VALUES AND SUSTAINABLE BEHAVIORS OF STREET RUNNERS: INFLUENCE ON PURCHASE DECISION OF SPORTS PRODUCTS

Valores e Comportamentos Sustentáveis de Corredores de Rua: Influência No comportamento de compra de produtos esportivos

Abstract
Street running by amateurs athletes became a popular sports practice amongst adults around the world, who seeks healthy habit and a life quality. Prior evidence showed that the

Resumo
A corrida de rua por atletas amadores tornou-se uma prática esportiva popular entre adultos de todo o mundo, que buscam hábitos saudáveis e qualidade de vida. Evidências
adoption of good practices is related to the development of an enhanced sustainable mindset. So far, few studies have examined the association between the healthy lifestyle of amateur runners and environmental values. The aim of this study was to examine the relationship between sports practice and environmental values. This investigation used survey data collected with amateur runners to examine the antecedents and consequences of healthy habits on sustainability practices using structural equation modeling. A sample of 208 amateur runners from Brazil, both male and female answered the questionnaire, with questions in a Likert scale adapted from current literature. Most participants reported a positive association between sports and sustainability, validating the proposed hypothesis. These findings provide support for additional studies on sustainability values and healthy habits, as an avenue for future research regarding consumer behavior.

**Keywords:** sustainable consumption; amateur runners; purchase decision; sports products; structural equation modeling.

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**INTRODUCTION**

Sustainable development here understood “as development that meets the needs of the present without compromising the ability of future generations to meet their needs” (Brundtland, 1991), has become an object of study for researchers, civil society and government since the publication of the United Nations report “Our Common Future” in 1987. In the following years, it presented developments such as the “Millennium Goals” of 2000 and, more recently, the seventeen “Sustainable Development Goals – SDGs” of 2012 (Sachs, 2012), improving its scope and purposes. For the purposes of this study, the terms sustainability and sustainable development will be used interchangeably to describe the state proposed by Brundtland (1991), of Science indexed databases with the descriptors “green marketing” or “sustainable consumption” in the areas of business and management points to a continuous and growing academic production from 1993-2020. However, more research is needed on which factors consumers believe have more weight in the concept of sustainability and to more deeply understand both sustainable consumption and the habits of preserving sustainability, such as disposal. (Paswan, Guzmán & Jeffrey, 2017). Remember that such habits are related to consumer behavior (Grohmann et al., 2012). Additionally, as Zanirato and Rotondaro (2016) point out, the current consumer society is one of the dilemmas of sustainability and presents a context in which the two ends of consumption are directly involved, such as production and consumption.
The values that link individuals to their ecosystem are realized through tangible and intangible relationships with nature, as well as the principles and virtues of a good life, which can accompany them and serve as motivators for a purchase decision process. (Klain, Olmsted, Chan & Satterfield, 2017). The suitability of companies in sustainable causes is seen as a tangible positive incentive for the brand, and this "tangibility" is an important factor to consider in strategic marketing decision-making (Hanson, Jiang, Jun, & Murthy, 2019). Likewise, those companies that practice greenwashing are targets of rejection and boycotts by consumers (Braga, Jr., Dirceu, Moraes & Garcia, 2016; Wang, 2017).

The running market (running g) in Brazil is a segment that encompasses several types of practitioners, from simple walkers to triathletes (Dallari, 2009; Carlssara, Parolini & Rocco Junior, 2016). This fact makes footwear and sportswear products in high demand. In this way, sports equipment manufacturing companies have a priority target for runners (Ladeira & Dalmaro, 2012; Ferreira, Sagin & Miura, 2017). It is a relationship between manufacturers and customers in which the positive results, the victory, the record, and the number of practitioners play a crucial role (Rein, Kotler, & Shields, 2008). Passion, dedication, effort, overcoming and fidelity are some of its characteristics (Melo Neto, 2013). For Ferreira et al. (2020), this product category has high doses of intangibility and is marked by the users’ experience.

Statistics on street racing in Brazil are still quite precarious, but it is estimated that official street events in Brazil are practiced by a number between 5 and 11 million who dispute approximately 500 races (Galdeano and Favero, 2020). In the latest official report, "Practices of Sport and Physical Activity", from Pnad 2015, 24.6% of Brazilians said they practice running and walking with some frequency. It is the second most practiced sport in the country, after football (IBGE, 2017).

