

CIÊNCIAS SOCIALMENTE APLICÁVEIS:

INTEGRANDO SABERES E
ABRINDO CAMINHOS

JORGE JOSÉ MARTINS RODRIGUES
MARIA AMÉLIA MARQUES

(Organizadores)

VOL VIII



EDITORIA
ARTEMIS

2023

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Dados Internacionais de Catalogação na Publicação (CIP)
(eDOC BRASIL, Belo Horizonte/MG)

C569 Ciências socialmente aplicáveis [livro eletrônico] : integrando saberes e abrindo caminhos: vol. VIII / Organizadores Jorge Rodrigues, Maria Amélia Marques. – Curitiba, PR: Artemis, 2023.

Formato: PDF

Requisitos de sistema: Adobe Acrobat Reader

Modo de acesso: World Wide Web

Inclui bibliografia

Edição bilingue

ISBN 978-65-87396-81-1

DOI 10.37572/EdArt_300523811

1. Ciências sociais aplicadas – Pesquisa – Brasil. 2. Abordagem interdisciplinar do conhecimento. I. Rodrigues, Jorge José Martins. II. Marques, Maria Amélia.

CDD 307

Elaborado por Maurício Amormino Júnior – CRB6/2422



APRESENTAÇÃO

O oitavo volume desta coleção segue a lógica dos livros anteriores. Procura apresentar ao leitor uma coletânea de artigos sobre problemáticas que são transversais ao campo das ciências sociais aplicadas.

Sendo discutível, na metodologia seguida na organização dos vários volumes procurou-se privilegiar artigos que abordassem novas tendências e/ou problemáticas transversais relevantes, adotassem metodologias mais holísticas e/ou modelos de investigação aplicada, apresentassem estudos de caso nacionais e/ou internacionais e procurassem ser reflexivos. Nesse contexto, o presente volume está organizado em três grandes eixos – Programação, Sustentabilidade, Educação e redes sociais.

Na construção da estrutura de cada eixo procurou-se seguir uma lógica em que cada artigo possa contribuir para uma melhor compreensão do artigo seguinte, gerando-se um fluxo de conhecimento acumulado que se pretende fluido e em espiral crescente.

Assim, o eixo Programação é constituído por um conjunto de oito artigos. A programação pode ser entendida como um conjunto de actividades que visam transformar tarefas repetitivas e monótonas em rotinas cooperativas e colaborativas. Estas rotinas são algoritmos e modelos matemáticos geradores de informação estruturada e eficiente que, apesar da sua racionalidade limitada, é útil para a tomada de decisões, sejam individuais ou de grupo.

O eixo Sustentabilidade junta um conjunto de sete artigos que, em comum, contribuem para a construção da responsabilidade social. As mudanças climáticas estão a perturbar a vida de milhões de pessoas no planeta, com especial ênfase nas regiões rurais mais pobres e com impacto negativo na economia. Assim, exigem-se políticas públicas inclusivas que incentivem o uso de materiais multíusos, amigos do ambiente. Os resíduos sólidos urbanos necessitam de ser melhor geridos e as empresas deverão ser incentivadas a incorporar aquelas políticas nas suas estratégias, para reforço dos seus valores, conforto e bem-estar dos seus constituintes.

O eixo Educação e redes sociais tem seis artigos. As principais teorias de liderança parecem apontar para que esta seja contingencial, podendo ser ensinada e as respectivas competências treinadas e melhoradas. Todo o ensino, presencial ou a distância, tem os seus pontos fortes e pontos fracos. Exigem-se comportamentos éticos, nomeadamente em ambiente de redes sociais, para evitar fraudes quer com os conteúdos quer com a respectiva avaliação, com eventuais traumas psicológicos em quem é visado.

Com a disponibilização deste livro e seus artigos esperamos que os mesmos gerem inquietude intelectual e curiosidade científica, procurando a satisfação de novas necessidades e descobertas, motor de todas as fontes de inovação.

Jorge Rodrigues, ISCAL/IPL, Portugal
Maria Amélia Marques, IPS/ESCE, Portugal

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PERSONAL FACTORS INFLUENCING SINGLE-USE PLASTIC PACKAGING CONSUMPTION: A QUALITATIVE APPROACH

Data de submissão: 27/03/2023

Data de aceite: 12/04/2023

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ABSTRACT: This study explores the personal factors that influence the consumption of single-use plastic packaging through a qualitative approach, conducting two focus groups with 17 young university students from the province of El Oro. The research aims to analyze the personal factors that influence individual consumption of single-use plastic packaging. The participants were selected based on their sustainable consumption practices and their favorable attitudes towards the environment. Thematic analysis of the focus group transcripts revealed key findings,

such as adult women being the main consumers of products packaged in plastic, a strong influence by brands, and the attractiveness of plastic packaging. Participants expressed a preference for the use of glass and cardboard packaging as alternatives, along with the need for better recycling infrastructure. Some findings differ from previous research, but this study provides valuable insights into consumer preferences and behaviors. The results can serve as a basis for marketing strategies or public policies aimed at reducing single-use plastic consumption and promoting sustainable alternatives. Future research should include confirmatory studies, including survey data collection to corroborate the findings and targeted marketing strategies focused on environmental awareness, green consumption, and green management.

