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Article

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The role of brand equity and decoy effect on actual purchase of insulated water flasks

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ABSTRACT

This study investigated the impact of brand equity and the decoy effect on the purchase of insulated water flasks. This was done in order to address a gap in understanding the decoy effect's effectiveness across sustainable alternatives like insulated water flasks and their influence on consumer purchasing behavior. The research involved 405 participants who completed an internet survey, distributed among different social media platforms. Findings analyzed using higher-order partial least square structural equation modeling with SMART PLS v3.0, revealed that both the marketing mix and the decoy effect significantly influenced actual purchase behavior. Promotion has the most substantial impact within the marketing mix factors while price has the least effect, suggesting that consumers are willing to invest in reusable insulated water flasks due to long-term savings and benefits. Additionally, attitude significantly influences purchasing intentions, highlighting consumers' role in decision-making. The study underscored the importance of individual attitudes and perceived behavioral control in driving purchasing decisions.

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Brand equity; decoy effect; insulated water flask; higher-order structural equation modeling; marketing mix



SUBJECTS


Psychological Science; Multidisciplinary Psychology; Business, Management and Accounting; Applied Mathematics

1. Introduction

Active people in tropical climates risk heatstroke due to high temperatures and humidity (Duong et al., 2017). To which, cooling water, typically in canteen bottles or insulated water flasks, is essential to prevent dehydration, replace lost fluids, and mitigate heat injuries. An insulated water flask, which has different types as branded such as thermoflask, aquaflask, hydroflask and vacuum flask, is on the rise in the market. These are portable containers that are intended to maintain the beverages' temperature steadily throughout time. Therefore, insulated water flasks have many advantages such as environmental benefits, temperature retention, portability, and durability. For example, vacuum flasks are made up of two flasks, or jars, stacked inside one another. The beverage's temperature remains consistent for an extended period due to a quasi-vacuum created between the two surfaces, reducing heat transmission. The majority of industries employ metal, foam, plastic, and borosilicate glass as common components; cork or polyethylene plastic is used for the cover or opening (Anyanwu et al., 2022). People's awareness of environmental issues and health issues have been expanded which is why many individuals are now purchasing insulated water flasks. These products are becoming more popular over the years because it is reusable and a better substitute for single-use plastic bottles.

According to Jha (2022), the market size of insulated water flasks in 2023 is about 2.2 billion US dollars. Until 2033, the global insulated water bottle market is projected to experience a compound annual growth rate of 3.4%. Because of this, the global market for insulated drinkware is expected to grow from

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US\$ 2.2 billion in 2033 to US\$ 3.1 billion by 2033. This is because plastics have become a crucial material in our daily lives, particularly in food and drink packaging (Matthews et al., 2021). In addition, their widespread use has raised environmental concerns. As highlighted by Stefanini et al. (2021) the composition of plastic, consisting of numerous small molecules, leads to a decomposition process that takes thousands of years, resulting in the formation of microplastics, posing a threat to marine life. Stafford and Jones (2019) highlighted the negative effects on marine animals, including seabirds, turtles, and cetaceans, caused by ingesting or becoming entangled in plastic, resulting in suffering and mortality. As awareness of these environmental issues grows, people are shifting towards more sustainable alternatives. Therefore, it is important to understand that purchasing intention, salability, and brand significance are important due to environmental and product trends.

As explained, Stafford and Jones proposed options like using reusable cups and personal water bottles to address environmental concerns associated with plastics. Given the environmental pressures of single-use packaging, a trend towards reusable packaging, perceived as both environmentally friendly and economically advantageous, has emerged (Coelho et al., 2020). Furthermore, Tamburini et al. (2021) emphasized the recyclability of aluminum bottles, which can be reused for up to 2.5 years. Due to their reusability, De Marchi et al. (2020) found that Italian consumers are willing to pay a premium for bio-bottles over PET bottles.