In Brazil, street racing became popular with the São Silvestre race created in 1925, which had 60 entries and took great momentum when it became international in 1945 (Ferreira, Ferreira & Moretti, 2020). The 2019 edition had approximately 35 thousand subscribers (Gazeta Esportiva, 2020). The segment grows every year due to the ease of not needing a specific physical space for its practice (such as a court or field), being able to be practiced individually, and that requires a low investment, in addition to contributing to the maintenance of the health of the practitioner (Albuquerque et al., 2018).

RESEARCH PROBLEM AND OBJECTIVE

The problem question of this study, formulated from the elaboration of the theoretical framework and the analysis of previous studies, is the following: are street runners influenced by their environmental awareness in their intentions and purchase decisions of a specific sports product: sneakers of racing?

Thus, the objective of this research was to verify whether the environmental concern of street runners influences their intention and decision to purchase sports products, specifically running shoes. More specifically, we sought to validate a research model to assess the impact of environmental awareness, here understood as the concern of individuals about environmental issues, in the formation of consumers’ values, their consumption behavior, and their influence on the purchasing decision process.

THEORETICAL FOUNDATION

Sustainability and Greenwashing

Although there is no single definition of sustainability or even sustainable development, which implies measurement difficulties, there is a theoretical-conceptual formulation that has been used in academic and business studies. This is the triple bottom concept line (TBL) proposed in 1994 by Elkington (1998), which is based on three interconnected principles: economic prosperity, maintenance of the social environment and ecological balance. These principles, when properly worked out, can indicate a sustainable business (Padin et al., 2016; Park & Kim, 2016; Isil & Hernke, 2017), in addition to an ethical posture on the part of companies (Longoni & Cagliano, 2016).

Thus, there is a need for an environmental balance between production and business development. A balance between economic, environmental, and social factors is needed, as environmentally friendly companies are more credible by people who adopt the logic of
environmentalism (Paswan et al., 2017; Lira, 2018). Performing ethical activities can be seen as respect for market moral principles and values. Organizations can increase their profitability by adopting business models that recognize the importance of human values associated with sustainability (Venkatraman & Nayak, 2015; Park & Kim, 2016; Palmer & Flanagan, 2016; Wahid & Mustamil, 2017).

To engage in sustainability and obtain feedback on this engagement, consumers’ environmental awareness is of fundamental importance, since they are faced with sustainability information on products but cannot be sure about the implications of their consumption behavior and its socioenvironmental implications (Diamantopoulos et al., 2003; Anderies, 2014). As a result of this sensitive issue, companies that harm the environment fear the scrutiny of consumers who are always attentive to attempts at greenwashing (Marquis, Toffel & Zhou, 2016).

Exploring the case of Volkswagen that was caught omitting data on the emission of polluting gases from its vehicles in 2014, Siano, Vollero, Conte and Amabile (2017) proposed the term deceptive manipulation to characterize the irresponsible behavior of the company that frustrated many of its customers, and it implies recognizing that sustainability communication has a constitutive force.

Environmental awareness and sustainability have brought to current studies on sustainable consumption a normative concept in the relationships between consumers and companies. The contemporary literature has titled the relationship of sustainable consumption, environmental awareness and politically correcting companies a green marketing relationship (Park, Lee & Koo, 2017; Lira, 2018). Consumers who are environmentally conscious can be distinguished in three aspects according to Paswan et al. (2017): i) supportive behavior, where less sacrifice is required to acquire the product; ii) active behavior, which includes pro-environmental activities that require a higher level of commitment; iii) pro-environmental behavior that implies a relationship between sustainability and lifestyle.

Purchases are affected by specifics of knowledge on the part of the consumer, related to corporate practices together with knowledge of the concept of environmental social responsibility with society. The current consumer is interested in the total behavior of companies, and their purchases are influenced by this behavior, and they are willing to support engaged companies (Rodrigues & Borges, 2014). These efforts can provide valuable contributions to building a strong brand, and the tendency for a strong brand to be evoked by the consumer in prepurchase alternatives is greater, being able to influence consumption (Biedenbach & Manzhynki, 2016). Thus, the level of involvement with the brand is due to the level of associations that the person is able to formulate (Ramesh, Saha, Goswami & Dahiya, 2019).