KEYWORDS: Consumer behavior. Single-use plastic packaging. Sustainable consumption. Qualitative approach. Alternatives to plastic.

FACTORES PERSONALES QUE INFLUYEN EN EL CONSUMO DE ENVASES DE PLÁSTICO DE UN SOLO USO: UN ENFOQUE CUALITATIVO

RESUMEN: Este estudio explora los factores personales que influyen en el consumo de envases plásticos de un solo uso a través de un enfoque cualitativo, realizando dos grupos focales con 17 jóvenes universitarios de la provincia de El Oro. La investigación pretende

analizar los factores personales que influyen en el consumo individual de envases plásticos de un solo uso. Los participantes fueron seleccionados en base a sus prácticas de consumo sostenible y sus actitudes favorables hacia el medio ambiente. El análisis temático de las transcripciones de los grupos focales reveló hallazgos clave, como que las mujeres adultas son las principales consumidoras de productos envasados en plástico, una fuerte influencia de las marcas y el atractivo de los envases de plástico. Los participantes expresaron su preferencia por el uso de envases de vidrio y cartón como alternativas, junto con la necesidad de una mejor infraestructura de reciclado. Algunas conclusiones difieren de investigaciones anteriores, pero este estudio aporta valiosos datos sobre las preferencias y comportamientos de los consumidores. Los resultados pueden servir de base para estrategias de marketing o políticas públicas destinadas a reducir el consumo de plástico de un solo uso y promover alternativas sostenibles. La investigación futura debería incluir estudios de confirmación, incluida la recopilación de datos de encuestas para corroborar las conclusiones y estrategias de marketing específicas centradas en la concienciación medioambiental, el consumo ecológico y la gestión ecológica.

PALABRAS CLAVE: Comportamiento del consumidor. Empaque plástico de un solo uso. Consumo sostenible. Enfoque cualitativo. Alternativas al plástico.

FATORES PESSOAIS QUE INFLUENCIAM O CONSUMO DE EMBALAGENS PLÁSTICAS DE USO ÚNICO: UMA ABORDAGEM QUALITATIVA

RESUMO: Este estudo explora os fatores pessoais que influenciam o consumo de embalagens plásticas de utilização única através de uma abordagem qualitativa, conduzindo dois grupos focais com 17 jovens estudantes universitários da província de El Oro. A investigação visa analisar os fatores pessoais que influenciam o consumo individual de embalagens de plástico de utilização única. Os participantes foram selecionados com base nas suas práticas de consumo sustentável e nas suas atitudes favoráveis em relação ao ambiente. A análise temática das transcrições dos grupos focais revelou conclusões chave, tais como o facto de as mulheres adultas serem as principais consumidoras de produtos embalados em plástico, uma forte influência das marcas, e a atratividade das embalagens de plástico. Os participantes expressaram uma preferência pela utilização de embalagens de vidro e cartão como alternativas, juntamente com a necessidade de melhores infra-estruturas de reciclagem. Alguns resultados diferem de pesquisas anteriores, mas este estudo fornece valiosos conhecimentos sobre as preferências e comportamentos dos consumidores. Os resultados podem servir de base para estratégias de marketing ou políticas públicas destinadas a reduzir o consumo de plástico de utilização única e a promover alternativas sustentáveis. A investigação futura deve incluir estudos de confirmação, incluindo recolha de dados de inquéritos para corroborar os resultados e estratégias de marketing direcionadas centradas na consciência ambiental, consumo verde, e gestão verde.

PALAVRAS-CHAVE: Comportamento do consumidor. Embalagens de plástico de utilização única. Consumo sustentável. Abordagem qualitativa. Alternativas ao plástico.

1 INTRODUCTION

The production and consumption of single-use plastic packaging have experienced a significant increase in recent decades, leading to massive waste accumulation and global pollution. Growing public awareness of the negative environmental impacts of these packages has driven higher demand for sustainable alternatives. However, transitioning to more sustainable practices presents a challenge, as consumers face various personal factors influencing their decisions and behaviors.

In this context, the present article focuses on investigating how personal factors can affect consumers' decisions and behaviors regarding the use of single-use plastic packaging. A qualitative approach is used to analyze interviews with consumers and understand more precisely how these factors influence individual decisions about the use of plastic packaging. The personal factors explored include environmental awareness, beliefs and values, and the perception of personal responsibility.

