	-0.409	-0.633	0.606

VA: Environmental Values, IC: Purchasing Intention, C: Communalities

**Table 1** Results of the exploratory factor analysis for the measurement instrument

Cronbach's alpha was also calculated for each of the factors associated with each construct. All the multi-scales had values that are within the recommended range ( $0.701 < \alpha < 0.84$ ) which gives evidence of the internal reliability of the scales.

Application of the survey. The students who responded to the survey are enrolled in the Business School of the private university, in the state of Mexico, particularly the one located in the City of Toluca.

The participants were informed about the project being carried out by the institution's professors and indicated that they had been chosen because they were part of the segment of young university students who received formal environmental education as part of their basic education (18-29 years). Participation in the survey was voluntary, but extra credits were offered to students who responded in the subject they were studying with the teachers who conducted the study. The survey was sent directly to the email of the students who confirmed their interest in participating.

The survey was conducted during the January-May 2020 semester and the summer of 2020. A total of 189 completed questionnaires were returned by the students. The data was coded and saved in an Excel file. In addition to the responses of the participants, aggregate variables were generated that correspond to the factorial scores of the three first-level constructs expressed in the model in Figure 1. For the self-identity construct, two aggregate variables, one associated with each component or dimension were calculated.

In the applied survey, students of both genders were represented in the same proportion, 45% women and 45% men, while the remaining 10% did not report their gender. 46.3% of the participants are between 18-20 years old, 51% between 21-24 years old and the remaining 2.7% reported ages between 25-28 years.

#### 4. Analysis of the results

To give empirical support to the model proposed in Figure 1, the most common four-step procedure recommended to evaluate the mediating effect of a variable was followed (Frazier, Tix, & Barron, 2004). The procedure consists of estimating several regression models using as regressors / predictors the environmental values (X) and the participant's green self-identity and as a response to the mediating variable (green self-identity in its two dimensions) and the response that you want to predict, which in this case corresponds to the purchase intention of green products (Y).

In a first step, a model was adjusted in which the environmental values (X) were the predictor of the intention to buy more green products in the short and medium term (Y). The model was highly significant, although the percentage of variability explained by environmental values was low ( $P = 0.000$ ,  $R^2 = 17\%$ ) and the model showed lack of fit ( $F = 1.96$ ,  $P = 0.016$ ). These results give empirical support to the research hypothesis H2 but suggest that environmental values by themselves are not a good predictor of the purchase intentions of green products, which leads to suggest other constructs that explain why a consumer decides purchase green products.

The second step consisted of fitting two simple linear regression models in which the moderating variable self-identity-green was proposed as the response and the environmental values as the regressor or predictor. The two models were highly significant ( $P = 0.000$ ), even though the values only explain a limited percentage of the variability of perceived green self-identity (M1) and demonstrated to others (M2) according to the self-report of the respondents. The perceived green self-identity (AI1 = M1) was explained to a greater degree by environmental values ( $R^2 = 11\%$ ) than the demonstrated green self-identity (IA2 = M2) before others ( $R^2 = 11\%$ ). Although the differences in the percentages of explained variance are minimal, the results are consistent with the literature reviewed that indicates that green self-identity is an expression of the individual's personal values. In this sense, the AI2 that represents the way of showing oneself to others could be associated with other constructs such as the social norms that regulate the actions of individuals in their social context and the pro-environmental behavior to which the individual is exposed (Culiberg, & Elgaaid-Gambier, 2016).

In a third step, a regression model was adjusted in which the predictors were the two components of the green identity (AI1 = M1 and AI2 = M2) and the response the intention to buy green products (Y). This third model was also highly significant ( $P = 0.000$ ) and explained a higher percentage of the variability in green purchase intentions than ( $R^2 = 27\%$ ). This implies that green self-identity is a better predictor by itself of the intentions to buy green products than the environmental values that the individual has. Consequently, the first research hypothesis (H1) has empirical support.

Both dimensions of green self-identity had a significant effect on the response ( $P = 0.000$ ). When comparing the beta coefficients of the two predictors, it was found that the perceived green self-identity explains the intention to buy green products to a greater extent than the green self-identity demonstrated to others ( $\beta_1 = 0.0785 > \beta_1 = 0.0543$ ), verifying that the decision to act in favor of the environment is more personal than influenced by the environment.

The three regression models adjusted in the first three steps of the procedure to empirically evaluate the proposed theoretical model allow us to conclude that there are significant direct associations between the constructs of the model, which supports the proposal that there are mediating effects. The last step of the procedure consisted in fitting a regression model in which all the predictors were included, that is, the two dimensions of self-identity and the environmental values. The model was highly significant and explained a greater percentage of the variability in the response than the previous models ( $P = 0.000$ ,  $R^2 = 37\%$ ) in addition to not exhibiting lack of fit ( $F = 1.71$ ,  $P = 0.136$ ).