In response to these environmental challenges, an increasing number of individuals are adopting sustainable development practices and embracing green initiatives to protect the planet (Shen & Wang, 2022). The concept of green purchasing, which reflects consumers' efforts to conserve resources and support eco-friendly products, has gained considerable traction. Despite manufacturers transitioning to environmentally conscious production methods, certain consumers encounter obstacles due to ingrained consumption matters, opposition to new technologies, or the higher costs associated with green products (Jung et al., 2020). Research findings indicated a consistent and robust interest among consumers in environmental protection and green products (Coderoni & Perito, 2020). In Hong Kong, for example, 76% of consumers opt for green purchases based on labels, and in the United States, 83% actively engage in green activities and choose eco-friendly products (Chen et al., 2018). More than 80% of Taiwanese consumers willingly pay extra for environmentally friendly products, with over 60% prepared to pay an additional 10% for green alternatives. This consumer behavior aligns with the global trend of an increasing emphasis on sustainable consumption. Additionally, governmental initiatives play a pivotal role in promoting green practices. In Taiwan, officials have actively encouraged energy conservation and carbon emissions reduction, resulting in political support for standardized energy prices and a substantial economic boost of NT\$97 billion within the green industry (Chen et al., 2018).

Throughout the years, companies have used different marketing strategies, and one of these is the decoy effect. When a decoy is included in the choices, more participants prefer the alternative that it represents (Ahn & Vazquez Novoa, 2016). The probability of choosing one option over another may increase if a decoy is included in a decision-making process. This could be typically seen when we go to coffee shops offering three sizes: small, medium, and large. Doing so would make their customers choose to buy the big size because it seems like a good deal at first glance (Hashem & Al-Zyoud, 2020). On another note, the brand equity—defined as the value of the product or service a company has, is said to be subjective among consumers (Bakshi & Mishra, 2016). That is, if one were made to choose between products, it could be beneficial if the product being pushed to be sold is environmentally friendly. Bajar et al. (2024) implicated that people are now more eco-conscious, choosing products that are environmentally friendly or are made with reduced plastics. Especially in the Philippines, the rise of eco-behavior has been evident as presented in their study. The development of products through eco-friendly process was suggested to be one branding a business could have for increased equity.

Nowadays, people are aware of their environmental impact and make conscious choices about what to buy based on how it affects the environment (Ndofirepi & Matema, 2019). However, some consumers still need to recognize the more sustainable products like insulated water flasks. Sometimes, consumers make choices that they believe to be the most environmentally responsible, but other choices may be more sustainable (Fetner & Miller, 2021). Furthermore, the actual demand for green products significantly needs to catch up to consumers' stated preferences, resulting in a relatively low market share for these products (Barbarossa & Pastore, 2015). Recent studies were not able to consider these aspects,

specifically considering both the strategies and marketing aspects of brand equity and decoy effects among purchasing eco-related products. This raises one of the significant gaps among current literatures.

The decoy effect could convince more consumers to buy appropriate sustainable products. Since it is on a subconscious level, it can add a new perspective to a consumer-product comparison by shifting the focus away from one product and onto another (Sherlin et al. 2020). The decoy effect could increase sales of such products when used correctly, especially with proper marketing strategy such as marketing mix inclusion (Jeong et al., 2021). To which, numerous studies have explored the phenomenon of the decoy effect. This is illustrated in the research conducted by Hashem and Al-Zyoud (2020), which examined the impact of decoy marketing on impulsive buying behavior among adult customers in Jordan's tech market, with brand equity mediating this relationship. On another note, Bakshi and Mishra (2016) analyzed the equity on a financial note but has implications that are generic, which was suggested to be applied in other types of businesses. These studies were able to underscore a positive note on both variables, but has yet been applied among other product-specific or product purchase analysis. There remains to be a notable gap in researchers' comprehension of the decoy effect's efficacy across various product contexts, especially concerning insulated water flasks as a sustainable option, their marketability, and consumer purchase intentions.