Environmental awareness refers to understanding the negative environmental impact of excessive and unnecessary consumption of plastic packaging. Beliefs and values refer to attitudes towards the environment, sustainability, and responsible consumption. The perception of personal responsibility relates to the idea that each individual plays a crucial role in reducing the negative environmental impact of plastic packaging.

The main objective of this article is to deepen the understanding of how these personal factors influence consumers' decisions and behaviors concerning the use of plastic packaging. By better understanding these factors, more effective strategies can be designed to decrease plastic packaging consumption and minimize their negative environmental impact. Additionally, it is essential to consider how public policies, business initiatives, and education can contribute to promoting more sustainable and responsible practices among consumers.

The analysis of these personal factors, combined with the development of innovative and sustainable packaging solutions, will encourage significant change in the consumption and management of plastic packaging. In this way, we can move towards a more sustainable and environmentally friendly future in which consumers, businesses, and governments take responsibility for protecting our planet.

2 ENVIRONMENTAL IMPACT OF PLASTIC PACKAGING

2.1 POLLUTION AND WASTE

The growing production and consumption of single-use plastic packaging have led to a significant increase in pollution and waste accumulation worldwide (Kumar et

al., 2021). Plastic packaging, particularly single-use ones, poses a major environmental concern, as their improper disposal and slow degradation negatively impact ecosystems, biodiversity, and human health (Kedzierski, 2020).

Plastic is a durable, resistant, and versatile material, but these qualities also make it an environmental issue. Most plastics are not biodegradable and, instead, break down into smaller fragments called microplastics, which can persist in the environment for hundreds of years (Oliveira, et al., 2020). Microplastics can be ingested by aquatic and terrestrial organisms, causing disruptions in the food chain and potential toxic effects on humans and wildlife (Alberghini, et al., 2023; Prata & Dias, 2023).

The poor management of plastic waste and its improper disposal in landfills, rivers, seas, and oceans contribute to soil and water pollution. It is estimated that approximately eight million metric tons of plastic enter the oceans annually, threatening marine life and ecological balance (Diggle & Walker, 2022). Additionally, the release of toxic chemicals as plastics break down in the environment can cause soil and water contamination, negatively affecting the quality and availability of water resources (Li et al., 2022).

The accumulation of plastic waste can also have social and economic implications. Plastic pollution in urban and rural settings can lead to landscape degradation and a decrease in the aesthetic value of affected areas (Tekman et al., 2022). Furthermore, cleaning and managing plastic waste require significant investments of financial and human resources, which can represent a burden on local and national economies (Borongon & NaRanong, 2022).

In the context of the present article, it is relevant to understand how plastic pollution and waste can affect consumers' decisions and behaviors. Personal factors, such as environmental awareness, beliefs and values, and the perception of personal responsibility, can influence individuals' choice and use of single-use plastic packaging.

Awareness of the negative consequences of plastic pollution and waste may motivate consumers to seek more sustainable alternatives and reduce their reliance on single-use plastic packaging (Heidbreder 2021). Therefore, it is crucial to address the issue of plastic pollution and waste in the research of personal factors influencing individuals' behavior concerning the use of single-use plastic containers.

2.2 ECOLOGICAL EFFECTS

The presence of plastics in the environment can cause the release of toxic chemicals, such as additives and persistent organic pollutants, which can have harmful effects on flora and fauna (Prata & Dias, 2023). These chemicals can be absorbed by

organisms and accumulate in their tissues over time, leading to health and reproductive issues, as well as the decline of key species populations in ecosystems (Thushari & Seneviratha, 2020).

The ecological effects of plastic packaging also include habitat disruption and landscape degradation. The accumulation of plastics on beaches, rivers, forests, and other natural environments can affect the habitat quality for many species and lead to a loss of biodiversity. The presence of plastic waste can also have a negative impact on the aesthetics of the landscape and the quality of life in urban and rural areas (Kumar, 2021).

It is important to consider consumer awareness and perception of the ecological effects of packaging (Rhein & Schmid, 2020). Understanding how environmental awareness influences individuals' attitudes and behaviors provides valuable insights for developing strategies and policies aimed at reducing single-use plastic packaging consumption and promoting more sustainable and environmentally friendly alternatives.

Education and awareness about the ecological effects of single-use plastic packaging are crucial for fostering changes in consumer behavior. Awareness and education campaigns can help individuals understand the negative consequences of their consumption and make more informed and sustainable decisions regarding the products and packaging they use (Jacobsen et al., 2022). Additionally, promoting conscious consumption practices, such as recycling, reuse, and reduction of single-use packaging, can contribute to reducing the ecological impact of plastic packaging on the environment.

The design of public policies and regulations also play a crucial role in mitigating the ecological effects of single-use plastic packaging. These policies may include the banning of certain types of packaging, the implementation of return and deposit systems, and the promotion of research and development of more sustainable and biodegradable materials (Rhein & Schmid, 2020). Furthermore, policies can support the transition towards a circular economy, in which materials and resources are reused and recycled instead of being discarded.