**Purchase decision process**

Contemporary society is characterized by consumer relations in historical dimensions never experienced (Ribeiro et al., 2019). Customer value is the result of an analysis of perceived benefits minus perceived costs. Perceived benefits can be functional, social, personal, or experiential. Perceived costs are presented as monetary, temporary, psychological and behavioral factors. For a customer, superior value is satisfaction and pleasure, thus creating a lasting and profitable relationship between the customer and company (He & Wang, 2019; Schamp et al., 2019).

Consumer behavior is a set of physical and mental activities performed by customers of consumer goods, which result in decisions and actions on how to search, choose, acquire and use products and services capable of satisfying their needs or desires (Lopes & Silva, 2011). The most commonly used model is the model developed by Engel, Kollat and Blackwell that bears their initials (EKB). In a decision-making process, the consumer goes through the following phases: (a) recognition of the need, (b) search for information about which products or services are capable of meeting this need, and (c) evaluation of alternatives in a preorder process, purchase, (d) making the purchase of products or acquiring the services, (e) consumption (use) of the good or service, (f) post purchase evaluation, and, finally, (g) discarding the product (Blackwell, Minard & Engel, 2011).

Customers, while making purchasing decisions, are influenced not only by tangible benefits, which offer quality and price but also by intangible assets, such as the company’s brand image and commercial reputation (Ramesh, et al., 2019). Basically, the values that link individuals to the ecosystem
are effected through tangible and intangible relationships with nature, as well as the principles and virtues of a good life, which can accompany them and serve as motivators for a purchase decision process (Klain et al., 2017).

Consumers are buying sustainable products, but there is a trend that possibly still restricts them, which is price elasticity and their consumption habits (Braga Jr, Silva, Gabriel & Braga, 2018). However, individuals with low brand attachment will only respond positively to consumption if corporate social responsibility actions are congruent with the cause that these brands sponsor. Therefore, the smaller the attachment is, the greater the congruence between the cause and the brand. Individuals with low brand attachment tend to perceive high levels of persuasion for consumption contained in brand actions (Kamiya, Hernandez, Xavier & Ramos, 2018).

**METHOD**

The design of this study was quantitative and operationalized through a survey. For data collection, a structured questionnaire was used, with assertions in the form of a Likert-type scale to measure the constructs and a sociodemographic inventory to characterize the sample. The instrument was made available through an electronic platform using the “snowball” sampling strategy. This strategy proved to be adequate since an individual, previously selected as a respondent, after his participation, selected another individual, with characteristics, habits and lifestyle similar to his own, to also become part of the sample, thus forwarding the survey to the next respondent (Ekitan & Bala, 2017).

To measure the constructs, existing scales were adapted but not validated in Portuguese. Its adaptation and validation followed the steps recommended in the literature (Pasquali, 2003, Hair Jr et al., 2019; Behling & Law, 2000), namely, (a) original scale version into Portuguese by a person fluent in both languages, (b) retranslation of the translated scale from Portuguese to English, performed by a person fluent in both languages and without contact with the original scale, (c) comparison of the translated scale with the back-translated scale to identify inconsistencies, (d) validation of the content carried out by judges, experts on the subject, and (e) semantic validation with subjects from the target population.

The measurement of ecologically conscious consumer behavior was operationalized through four assertions extracted from the work of Park et al. (2017). To measure the values of green consumers, the six assertions from the study by Haws, Winterich were used. Naylor (2014). To compose the assertions of the need/opportunity recognition construct, Bruner’s eight assertions (1989) were used. In measuring the information search construct, the following scales were adapted: external information search by Noble et al. (2006) and regret in seeking information (Reynolds et al., 2006). The evaluation of alternatives construct was measured in a joint dimension, which involved the concept of evoked set within a specific context, using the scale of Breivik & Thorbjørnsen (2008), together with the scale of decision importance of Tokman et al. (2007) and the scale of difficulty of choices by Mariadoss et al. (2010).