With businesses trying to meet market demands, compete in related and existing businesses, as well as develop strategies, establishing brand equity and decoy effect may not holistically encompass the solution to the problems. Taking notes from the study of Ong et al. (2021), marketing mix using 4Ps as variables could provide better understanding and insights on how to strategize on the strengths and weaknesses of a product-related business. However, their study considered marketing mix as a whole variable and implications were made based on factor analysis. There may be limitations on these such as effects of distant variables and factors (Fan et al., 2016) or mediating variables (Woody, 2011). Studies like that of Sarstedt et al. (2019) suggested the utility of higher-order constructs to present better implications of several affecting factors under a variable. This is especially true among marketing and branding related studies. To which, it would be better to separately analyze the 4P's of marketing mix—which has yet been considered among literatures. Moreover, the inclusion of overall behavior could be applied. As suggested by the developer of the theory of planned behavior (TPB), Ajzen (2020), the model itself has been proven to be effective to generalize consumer and human behavior. However, it was suggested that extension or modification could be made to provide better implications and understanding. To which, the inclusion of TPB domain, brand equity, decoy effect, and higher-order construct marketing mix could better assess the actual purchase among consumers—which has yet been established as a model.

Therefore, this study aimed to fill this knowledge gap by providing a thorough examination of whether the decoy effect, brand equity, consumer behavior, and marketing mix could be an effective approach to incentivize consumers to make environmentally conscious purchasing choices. Through the use of structural equation modeling, a holistic approach on the measurement could be created. The outcome of this study could help determine whether the decoy effect can influence consumers toward sustainable behavioral intentions. Moreover, it could give insights into the effectiveness of this technique among this group and how it can help businesses market sustainable products using the decoy effect and marketing mix as a strategy.

2. Conceptual framework

Figure 1 presents the research's theoretical framework, featuring three independent latent variables (decoy effect, brand equity, and marketing mix) and five dependent latent variables (attitude, subjective norm, perceived behavioral control, purchasing intention, and actual purchase). A total of 10 hypotheses were created to holistically measure the intention and actual purchase of Filipinos for insulated water flasks.

As defined by Minarto et al. (2021) attitude encompasses a person's feelings and mindset, shaping their positive or negative emotions, thoughts, and inclination toward specific objects. This psychological construct is pivotal in predicting whether someone plans to carry out specific actions. Hoque et al.