Collaboration between governments, industry, civil society, and consumers is essential for addressing the ecological effects of single-use plastic packaging. The adoption of responsible and sustainable business practices, such as reducing the use of plastics in packaging and promoting more environmentally friendly alternatives, can contribute to decreasing the demand and production of single-use plastic packaging (Kumar, 2021; Phillips et al., 2020). At the same time, active consumer participation in adopting more sustainable and environmentally conscious behaviors can have a significant impact on reducing single-use plastic packaging consumption (Jacobsen et al., 2022).

Therefore, the ecological effects of single-use plastic packaging are multiple and encompass issues affecting ecosystems, biodiversity, and ecological balance. Considering these effects in research on personal factors influencing the behavior of individuals using single-use plastic packaging is crucial for understanding the underlying dynamics and motivations in consumer decisions and ultimately contributing to the promotion of more sustainable and environmentally respectful alternatives.

3 FACTORS INFLUENCING CONSUMER BEHAVIOR

3.1 SOCIAL FACTORS AND CONSUMPTION

Social factors are key elements that influence consumer behavior in relation to single-use plastic packaging. These factors include the influence of family, friends, reference groups, and social networks on individuals' purchasing and consumption decisions (Hameed et al., 2021). By understanding the impact of social factors on consumer behavior, we can develop more effective strategies to address the issue of single-use plastic packaging and foster more sustainable and environmentally friendly practices.

Family plays a crucial role in shaping consumer attitudes, values, and behaviors. Parents' consumption preferences and practices can influence their children's choices, which may perpetuate the use of single-use plastic packaging in subsequent generations (Wijekoon & Fazli, 2021). Moreover, purchasing and consumption decisions within the household can be influenced by the need to meet family members' expectations and demands, which may lead to the selection of plastic-packaged products due to their convenience and practicality.

Friends and reference groups also have a significant impact on individuals' consumption decisions. Reference groups are those to which consumers turn for guidance and with which they compare themselves in terms of consumption behavior and preferences (Avery, et al., 2021). Individuals may feel pressure to conform to the norms and expectations of their reference groups, which can influence their choice of products and packaging.

Social networks also play an important role in influencing consumer behavior in relation to single-use plastic packaging. Through social networks, consumers may be exposed to information, opinions, and experiences of other consumers, which can affect their own purchasing and consumption decisions (Gangabada, 2021). Furthermore, social networks can also act as a channel for the dissemination of sustainable consumption trends and practices. Influencers and opinion leaders on social networks can promote the

use of eco-friendly packaging and reusable products, which can influence their followers' behavior and encourage changes in consumption practices (Pop et al., 2020).

In this way, social factors, including family, friends, reference groups, and social networks, have a significant impact on consumer behavior in relation to single-use plastic packaging. By understanding these social influences, we can develop more effective strategies to address the issue of single-use plastic packaging and promote more sustainable and environmentally friendly consumption practices (Wiefek, et al., 2021).

An effective strategy could include promoting education and awareness about the negative effects of single-use plastic packaging and the more environmentally friendly alternatives available. This could be done through targeted marketing and communication campaigns aimed at different social groups and using various channels, such as social networks, online advertising, and collaborations with influencers and opinion leaders (Michaelson et al., 2022).

Another key strategy could be to involve consumers in promoting sustainable consumption practices within their own communities and social groups. Consumers could be incentivized and empowered to share their experiences and knowledge about eco-friendly products and packaging with their family, friends, and social networks, which could create a multiplier effect and encourage a broader change in consumer behavior (Banyté et al., 2020; Prieto et al., 2022; White, Hardisty & Habib, 2019).

It is also important to address the challenges and barriers faced by consumers when adopting more sustainable consumption practices. This could include the development of public policies and support programs that facilitate access to eco-friendly products and packaging, such as tax incentives, grants, and education and training programs (Cantú et al., 2021).

Finally, businesses and manufacturers also have a significant role in promoting sustainable consumption practices in relation to single-use plastic packaging. They can innovate and develop more sustainable and environmentally friendly products and packaging, as well as implement marketing and communication strategies that promote the adoption of these products by consumers (Coelho et al., 2020).

3.2 CULTURAL FACTORS AND CONSUMPTION

Cultural factors are an integral part of understanding consumer behavior and play a crucial role in the choice of single-use plastic packaging. Culture, in general terms, refers to the set of values, beliefs, customs, and practices shared by a group of people and has a significant impact on the way people perceive and consume products (Weber et al., 2021).

Culture influences consumer preferences and consumption patterns through several dimensions. Firstly, cultural norms can determine the acceptability and usage of certain packaging materials. In some societies, the use of single-use plastic packaging may be considered unacceptable due to growing concerns about the environment and sustainability. On the other hand, in other cultures, plastic packaging might be preferred due to its convenience and practicality (Nguyen, 2020).