The measurement of the post consumption disposal dimension, which is the last stage of the purchase process, was adapted from the scale by Trudel et al. (2016) on responsible involvement in relation to disposal. All stopovers are available upon request.

The research hypotheses were formulated as follows, and the research model is shown in Figure 1:

**H1.** The values of green consumers can influence the consumption behavior of ecologically conscious consumers.

**H2.** Ecologically conscious consumption behavior is able to influence consumers to recognize their needs and opportunities.

**H3.** Ecologically conscious consumption behavior is able to influence the consumer in the search for information about a particular product or service.

**H4.** Ecologically conscious consumption behavior is capable of influencing the consumer when evaluating alternatives for the consumption of a particular product or service.

**H5.** Ecologically conscious consumption behavior is able to make the consumer think about the disposal/post consumption of the product before making the purchase.
H6. The values recognized by green consumers influence the recognition of their needs or opportunities.  
H7. The values recognized by green consumers influence them when searching for information for certain products or services.  
H8. The values recognized by green consumers influence them when evaluating alternatives for the consumption of a particular product or service.  
H9. The values recognized by green consumers make there is a concern about the disposal or post-consumption of the product capable of influencing the consumption of the product.  
H10. The recognition of a need or opportunity by the consumer influences the search for information for a particular product or service.  
H11. The search for information, carried out by the consumer, influences the evaluation of the alternatives recognized by them.  
H12. The evaluation of alternatives is related to the form of disposal or post-consumption of the product.

Inspired by the study by Diamantopoulos et al. (2003), the following sociodemographic data were collected: a) gender, b) age, c) marital status, d) education level, and e) family income.

![Research Model](image)

Source: Prepared by the authors

**Figure 1. Research Model**

**RESULTS**

The final sample, composed of 208 participants, had a mean age of 33.1 years (SD=9.07 years, Med =31 years), 54.1% of whom were male. Regarding marital status, 42.9% declared themselves single, 32.7% married, 7.7% in a stable relationship, 16.3% divorced and 0.5% widowed. Regarding the level of education, 2% indicated complete elementary school, 21.7% completed high school, 53% completed higher education and 23.2% completed postgraduate studies. Finally, in terms of income, 2.4% of respondents reported having an income below 3 minimum wages, 25.9% between 3 and 5 minimum wages, 41.5% between 5 and 10 minimum wages and 4.9% above 15 minimum wages.
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Covariates

Additionally, the following covariates were collected: (a) having children: 40.6% said they had children, (b) number of children for those who said they had children: mean 1.8 children (SD=0.9 children), (c) owning or not owning a specific pair of running shoes: 98.1% said they had it, (d) number of pairs of specific running shoes for those who claimed to have it: average 2 pairs (SD=1.31 pairs), (e) level as a runner, on a self-declaration scale: basic (1 to 6 months) 5.8%, beginner (from 6 months to 1 year) 9.7%, intermediate (from 1 to 3 years) 16.5%, expert (3 to 5 years) 32.5%, and very experienced (more than 5 years) 35.4%.

From the proposed research model, variance-based structural equation modeling was used. This choice was due to the nonnormality of the data, a situation in which structural equation modeling based on covariance presents biases and difficulty in adjusting the model (Hair et al., 2019). The measurement model and the structural model were evaluated. In the first one, the latent variables (constructs) and their indicators are evaluated, and in the structural one, the hypothetical relationship between the constructs is evaluated.

Table 1 presents the results related to the convergent validity (average variance extracted - AVE) and the reliability (lower and upper limits) of the research model. Reference values for AVE are above 0.50, for Cronbach’s alpha above 0.60 in exploratory studies, and for composite reliability below 0.95 (Hair et al. 2016). The construct “Guilt in Discarding” was measured as formative because it presents only one indicator; in this case, the convergent validity and reliability measures do not apply.