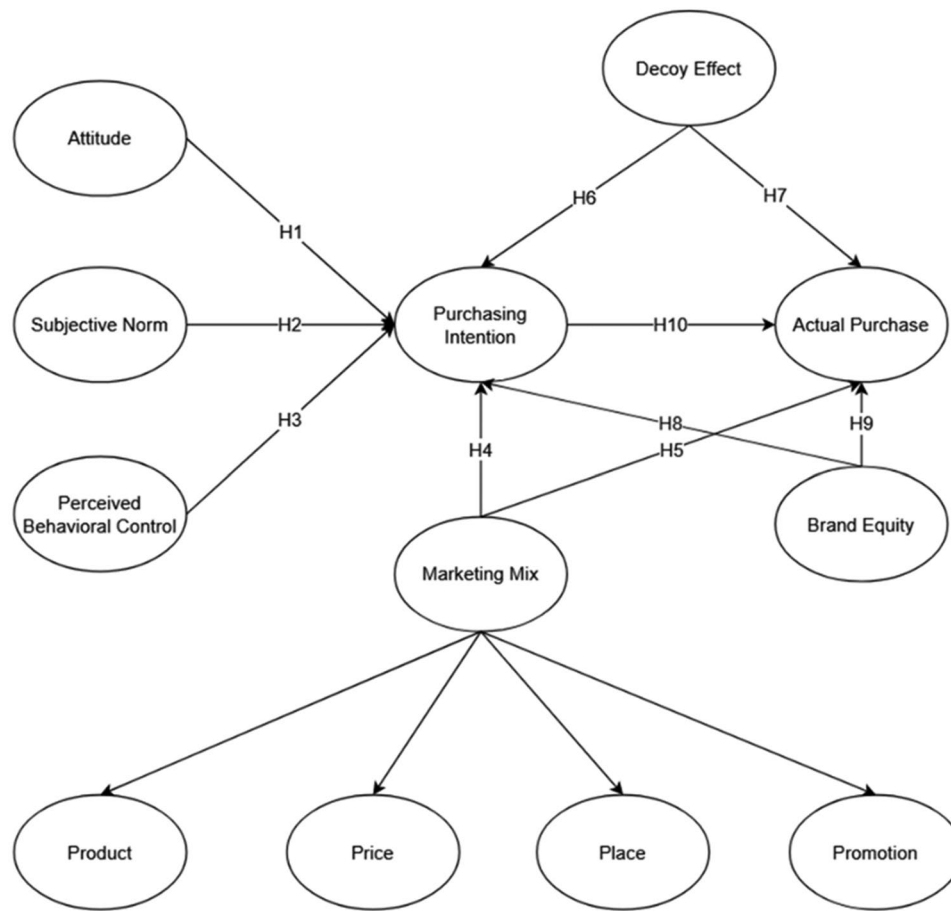


Figure 1. Conceptual framework.

(2018) emphasized that the more favorable one's attitude is toward a product, the stronger one's intention to buy. The intention to buy, also known as purchase intention, is a crucial determinant in purchasing decisions (Pebriani et al., 2018). Thus, individuals with a robust intention to purchase a product will likely follow through. This connection between attitude and purchase intention is based on anticipating either good or bad experiences and expectations shaped by individual beliefs, internal, or external social influences. Sharma and Dayal (2017) found that when consumers believe in the effectiveness of environmentally friendly products, their intention to purchase them increases due to a strengthened sense of personal capability to be environmentally conscious. Within the concept of efficacy, the consumer is able to develop an attitude that leans towards green consumerist behavior. This factor is closely linked to how consumers feel about eco-friendly products and is a major indicator of whether they intend to buy them, much like what was observed in the research by Sharma and Foropon (2019). In relation to this study, the concept of attitude toward brands as tied to purchase intentions may play a role in consumer behavior dynamics toward green products, specifically insulated water bottles. Therefore, it was hypothesized that:

Hypothesis 1 (H1). Attitude towards a brand significantly influences purchasing intention.

Subjective norms, as described by Ajzen (1991), refer to the impact of outside factors on customer intentions, involving the likelihood of approval or disapproval from significant individuals or groups regarding a specific behavior. Vermeir and Verbeke (2006) illustrated the concept greatly wherein consumers buy green products due to the implied pressure of norms from peers. The previous study of Chen (2007) suggested that there is a favorable connection between subjective norms and customers' intentions to purchase sustainable and environmentally friendly products. Consequently, individuals progressively opt for environmentally friendly products and embrace green consumption practices. Studies by Si et al. (2020) and Tan et al. (2018) underscored and substantiated this evolving trend. The green

purchasing behavior (GPB) is directly influenced by the presence of subjective norms as it is well tied with the consumers' environmental commitment to society (Ogiemwonyi et al., 2023). With fluctuating levels of environmental activities and activism within various localities, it is to be expected that subjective norms serve as determinants for eco-friendly product purchases. Therefore, it was hypothesized that:

Hypothesis 2 (H2). Subjective norm significantly influences purchasing intention.