Additionally, cultural practices related to food and consumption can also affect the demand for single-use plastic packaging. In cultures where fast food and processed foods are common, plastic packaging might be more prevalent due to its ease of use and ability to maintain the freshness and quality of products (Ncube, 2020).

Cultural factors can also influence consumers' attitudes and perceptions towards recycling and waste management. Some cultures may have a greater awareness of the importance of waste reduction and environmental conservation, which could lead to lower use of single-use plastic packaging (Herrmann, 2022). In contrast, other cultures might prioritize convenience and practicality, resulting in a higher demand for plastic packaging.

Subculture and social class are also cultural factors that can affect consumer behavior in relation to single-use plastic packaging. Subcultures, such as ethnic, generational, or geographic groups, may have their own consumption preferences and practices that affect packaging choices (Quicanga & Ogbere, 2022). In this way, consumers from a specific subculture might prefer traditional packaging, such as glass or paper, instead of plastic packaging.

Social class, which refers to an individual's position in the socioeconomic hierarchy, can also affect consumer preferences and behaviors concerning plastic packaging. Consumers from higher social classes might be more willing to pay higher prices for products in sustainable packaging, while those in lower social classes might prioritize affordability and convenience, which could lead to a greater use of single-use plastic packaging (Jacobse et al., 2022).

3.3 PSYCHOLOGICAL FACTORS AND CONSUMPTION

Psychological factors play a crucial role in consumer behavior, influencing the choice and use of products, including single-use plastic packaging. These factors encompass cognitive, emotional, and motivational processes that affect consumers' perception, attitudes, and decisions (Schoultz et al., 2022).

The main psychological factors influencing the consumption of single-use plastic packaging include perception, learning, memory, motivations, and attitudes. Perception

refers to how consumers interpret the sensory information of products and packaging, such as appearance, touch, smell, and sound. Single-use plastic packaging may be perceived as more practical, hygienic, and safe compared to alternatives, influencing consumer preference (Granato et al., 2022; Weber et al., 2021).

Learning, such as past experiences and acquired knowledge, affects future decisions and preferences. Negative experiences with alternative packaging may lead to a preference for single-use plastic packaging. Memory plays a significant role in consumer behavior, as memories of product information, advertisements, and personal experiences can influence purchasing decisions and evaluation of packaging options (Norton et al., 2022; Oloyede & Lignou, 2021).

Motivations drive individuals to act according to their needs and desires, such as comfort, safety, social status, economy, and environmental responsibility. In the case of single-use plastic packaging, motivations may be related to convenience and practicality, but may conflict with environmental concerns (Nguyen et al., 2022).

Attitudes, positive or negative evaluations of objects, people, or situations, also influence consumer behavior. Consumers' attitudes towards single-use plastic packaging may be influenced by factors such as product quality perception, brand image, environmental concern, and social responsibility. These attitudes determine whether consumers choose plastic-packaged products or more sustainable alternatives (Herrmann, 2022).

Understanding and addressing these psychological factors is crucial to developing effective strategies that promote more sustainable and eco-friendly alternatives. This may include raising awareness about the environmental impacts of single-use plastic packaging, promoting sustainable alternatives, and implementing public policies that encourage responsible consumption practices (Jacobsen et al., 2022; Rhein & Schmid, 2020).

An effective strategy to address psychological factors is persuasive communication. Marketing messages and awareness campaigns can be designed to highlight the ecological, economic, and social benefits of using sustainable alternatives to single-use plastic packaging. These messages must be tailored to the specific needs and motivations of different consumer segments (Skoric et al., 2022).

Research in consumer psychology can provide valuable insights into addressing cognitive biases and heuristics that influence the choice of single-use plastic packaging. For example, interventions based on the nudge theory can be employed to help consumers make more sustainable and environmentally conscious decisions by presenting options that favor the selection of eco-friendly alternatives (White, Habib & Hardisty, 2019).

Furthermore, it is crucial to consider the role of social norms in adopting more sustainable consumption behaviors. Awareness campaigns and community interventions can be designed to foster the adoption of social norms that value the use of sustainable packaging and reduce single-use plastic consumption (Jacobsen et al., 2022).

Lastly, collaboration between researchers, policymakers, businesses, and non-governmental organizations is key to effectively addressing the psychological factors influencing consumer behavior concerning single-use plastic packaging. Joint efforts can enable the development and implementation of comprehensive and tailored strategies and policies for different consumer groups, promoting lasting and meaningful change in plastic packaging consumption and the adoption of more sustainable and environmentally friendly alternatives (Jacobsen et al., 2022; Rhein & Schmid, 2020; White, Habib & Hardisty, 2019).