Additionally, the regression coefficient of the environmental values construct ( $\beta_{VA} = 0.218$ ), although significant, turned out to be less than the coefficient of the simple regression model in which it was proposed that environmental values have only a direct effect on the intention to purchase products. green ( $\beta_{VA} = 0.378$ ). These results support the mediating effect that the dimensions of green self-identity have on the purchase intention of green products, which supports the latest proposed H3 research hypothesis.

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## 6. Conclusions

Current trends in sustainable practices show that consumers are more committed to the environment and play a more active role in protecting it through a series of sustainable practices including recycling, fair trade, sustainable consumption and the purchase of environmentally friendly products. Identifying the personal characteristics of the consumer that positively influence consumers' decision to buy organic products is essential to reinforce sustainable consumption. This research contributes to the literature on buying green products by verifying the fundamental role that green self-identity plays in the purchase intentions of sustainable products by young and highly educated consumers who are the segment that is driving the growth of the market. green.

Research results suggest that people tend to enhance their self-identity by purchasing identity products. Therefore, companies interested in expanding the market for green products and differentiating themselves from others through their offer of ecological products, would have to appeal to the sustainability of their products and focus on messages and images that induce consumers to evoke and demonstrate their identity. green.

Like all research, this study has limitations that open up areas of opportunity. The main limitation is that the survey participants were exclusively students from a private university. The selection of a random sample of university students would increase the external validity of the present study. Another limitation is the relatively low predictive power of the empirically validated theoretical model. Considering other variables, both demographic (gender and socioeconomic level) and psychographic (environmental awareness and value assigned to the ecological attributes of a product) would help to better complement and predict the intentions and purchase of green products of the young consumer segment.

## 7. References

Baldi L., Bertoni D., Migliore G., Peri M. (2019). How alternative food networks work in a metropolitan area? An analysis of Solidarity Purchase Groups in Northern Italy. *Agric Food Econ*, 7, 20, doi:10.1186/s40100-019-0139-3.

Belk, R. W. (1988). Possessions and the extended self. *Journal of Consumer Research*, 15, 139–168.

Bemmaor, A. C. (1995). Predicting Behavior from Intention-to-Buy Measures: The Parametric Case." *Journal of Marketing Research* 32 (May): 176-19

Carfora, V., Caso, D., Sparks, P. and Conner, M. (2017). Moderating effects of pro-environmental self-identity on proenvironmental intentions and behaviour: A multi-behaviour study. *Journal of Environmental Psychology*, 53, 92-99.

Cook, A. J., Kerr, G. N., & Moore, K. (2002). Attitudes and intentions towards purchasing GM food. *Journal of Economic Psychology*, 23(5), 557-572.

Culiberg, B. and Elgaaied-Gambier, L. (2016). Going green to fit in – understanding the impact of social norms on pro-environmental behaviour, a cross-cultural approach. *International Journal of Consumer Studies*, 40(2), 179-185.

Dermody, J., Hanmer-Lloyd, S., Koenig-Lewis, N., & Lifan Zhao, A. (2015). Advancing sustainable consumption in the UK and China: the mediating effect of proenvironmental self-identity [Online First]. *Journal of Marketing Management*, 31 (13-14)

Escalas, J. E., & Bettman, J. R. (2005). Self-construal, reference groups, and brand meaning, *Journal of Consumer Research*, 32(December), 378–98.

Frazier, P. A., Tix, A. P. and Barron, K. E. (2004). Testing moderator and mediator effects in counseling psychology research. *Journal of Counseling Psychology*, 51(1), 115-128.

Gao, L., Wheeler, C., and Shiv, B. (2009), The 'shaken self': product choice as a means of restoring self-view confidence, *Journal of Consumer Research*, 36(June), 29–38.

Gatersleben, B., Murtagh, N. and Abrahamse, M. (2014). Values, identity and pro-environmental behaviour, *Contemporary Social Science*, 9(4), 374-392.

Gilg, A., Barr, S. and Ford, N. (2005). Green consumption or sustainable lifestyles? Identifying the sustainable consumer. *Futures*, 37, 481–504.

Groot, J. I. (2008). *Mean or green? Value orientations, morality and prosocial behaviour*. s.n. Retrieved from: [https://www.rug.nl/research/portal/en/publications/mean-or-green-value-orientations-morality-and-prosocial-behaviour\(9ea8bee6-1155-45c8-ba46-52063f8a3054\).html](https://www.rug.nl/research/portal/en/publications/mean-or-green-value-orientations-morality-and-prosocial-behaviour(9ea8bee6-1155-45c8-ba46-52063f8a3054).html).

Francisco, Padre (2015). Laudato Si (Alabado sea) Carta Encíclica del Santo Padre Francisco Sobre el cuidado de la casa común. Hermanos Misioneros Servidores de la Palabra (HMSP).