The concept of perceived behavioral control describes one's sense of control over a specific behavior, showing how simple or complex its execution is (Guo et al., 2023; Nekmahmud et al., 2022). The recognition of both barriers and abilities shapes this perception. Environmental factors can influence perceived behavior, empowering individuals to undertake specific actions (Moloi et al., 2022). Regarding reusable water bottles, their merit is that they are eco-friendly solutions against single-use water bottles which a million is purchased every minute (Bruchmann et al., 2021). As for the insulated water flasks, it has the added benefit of conserving energy that would have been used to reheat/recool their preferred liquids. In a way, green products that present themselves as less complex for the consumer to perceive the benefits may be a factor in formulating purchase intentions. Therefore, the crucial factor lies in individuals' perceived level of control over their behavior's performance. In the context of purchasing decisions, consumers faced with external influences are likely to exhibit higher perceived behavioral control if they believe they possess ample resources and opportunities (Zhuang et al., 2021). Past research indicated that consumers are more likely to buy eco-friendly products when they feel they have the ability to influence external factors that might otherwise appear beyond their control (Xu et al., 2021). In relation, this current study aims to investigate the qualities and characteristics of insulated water bottles as a green product and their marketing to determine their influence on consumer purchase intentions. Therefore, it was hypothesized that:

Hypothesis 3 (H3). Perceived behavioral control significantly influences purchasing intention.

The marketing mix is made up of product, pricing, place, and promotion, commonly known as the 4Ps of marketing, are crucial components in a company's strategy to connect with its customers and is deemed essential for both corporate success and product effectiveness (Thabit & Raewf, 2018; Marušić, 2019). This perspective is further emphasized by Yandug et al. (2023) on the exploration of the marketing mix as a set of variables crucial for influencing consumer responses to products or services, influencing purchasing intentions. Specifically delving into the importance of aligning marketing mix variables with the preferences of young consumers, showcasing that such alignment can amplify awareness and purchase intentions. This finding also aligns with Mahmoud (2018), which found a significant link between the green marketing mix and intentions to purchase, demonstrating that each of the 4Ps independently influences both the intention to buy and the actual purchasing behavior. As a reflection on the study of Yandug et al. (2023), individual assessment is better than a holistic presentation of the marketing mix as it provides better insights for strategy build-up, yet limited studies have taken advantage of this parameter.

A product can be a physical item or a service, designed to fulfill consumers' needs and desires (Widyastuti et al., 2020). The product's unique characteristics and attributes had a significant effect on purchasing intention. This crucial factor determined whether customers would buy a product or service (Farid et al., 2023). Proboyo and Kusuma (2019) highlighted that the product is a crucial variable affecting purchase intention. They found that, especially in the context of parents looking out for their children, factors such as the product's brand name and quality significantly influence purchase intention. This correlation extends to actual purchasing as well. However, most studies have yet to specify the marketing mix as an individual variable reflecting the 4Ps (Bajar et al., 2024; Yandug et al., 2023). Sugiono and Widiastutik (2021) suggested that products exert a positive and noteworthy influence on purchasing decisions. Essentially, presenting better products to consumers can enhance their purchase decisions and increase customer satisfaction and loyalty. Santoso and Sispradana (2021) aligned with this perspective, indicating that improving product quality contributes to better purchasing decisions by consumers.

In essence, if a company delivers high-quality products, consumers perceive greater value in their purchases compared to products of lower quality. For products to be innovative, companies should consider the environment, technology, and the needs and wants of their customers (Kalogiannidis &

Mavratzas, 2020). Moreover, according to Bi et al. (2019) companies should strengthen the brand marketing to promote the uniqueness of its brand, to innovate production technology and to widen distribution pipe. This will eventually lead to a positive reflection on purchasing behavior and actual purchase of products.