4 METHOD

This study aims to analyze the personal factors influencing individual consumption of single-use plastic packaging, considering the gap between the pro-recycling attitude expressed by consumers and their consumption habits. Since understanding the cultural and historically situated interpretations of the social world is sought, an interpretive approach is considered appropriate. Qualitative methods were adopted to explore how individuals interpret their own actions and construct meaning. The advantage of using qualitative methods is that they allow focusing on everyday events that occur in real-life settings and understanding how the everyday and intersubjective world of subjects is constituted.

In the framework of our research, two focus groups were conducted, which were audio and video recorded. Initially, 23 participants were recruited, but six dropped out of the study, so 17 people aged between 18 and 27 finally participated (table 1). All participants were young university students from universities located in the province of El Oro. Focus groups were mostly composed of women (9) compared to men (8). The duration of each focus group ranged between 1.5 and 2 hours. A significant advantage of using focus groups is their ability to explore complex behaviors and motivations, as they rely on explicit group interaction (Manzano, 2022).

Given that this study had an exploratory focus, we sought to acquire new perspectives that often emerge through group discussions (Nyumba et al., 2018), as spontaneous interactions between focus group members can give rise to new ideas (Colom, 2022) notes, the group potentially offers “a context in which synergy can produce more than the sum of individual contributions.” The purpose of the conversations in the focus groups was to deepen our understanding of this phenomenon.

Announcements were placed on university bulletin boards. Participants were selected based on their sustainable consumption practices and favorable attitude towards the environment. We were particularly interested in those consumers who were not explicitly “green” in their ecological consumption practices and who expressed concern for the environment. To reduce bias in self-assessment, we indicated from the outset of the selection process (through a brief telephone interview) that we were interested in consumers who purchased environmentally friendly products for the home.

Previous research has shown that consumers may exaggerate their preferences and purchase intentions towards socially responsible behaviors when responding to environmentally-related questions (Testa et al., 2020). During focus group discussions, we emphasized our neutral position regarding single-use plastic packaging consumption, allowing participants to feel comfortable discussing their consumption habits. At the beginning of each focus group, we also reminded participants that our interest lay in understanding the reasons why consumers did or did not buy single-use plastic packaging.

To ensure an academic and scientific approach, a rigorous protocol was followed in conducting focus groups and analyzing data. Focus group moderators were trained in moderation techniques, and a discussion script was used to ensure consistency in information gathering. Additionally, strategies were implemented to encourage participation from all group members and ensure that diverse perspectives were heard.

Once the focus groups were completed, audio and video recordings were transcribed, and a thematic analysis of the data was conducted. Thematic analysis involved identifying patterns and emerging themes from the transcripts, which was carried out by multiple researchers to ensure objectivity and validity of the findings. Results were interpreted and discussed in relation to existing literature on single-use plastic packaging consumption and the personal factors influencing such consumption. This methodological approach, focused on qualitative exploration and group interaction, allowed for a deeper understanding of the personal factors influencing the consumption of products with single-use plastic packaging while ensuring scientific rigor and validity in the research findings.

5 FINDINGS AND DISCUSSION: INDIVIDUAL BEHAVIORS AND MOTIVATIONS FOR PLASTIC PACKAGING CHOICE

The focus groups began with an introduction by the moderator, who explained the topic, objective, and context of PET plastic and its environmental impact. After using projective techniques, the attendees were asked for their opinions on the matter.

Participants shared their experiences of collecting, reusing, and selling plastic to authorized recycling centers, as well as their familiarity with plastic-bottled products such as chlorine bleach and fabric softeners, among others.

Regarding the purchase of plastic-packaged products, focus group participants agreed that adult women, especially housewives, are the main consumers of single-use plastic-packaged products, particularly for household cleaning. This result is supported by previous research, such as Velentaga (2017) and Rodas et al. (2019), who also found that women, particularly housewives and students, are the major buyers of plastic-bottled products.

Table 1. Focus group participants.

Code	Gender	Age	City
FG1P1	M	24	Pasaje
FG1P2	F	21	Machala
FG1P3	M	18	Pasaje
FG1P4	F	20	Pasaje
FG1P5	M	24	Machala
FG1P6	M	19	Machala
FG1P7	F	20	Machala
FG1P8	F	26	El Guabo
FG1P9	M	21	Santa Rosa
FG1P10	M	20	El Guabo
FG2P1	M	25	Santa Rosa
FG2P2	M	23	Huaquillas
FG2P3	F	24	Santa Rosa
FG2P4	F	23	Huaquillas
FG2P5	M	23	El Guabo
FG2P6	F	27	Arenillas
FG2P7	F	25	Machala

Participants also discussed the reasons behind the consumption of plastic-packaged products, noting that companies choose this type of packaging due to its lower cost compared to alternatives such as glass. In addition, they mentioned that plastic packaging is easier to handle, transport, and offers more affordable prices to customers. These findings suggest that women, especially housewives with purchasing power, characterize the predominant consumer of plastic-bottled products, as the packaging design facilitates their use and product preservation.