Table 1

<table>
<thead>
<tr>
<th>Convergent validity and reliability of the measurement model</th>
<th>AVE</th>
<th>Cronbach’s Alpha</th>
<th>Composite Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Consumer Values</td>
<td>0.679</td>
<td>0.842</td>
<td>0.894</td>
</tr>
<tr>
<td>Comp. consumption _ Eco Correct</td>
<td>0.752</td>
<td>0.673</td>
<td>0.859</td>
</tr>
<tr>
<td>Difficulty of Choice</td>
<td>0.760</td>
<td>0.848</td>
<td>0.904</td>
</tr>
<tr>
<td>External Search</td>
<td>0.685</td>
<td>0.771</td>
<td>0.867</td>
</tr>
<tr>
<td>Adapt Search Strategy</td>
<td>0.835</td>
<td>0.901</td>
<td>0.938</td>
</tr>
</tbody>
</table>

Source: Research data

Table 2 presents the Fornell-Larcker criterion, used as an indicator of discriminant validity, where the square root of the average variance extracted from a construct must be greater than the correlation of this construct with the others (Fornell & Larcker, 1981; Bido & Silva, 2019).

Table 2

<table>
<thead>
<tr>
<th>Discriminant validity - Fornell-Larcker criterion</th>
<th>1</th>
<th>two</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Difficulty of Choosing</td>
<td>0.872</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Guilt in Disposal</td>
<td>-0.537</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Comp. consumption _ Eco Correct</td>
<td>0.299</td>
<td>-0.356</td>
<td>0.867</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. External Search</td>
<td>-0.505</td>
<td>0.267</td>
<td>-0.013</td>
<td>0.827</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Green Consumer Values</td>
<td>0.524</td>
<td>-0.557</td>
<td>0.758</td>
<td>-0.232</td>
<td>0.824</td>
<td></td>
</tr>
<tr>
<td>6. Adapt. Search Strategy</td>
<td>-0.064</td>
<td>-0.011</td>
<td>0.353</td>
<td>0.208</td>
<td>0.234</td>
<td>0.914</td>
</tr>
</tbody>
</table>

Source: Research data

Note. The values in bold on the diagonal represent the square root of the average variance extracted (AVE) of each construct.

The cross loadings of each construct were calculated, in which each indicator must have the highest load on its own construct (Bido & Silva, 2019) as a criterion for assessing discriminant validity. The reliability of the indicators is related to the factor loading, desirable above 0.708 (Hair et al., 2019), and its statistical significance. All the results confirmed the criteria for acceptance. Due to space limitations, they will not be presented here but are available upon request.

Subsequently, an evaluation of the collinearity between the indicators was conducted using the
variance inflation factor (VIF). All had values lower than 3. (Hair et al., 2019). After completing the analysis and adjustment of the measurement model, to calculate the structural equation modeling, the analysis and adjustment of the structural model was provided (Hair et al., 2019). In this step, the following are verified: (a) the collinearity between the constructs, (b) the size (Γ) and the significance of the path coefficients, (c) the level of the coefficient of determination (R²), (d) the effect size (f²), and (e) the predictive power of the model (Q²) (Hair et al., 2017). The values related to the variance inflation factor (FIV) are shown in Table 3.

Table 3
Diagnosis of collinearity between constructs - variance inflation factor (VIF)

<table>
<thead>
<tr>
<th>Construct</th>
<th>Value 1</th>
<th>Value 2</th>
<th>Value 3</th>
<th>Value 4</th>
<th>Value 5</th>
<th>Value 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulty of Choosing</td>
<td></td>
<td></td>
<td>1.422</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guilt in Disposal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comp cons Correct Ecol</td>
<td>2,348</td>
<td>2,543</td>
<td>2,423</td>
<td>2,514</td>
<td></td>
<td></td>
</tr>
<tr>
<td>External Search</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,131</td>
<td></td>
</tr>
<tr>
<td>Green Cons Values</td>
<td>2,348</td>
<td>2,355</td>
<td>1,000</td>
<td>3,040</td>
<td>2,656</td>
<td></td>
</tr>
<tr>
<td>Adapt String Search</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,146</td>
</tr>
</tbody>
</table>