The second factor in the marketing mix is promotion, which involves the process of marketing a company's products to potential consumers. It was found that promotion raises brand awareness, and in turn increases sales (Yudha et al., 2024). Their research revealed that promotion has a considerable effect on consumers' intentions to make a purchase. A successful promotional campaign builds awareness of product and makes it stand out from competitors. Nonetheless, the capitalization on what promotion should be considered has yet been generalized. One reason of which is that promotions are not at all a generalized structure applicable for any type of business. In context, promotion plays a crucial part in engaging consumers in their buying decisions. However, findings from the study concluded that promotion does not have a substantial relationship with customers' purchasing decisions. The respondents in their study did not consider promotional items when deciding to make a purchase. In contrast, Panjaitan et al. (2019) suggested that promotion does have a notable influence on consumer purchasing decisions. When consumers are provided with thorough product information through promotional activities, they tend to be more inclined to make a purchase. Therefore, having effective promotional content is crucial in facilitating informed consumer decisions. In the current market where technology is being used by almost everyone, marketers should use this to their advantage. According to Lim (2023), B2B marketers utilized email marketing or any digital marketing like podcasting. This would help businesses to engage with potential customers. Thus, this presents as a basic reflective construct of marketing mix.

The third component is price, recognized by Guan et al. (2020) as a pivotal element in the marketing mix. They indicated that pricing had the greatest influence on consumers' intention to purchase. However, conflicting perspectives emerge from studies by Garaika et al. (2019) and Proboyo and Kusuma (2019) suggesting no significant impact on purchase intention. These studies proposed that once consumers' needs are met and they obtain the desired products, price becomes less relevant. Yet, it could not be disregarded as applicability of the 4Ps may differ in among different brands, businesses, and products (Yandug et al., 2023). In contrast, Febrianti et al. (2021) concluded that price plays a significant part in a customer's purchasing decision. Their study revealed that respondents consider product prices, assessing appropriateness and satisfaction before making a purchase. Muhammad (2019) suggested that price was not the foremost consideration in consumer purchasing decisions. Their study highlighted that product influences the consumers' purchasing decision compared to other variables. For price to be innovative in the current generation, companies must consider pricing their products precisely and appropriately to be able to compete in the market (Yolanda et al., 2024). In this study's context, employing this approach might serve as a strategy to draw in more customers and maximize profits. This is because the value of a product to a customer is greatly impacted by the price or cost of the item. Consequently, it affects the company because a product's price includes all of the costs associated with its production, distribution, and promotion.

The final component of marketing mix is place, denoting the location where a product can be obtained, encompassing both physical and virtual avenues. According to Elvinda et al. (2019) place or a distribution channel is a marketing strategy crafted to facilitate the supply of items and services from manufacturers to consumers, and their research indicated that this factor had a notable impact on consumers' intent to purchase. They highlighted the influence of distribution channels on purchasing intention, emphasizing how products are more likely to be purchased and meet consumer satisfaction when they are easily accessible. Furthermore, Bathmathan and Rajadurai (2019) established a significant relationship between place and actual consumer purchases, attributing it to the distribution channels employed for the product. This connection gains additional support from Widyastuti et al. (2020) which suggested that enhanced accessibility of the place and an increase in the value of the place positively influences consumer purchasing decisions. For place to be innovative in the current generation, companies should make use of the digital technologies enabling them to reach their consumers easier.

A study by El Houda and Baghdad (2023) implicated that companies could use the digital technology in different ways that would best fit the preferences of the company. Their research showed that

different companies utilized digital and e-commerce platforms, which in the scope of this study, might serve as a strategy to ensure easy access to their products, providing convenience and potentially enhancing customer satisfaction. Additionally, Ong et al. (2021) presented some indicators on why place is significant. For products that people wear, it should have a sense of feel and tangibility for consumers to appreciate it. However, for other aspects, products may just be readily available and could easily be purchased like from online shops.

With the studies presented, it can be posited that employing the marketing mix incorporating the 4Ps reflective construct, particularly in relation to eco-friendly products, has the capacity not only to influence consumers' intentions to purchase but also to impact their actual purchasing behavior. Since a holistic assessment were made on the 4Ps as a general variable, a different approach may be implied with the use of higher-order reflective construct of the 4Ps marketing mix. Therefore, the following were hypothesized as:

Hypothesis 4 (H4). Marketing mix significantly influences purchasing intention.