5.1 BRAND AND PRODUCT POSITIONING RELATED TO PLASTIC PACKAGING

The focus group participants (table 1) indicated that the most consumed brands in plastic bottles in the beverage sector include Pure Water, Tesalia, Coca Cola, Pepsi, Güitig, and Fuze Tea. Meanwhile, in household cleaning and personal care items, they include Clorox, Suavitel, Pantene, Sedal, La Favorita, Bonella, and Nestlé. They prefer to purchase these brands due to their market positioning, product preservation, spill and waste prevention, and prices that match the consumer's economy. Additionally, they emphasized that the quality is different compared to other types of packaging and the product is preserved for longer. Some characteristics that consumers consider when purchasing plastic-bottled products are product presentation, size, brand, color, and quality.

This result is consistent with previous studies, such as Herrera (2017), Benítez et al. (2020), and De la Torre (2019), which show that respondents consume sugary drinks, plastic-bottled products, and staple goods in plastic bottles due to their taste in the case of food and drinks, ease of acquisition, price, presentation, and material for products in general. It also coincides with the articles by Coba (2021) and Jaramillo (2018), which indicate that Ecuadorian households prefer brands such as Toni, Coca-Cola, Maggi, and La Favorita, presented in plastic bottles, and that 98% of respondents consume drinks in this type of packaging.

5.2 CONSUMPTION HABITS REGARDING PLASTIC-PACKAGED PRODUCTS

Focus group participants (table 1) mentioned that they purchase plastic-bottled products in shopping centers, stores, supermarkets, mini markets, and pharmacies. They prefer to shop at these places due to their proximity to their homes, promotions, discounts, necessity, price, and time. However, there are few sales points where alternatives to plastic are presented.

This result aligns with the research by Freire et al. (2019), which shows that 44.7% of respondents prefer to buy plastic-bottled products in shopping centers, followed by 22.9% who tend to acquire them in local stores. It also agrees with the study by Rosales et al. (2021), which indicates that 40.3% of respondents shop at Supermaxi, followed by 36.9% who purchase at local stores. These results highlight consumers' preference for buying plastic-bottled products in establishments close to their homes and where affordable prices and time savings are offered.

Focus group participants (table 1) expressed that they prefer to purchase plastic-bottled products on special occasions such as family gatherings, meetings with friends, celebrations, parties, as well as during sports activities, outings in the park, and similar

events. They indicated that they buy plastic-bottled products every two weeks for their homes, while for personal consumption, they acquire them daily. The factors influencing the purchase of these products are time, price, and necessity, with price being the most determining factor in their buying decision.

These results coincide with research such as Guano (2019), Cali (2020), and Villón (2019), which highlight the preference for consuming bottled sugary drinks at work, study centers, family gatherings, sports activities, and the importance of price in the purchasing decision. However, there are discrepancies with studies such as De la Torre (2019) and Ponce et al. (2019), which report monthly and quarterly purchase frequencies and a preference for plastic-bottled products for reasons of environmental conservation and the use of disposable materials.

The focus group results suggest that participants consume plastic-bottled products due to factors such as practicality, lack of alternatives in the market, packaging presentation, and affordable prices. These products are primarily purchased at shopping centers, stores, supermarkets, and pharmacies due to their proximity and promotions. Despite the discrepancies in purchase frequencies, these findings contribute to understanding the personal factors influencing individual consumption of single-use plastic packaging and may be useful in developing strategies for reduction and awareness-raising around this topic.

5.3 ALTERNATIVES TO PLASTIC BOTTLES

The participants in the focus groups expressed that, in addition to plastic bottles, they opt for using glass bottles because the taste of the product is different from those bottled in plastic, and the packaging presentation is eye-catching and elegant. They also mentioned that glass bottles are returnable and help reduce the consumption of plastic bottles. Moreover, they recommended using other types of packaging, such as glass and cardboard, as these materials contribute to preserving the environment and can be reused and recycled.

These results agree with studies such as Cobos (2021), which indicates that 41.41% of the surveyed people prefer to consume products bottled in plastic, 32.3% in cardboard, and 20.8% in glass; and Franco (2017), which shows that 82.32% of people choose to buy products bottled in glass due to their greater environmental friendliness. Furthermore, they are consistent with the research by Rosales et al. (2021), which highlights the preference for plastic bottles for liquid beverage consumption, followed by Tetra Pak packaging.

The focus group findings reflect the growing preference for alternatives to plastic bottles, such as glass and cardboard, which contribute to preserving the environment.

These results can be useful for the development of strategies promoting sustainable packaging and raising awareness about the impact of single-use plastic consumption.