Source: Research data

Table 4
Structural model evaluation - path coefficient and effect size

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Path</th>
<th>Γ</th>
<th>f²</th>
<th>t</th>
<th>p</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Green Cons. Values → Ecol Cons Behav</td>
<td>0.758</td>
<td>1.348</td>
<td>20.749</td>
<td>0.000</td>
<td>Accept</td>
</tr>
<tr>
<td>H2</td>
<td>Ecol Cons Behav → Choice Difficulty</td>
<td>-0.236</td>
<td>0.032</td>
<td>2.947</td>
<td>0.003</td>
<td>Accept</td>
</tr>
<tr>
<td>H3</td>
<td>Choice Difficulty → External Search</td>
<td>-0.487</td>
<td>0.238</td>
<td>5.516</td>
<td>0.000</td>
<td>Accept</td>
</tr>
<tr>
<td>H4</td>
<td>External Search → Alternat Evaluation</td>
<td>0.216</td>
<td>0.052</td>
<td>2.428</td>
<td>0.015</td>
<td>Accept</td>
</tr>
<tr>
<td>H5</td>
<td>Alternat Evaluation → Disposal Guilt</td>
<td>0.121</td>
<td>0.014</td>
<td>1.578</td>
<td>0.115</td>
<td>Reject</td>
</tr>
<tr>
<td>H6</td>
<td>Ecol Cons Behav → External Search</td>
<td>0.286</td>
<td>0.042</td>
<td>2.178</td>
<td>0.029</td>
<td>Accept</td>
</tr>
<tr>
<td>H7</td>
<td>Ecol Cons Behav → Alternat Evaluation</td>
<td>0.337</td>
<td>0.052</td>
<td>2.947</td>
<td>0.003</td>
<td>Accept</td>
</tr>
<tr>
<td>H8</td>
<td>Ecol Cons Behav → Disposal Guilt</td>
<td>0.093</td>
<td>0.007</td>
<td>1.039</td>
<td>0.299</td>
<td>Reject</td>
</tr>
<tr>
<td>H9</td>
<td>Green Cons. Values → Choice Difficulty</td>
<td>0.696</td>
<td>0.295</td>
<td>8.205</td>
<td>0.000</td>
<td>Accept</td>
</tr>
<tr>
<td>H10</td>
<td>Green Cons. Values → External Search</td>
<td>-0.194</td>
<td>0.015</td>
<td>1.217</td>
<td>0.224</td>
<td>Reject</td>
</tr>
<tr>
<td>H11</td>
<td>Green Cons. Values → Alternat Evaluation</td>
<td>0.033</td>
<td>0.001</td>
<td>0.285</td>
<td>0.776</td>
<td>Reject</td>
</tr>
<tr>
<td>H12</td>
<td>Green Cons. Values → Disposal Guilt</td>
<td>-0.668</td>
<td>0.280</td>
<td>7.694</td>
<td>0.000</td>
<td>Accept</td>
</tr>
</tbody>
</table>

Source: Research data

Table 4 shows the size (Γ) and significance (statistics t and p value) of each path coefficient, the effect size (f²) and the decision in relation to each of the formulated hypotheses. To evaluate the effect size (f²), the values are those proposed by Cohen (1992): small = 0.02, medium = 0.15 and large = 0.35 (Ringle et al., 2014).

Recently, Hair et al. (2019) proposed reference values for the predictive accuracy of the Stone-Geisser coefficient in structural models, as follows: small > 0, medium = 0.25 and large = 0.50. The values proposed by Cohen (1992) for evaluating the coefficient of determination (R²) as an effect size fundamentally depend on the field of knowledge. For research on consumer behavior, Hair et al. (2017) propose that values of less than 0.02 are very weak, values from 0.02 to 0.13 are weak, values from 0.13 to 0.26 are moderate, and values above 0.26 are substantial. Table 5 presents (a) the coefficient of determination (R²), (b) the values related to the calculation of the model’s predictive power: RMSE (root mean square error) and MAE (mean absolute error), and (c) the Stone-Geisser coefficient (Q²).
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<table>
<thead>
<tr>
<th>Table 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation of Pearson's coefficients of determination (R²) and predictive validity (Q²)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Choice Difficulty</td>
</tr>
<tr>
<td>Disposal Guilt</td>
</tr>
<tr>
<td>Ecol Conc Behav</td>
</tr>
<tr>
<td>External Search</td>
</tr>
<tr>
<td>Alternat Evaluation</td>
</tr>
</tbody>
</table>

Source: Research data

Note. RMSE = Root Mean Square Error; MAE = Mean Absolute Error.