Hypothesis 5 (H5). Marketing mix significantly influences actual purchase.

The study by Hashem and Al-Zyoud (2020) offers a valuable understanding of the decoy effect, illustrating how the inclusion of a less attractive third option can impact consumer decisions through manipulation of the decision-making process. The findings indicated that consumers might be inclined towards a target product, even if it is priced higher, due to cognitive biases triggered by the presence of a decoy option. This understanding aligns with Cui (2022), who suggested that, when faced with a decoy option, consumers tend to lean towards choices that seem to offer more apparent advantages or benefits. Relating this information to the broader context, the literature supports the notion that the decoy effect influences consumer behavior on a larger scale. In the context of this study, a subjective format was reflected on the decoy effect—implying that options, availability, impulse, and benefits could be assessed as a whole (Hashem & Al-Zyoud, 2020).

The cognitive biases identified in decision-making processes underscore the potential for the decoy effect to divert individuals away from options that may genuinely align with their specific needs or preferences. Expanding on the research by Sherlin et al. (2020) it was highlighted that the decoy effect as a potent psychological tool influences economic decision-making. They found that this effect can impact choices, even leading people to buy more expensive items if strategically presented as more attractive compared to other options. Additionally, Ahn and Vazquez Novoa (2016) found that individuals are inclined to select an option if there is a noticeable distinction between alternatives. Introducing and emphasizing certain options increases the likelihood of it being selected and purchased. With the studies presented, the decoy effect, by strategically presenting and emphasizing options, not only affects consumer choices but also directly impacts the final decision to make purchases. This emphasizes the practical implications of the decoy effect in shaping economic decisions and purchasing behavior. Therefore, the following were hypothesized as:

Hypothesis 6 (H6). The decoy effect significantly influences purchasing intention.

Hypothesis 7 (H7). The decoy effect significantly influences actual purchases.

According to the study of Erlangga (2021), brand equity through increasing brand recognition and distributing consumer feedback and reviews, among other things, emphasizes the vital impact that modern marketing platforms like social media play in consumers' purchasing intentions in order to make their actual purchases. The levels of brand equity take the lead to fully understand consumer attitudes and expectations regarding cutting-edge, delightful marketing tactics like social media to satisfy their demands and expectations. This ultimately results in higher levels of fulfillment and loyalty to the brand (Alwan & Alshurideh, 2022). It was seen that reducing the influence of brand equity would increase the requirement for greater integration of new marketing strategies that place a greater value on the common buying patterns in order to successfully address the modifications in the field. Brand associations can arise if customers have heard of a brand at some point and have even had indirect encounters with it. As a result, once customers are aware of the brand, certain thoughts and ideas may arise in their minds which can lead to actual purchase of the product (Chan et al., 2018).

Furthermore, Munamba and Nuangjamnong (2021) investigated and firmly established the influence of purchasing intention on actual consumer behavior, revealing that a substantial correlation between green products and the intention to purchase them can foster a positive attitude towards sustainability. According to Amoako et al. (2020) this can affect the consumers' green buying behavior. This concept gains additional support from Suyanto and Dewi (2023) whose research confirmed a strong and beneficial relationship between purchase intention and actual buying behavior, suggesting that consumers with greater purchase intentions are more inclined to make purchases. However, implying a larger build up on brand equity may reflect a different cognitive bias among respondents when assessments are performed. The suggestion of related studies would be to create a unified and single dimension subjective assessment of the variable to create a more distinct brand equity reflection (Bakshi & Mishra, 2016; Hashem & Al-Zyoud, 2020). In relation to this study, when consumers decide to purchase a product or brand, their level of awareness, loyalty, perceived value, and emotional attachment to the brand all contribute significantly to shaping their intention to buy, potentially resulting in an actual buying decision. This was built upon and reflected as constructs, following related studies (Hashem & Al-Zyoud, 2020). As per Nasir and Guvendik (2021), it has been thought that consumer innovativeness plays a moderate role. Consequently, it was shown that elements related to innovation had an impact on both high and poor perceptions of brand equity. It was highlighted that innovation causes a brand with low brand equity to be perceived as having a higher level of brand equity. Therefore, it was hypothesized that:

Hypothesis 8 (H8). Brand equity significantly influences purchasing intention.