Recycling of single-use plastic bottles Focus group participants (table 1) mentioned that they have been recycling plastic bottles for approximately one to ten years and also expressed the need for more infrastructure and recycling programs in El Oro to facilitate and promote recycling. This result agrees with research such as Paredes et al. (2021), which shows that 52.72% of Ecuadorian households dispose of plastic bottles, while 46% recycle plastic bottles. It also aligns with the study by Herrera et al. (2017), concluding that there is a low percentage of plastic bottle recycling in Ecuador due to the lack of infrastructure and recycling programs at the national level.

Participants recognized certain symbols and colors related to recycling and highlighted the advantages of recycling plastic bottles for businesses and consumers. This result is consistent with the study by Mancheno et al. (2020), which emphasizes the importance of informing people about the consequences of massive plastic consumption and use. They also mentioned international initiatives, such as the United Nations Environment Program (UNEP) and the United Nations (UN) initiative, in which 200 countries committed to reducing or decreasing single-use plastic bottles by 2030.

Some participants suggested implementing recycling machines in public places and establishing collection points in different sectors of the city. These findings reflect the growing awareness of the importance of recycling single-use plastic bottles and the need for adequate infrastructure and programs to promote recycling and reduce the environmental impact of these products. These results can be useful for developing strategies and policies that encourage recycling and raise awareness of the problems associated with single-use plastic bottles.

6 CONCLUSIONS, CONTRIBUTION AND FUTURE RESEARCH DIRECTIONS

Through this research, a study was conducted to identify the personal factors that influence the behavior of individuals who use single-use plastic packaging. Certain characteristics and patterns were determined that respond to the objective of the study.

The first element to highlight relates to the profile of the single-use plastic consumer, determining that women, mostly housewives, aged between 18 and 65 years with purchasing power, are the ones who consume more products bottled in plastic. The consumption of these products is due to the packaging design and the longer preservation of the product. This result is consistent with the research conducted by Rodas et al. (2019), in which it is pointed out that 70.7% of the surveyed women, mainly housewives,

are the ones who most acquire products bottled in plastic for Ecuadorian households. In addition, it indicates that 46.3% of consumers choose products in plastic bottles to care for and preserve the environment.

The second notable element relates to the types of products, showing that consumers prefer bottled products from brands such as Clorox, Suavitel, Coca Cola, Pepsi, Pantene, Sedal, La Favorita, Bonella, Pure Water, and Nestlé. This result coincides with the research by Coba (2021), which specifies that Ecuadorian households prefer to consume brands such as Toni, Coca-Cola, Maggi, and La Favorita, which are presented in plastic bottles and are considered essential products. Regarding the place of purchase, it is highlighted that consumers prefer to buy products bottled in plastic at local stores and supermarkets. This result is consistent with the research by Rosales et al. (2021), which indicates that 40.3% of respondents shop at Supermaxi, followed by 36.9% who purchase products in local stores.

Regarding the time of purchase, consumers prefer to buy products bottled in plastic on special occasions such as family gatherings, with friends, celebrations, and parties. However, this result does not coincide with the study by Villón (2019), where respondents mentioned that they prefer to consume products bottled in plastic when doing sports, highlighting that price is the most influential factor in their purchase decision. Concerning the frequency of purchase, it is noted that consumers buy products bottled in plastic every fifteen days for the home and for personal consumption, they buy them daily. This result agrees with the study conducted by Cali (2020), in which it is mentioned that 52.2% of respondents buy products bottled in plastic daily.

Meanwhile, regarding alternatives to plastic bottles, consumers opt for buying products in glass bottles, as they are returnable and reduce the consumption of plastic bottles. However, this result does not coincide with the research by Rosales et al. (2021), in which it is mentioned that the surveyed people prefer plastic bottles for the consumption of liquid beverages, followed by Tetra Pak containers.

In conclusion, the research allowed identifying different personal and consumption factors that influence the behavior of individuals who use single-use plastic packaging. Although some of the conclusions do not coincide with previous studies, these results provide an overview of the preferences and behaviors of consumers regarding products bottled in plastic. These findings could be used to design marketing strategies or public policies focused on reducing single-use plastic consumption and promoting more sustainable and environmentally friendly alternatives.

Regarding future actions, it is suggested to carry out a confirmatory study or data collection through surveys to corroborate the elements raised in the present

research, such as trends and orientations concerning the personal factors that influence the consumption of single-use plastic packaging. When designing marketing strategies related to environmental awareness, green consumption, green management, and other aspects related to the environment, it is essential to focus on a specific audience, aligned with the results of the present research.

7 ACKNOWLEDGEMENTS

The authors present this work as a result of the activities developed within the framework of the research project “Management of companies and stakeholders towards sustainability from corporate social responsibility”, enrolled in the career of Business Administration at UMET Sede Machala. In this sense, we are grateful for the support, assistance and motivation provided for the development of this research by the project staff.

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