Ho, S. (November 11, 2019). Shoppers are buying more sustainable goods across every product category. *Zero Waste Recycling Trends*. Available at: <https://www.greenqueen.com.hk/shoppers-are-buying-more-sustainable-goods-across-every-product-category-2/>.

Kearney (22 de abril, 2020). *Research Indicates COVID-19 Has Not Reduced Consumers' Demands for Sustainable Solutions*. Disponible en: <https://www.sdexec.com/sustainability/press-release/21129744/at-kearney-research-indicates-covid19-has-not-reduced-consumers-demands-for-sustainable-solutions>

Khare, A. (2015). Antecedents to green buying behaviour: a study on consumers in an emerging economy, *Marketing Intelligence & Planning*, Vol. 33 No. 3, 2015, pp. 309-329.

Khare, A. and Vaershneya, G. (2017). Antecedents to organic cotton clothing purchase behaviour: study on Indian youth. *Journal of Fashion Marketing and Management*, 21(1), 51-69.

Madani, S. R., and Rasti-Barzoki, M. (2017). Sustainable supply chain management with pricing, greening and governmental tariffs determining strategies: A game-theoretic approach. *Computers & Industrial Engineering*, 105, 287–298.

Möbius (2017) Tratados internacionales sobre el medio ambiente – ¿Cuáles son? Disponible en: <http://mobius.net.co/tratados-internacionales-medio-ambiente/>

Morales-Vallejo, P. (2011). El Análisis Factorial en la construcción e interpretación de tests, escalas y cuestionarios. Universidad Pontificia Comillas, Madrid Facultad de Ciencias Humanas y Sociales. Disponible en <http://www.upcomillas.es/personal/peter/investigacion/AnalisisFactorial.pdf>.

Nath, R., Kumar, R., Agrawal, A., Gautam, V., & Sharma, V. (2013). Consumer adoption of green products: Modeling the enablers. *Global Business Review*, 14(3), 453–470.

Nielsen (17 de diciembre, 2018). Was 2018 the year of the influential sustainable consumer? Available at: <https://www.nielsen.com/us/en/insights/article/2018/was-2018-the-year-of-the-influential-sustainable-consumer/>.

Nielsen (10 de octubre, 2019). A ‘Natural’ Rise in Sustainability Around the World. Available at: <https://www.nielsen.com/eu/en/insights/article/2019/a-natural-rise-in-sustainability-around-the-world/>.

Organización para la Cooperación y el Desarrollo Económicos, OCDE (September 28, 2020). Biodiversity and the economic response to COVID-19: Ensuring a green and resilient recovery. Available at: <http://www.oecd.org/coronavirus/policy-responses/biodiversity-and-the-economic-response-to-covid-19-ensuring-a-green-and-resilient-recovery-d98b5a09/>.

Reed, A. II, Forehand, M., Puntoni, S., and Warlop, I: (2012), Identity-based consumer behavior, *International Journal of Research in Marketing*, 310-321.

Shalini, U., Biggs, C., & Singh, N. (11 de Agosto, 2020). Sustainability matters now more than ever for consumer companies. BCG. Disponible en: <https://www.bcg.com/publications/2020/sustainability-matters-now-more-than-ever-for-consumer-companies>.



Sesini, G., Castiglioni, C., & Lozza, E. (2020). New trends and patterns in sustainable consumption: A systematic review and research agenda. *Sustainability*, 12, 5935. doi:10.3390/su12155935.

Stern, P. C. (2000). Toward a coherent theory of environmentally significant behavior. *Journal of Social Issues*, 56(3), 407–424. <https://doi.org/10.1111/0022-4537.00175>

Thøgersen, J. (2017) Sustainable food consumption in the nexus between national context and private lifestyle: A multi-level study. *Journal Food Quality and Preference*, Volume 55, January, Pages 16-25.

Townsend, C. and Sanjay, S. (2012). Self-affirmation through the choice of highly aesthetic products. *Journal of Consumer Research*, 39(2), 415-428.

Tung, T., Koenig, H. F., & Chen, H. L. (2017). Affective involvement on patronage intention in eco-friendly apparel consumption: A gender comparison. *Sustainability*, 9, 1977-1994.

Van der Werff, E., Steg, L., & Keize, K. (2013). The value of environmental self-identity: The relationship between biospheric values, environmental self-identity and environmental preferences, intentions and behaviour. *Journal of Environmental Psychology*, 34, 55-63. doi: 10.1016/j.jenvp.2012.12.006.

Whitmarsh, L. and O'Neill, S. (2010). Green identity, green living? The role of pro-environmental self-identity in determining consistency across diverse pro-environmental behaviours. *Journal of Environmental Psychology*, 30(3), 305-314.