**DISCUSSION**

The present study sought to verify the influence of the environmental awareness of street runners on their purchase intentions and decisions regarding running shoes. To do so, it used a research model formulated with hypotheses arising from the theoretical framework on sustainability and the purchasing decision process. The conceptual approach was based on studies that involved sports or similar products within a context of sustainable consumption.

The results obtained through the empirical validation of the research model using structural equation modeling based on partial least squares (PLS-SEM) confirmed eight of the twelve hypotheses formulated, which will be addressed individually.

The construct green consumer values, hypothetically predicted as an antecedent of ecologically correct consumer behavior, the consumer's difficulty in choosing running shoes, the external search for information, the adaptation of the search strategy and the guilt in disposal, was empirically accepted in the first and last hypothesis and rejected in the second and third hypotheses.

This result is in line with the assumptions made by Park et al. (2017). The acceptance of hypothesis 12 stands out, which demonstrates the effect of green consumer values on their attitude toward discarding in a negative way; that is, the more values that are part of the consumer, the less difficult it will be to discard a running shoe used. Likewise, green consumer values precede ecologically correct consumer behavior, as proposed in hypothesis 1. This finding reflects the proposition of Aride and Pamies-Pallise (2019) in their integrative model of the influence of values on behavior and its consequences in relation to abstract and concrete attributes of a product.

The ecologically correct consumer behavior was able to empirically predict three of the four hypotheses formulated in the research model. It should be noted that hypothesis 8 was rejected, contradicting the studies carried out by Braga Jr et al. (2018) with consumers in supermarket retailers, thus raising a possible path for comparative research in specific contexts, since the sample of the present study was homogeneous and the focus was the acquisition of a single product.

Corroborating the postulates of the integrative models of the consumer's purchasing decision-making process (Lopes & Silva, 2011), the hypothetical relationships formulated in relation to the difficulty of choice, external search for information and search adaptation strategies were all empirically validated. A highlight, however, was the rejection of the hypotheses in which green consumer values preceded the phases of external information search and search adaptation strategies, evidencing a possible direct relationship between green values and assertiveness in choice, causing consumers with a greater presence of green values to not need to experiment with external information search or even implement search adaptation strategies. This finding suggests that further research be undertaken to verify whether such purchase behavior is valid in more general contexts or is specific to the conditions evaluated in this study.

The last latent variable of the model, fault at disposal, was included in three hypotheses formulated, with only the one that presupposed the values of the green consumer was empirically accepted, and the other two, ecologically correct consumer behavior and search adaptation strategies, were accepted. Such evidence seems to be in line with the formulations of Kaaronen (2017), who postulates the need for a change in the formulation of public policies toward a more systemic approach...
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in relation to pro-environmental behavior. In this sense, his proposal for the use of *affordance theory* is fundamental for the integration between thinking and acting.

Such dissociation between thinking and acting is evident in the analysis of the hypotheses formulated in this study in which the values of the green consumer, which we could extrapolate to a dimension “thinking” within the *affordance theory*, precedes guilt in the disposal, while the behavior of the ecologically correct, here also borrowing the concept of “acting” from the theory, does not precede guilt in disposal, in line with the findings of ElHaffar et al. (2020).

The present study, with an exclusive focus on amateur street runners and their process of purchasing running shoes, showed that the values of the green consumer precede their behavior as an ecologically correct consumer and is a robust predictor of their behavior in the last stage of the process of consumption, that is, the disposal, opening space for discussions and future research in relation to nonspecific contexts.

From a managerial point of view, managers and public policy makers can benefit from the findings of this study, mainly in relation to defining the positioning strategy of their brand, considering this specific target audience, as well as devising models and public–private partnerships in line with existing legislation, such as the National Solid Waste Policy - PNRS (Maiello et al., 2018), taking advantage of this public’s predisposition toward sustainable values.

**References**


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Values and Sustainable Behaviors of Street Runners: Influence on purchase decision of sports products