Hypothesis 9 (H9). Brand equity significantly influences actual purchases.

According to a study by Ajzen and Fishbein (2002), the intention to behave in a certain way strongly predicts actual behavior. It was explained that the domains of TPB can be used to predict intentions to execute various actual activities. Whereas a study by Azzari and Pelissari (2020) consumer branding in which a buyer's intention to buy is influenced by brand equity, which motivates them to make additional purchases. Brand equity refers to the ability to assess brand customers rationally and identify factors influencing buyers' perceptions of the brand. In accordance with this study, customers' actual purchases are influenced by brand equity because of their favorable perceptions of the brand or the product. Furthermore, this study says that buy intention results from brand equity and can influence actual purchase behavior. Research by Azzari and Pelissari (2020) has found that there is widespread reporting of the beneficial benefits of brand equity on consumers' actual purchases.

According to the study Narayanan et al. (2022) unexpected, unplanned, and external events may interfere with and alter a consumer's purchasing intentions, even if research accurately determines those intentions at any one time. Significantly, the study comes to the imperfect conclusion that buying intention and actual purchase are connected. However, when it comes to insulated water flasks, there is a noticeable distinction regarding the intention to buy and the actual act of purchasing. It is a familiar concept in marketing where a consumer's readiness to buy a specific product or service is commonly known as their purchase intention concept. They highlighted how brand equity and real purchases are positively correlated. Thus, it was hypothesized that:

Hypothesis 10 (H10). Purchasing intention significantly influences actual purchases.

3. Methodology

3.1. Participants

The study included 405 participants selected through purposive sampling via an online survey. This study was approved by Mapua University Research Ethics Committees (FM-RC-23-01-76) prior to survey deployment. In accordance, informed consent was obtained among respondents (FM-RC-23-02-76). The survey was distributed across various platforms, including Facebook groups, Viber, and X, and was also shared on Instagram to enhance respondent participation. The use of purposive sampling aimed to guarantee a varied inclusion of backgrounds and perspectives, strengthening the relevance of the study's outcomes. The survey remained accessible from November 2023 to January 2024. The participant

Table 1. Respondents' descriptive statistics ($n=405$).

Characteristics	Category	N	%
Sex	Male	170	42
	Female	235	58
Age	18–22	252	62.2
	23–30	65	16
	31–38	30	7.4
	39–46	29	7.2
	47–54	14	3.5
	Above 55 years old	15	3.7
Educational Background	High School Graduate	86	21.2
	College Graduate	108	26.7
	Undergraduate	187	46.2
	Graduate Studies	24	5.9
Monthly Salary/ Allowance	Below Php 5000	159	39.3
	Php 5,001–Php 10,000	70	7.3
	Php 10,001–Php 20,000	64	15.8
	Php 20,001–Php 30,000	37	9.1
	Php 30,001–Php 40,000	28	6.9
	Php 40,001–Php 50,000	20	4.9
Metro Manila	Above Php 50,001	27	6.7
	Caloocan	9	2.2
	Las Piñas	42	10.4
	Makati	34	8.4
	Malabon	8	2
	Mandaluyong	7	1.7
	Manila	140	34.6
	Marikina	17	4.2
	Muntinlupa	13	3.2
	Navotas	6	1.5
	Parañaque	28	6.9
	Pasay	14	3.5
	Pateros	4	1
	Quezon City	35	8.6
	San Juan	5	1.2
	Taguig	16	4
	Valenzuela	10	2.5

demographics (Table 1) comprised 42% males and 58% females, with a significant portion (56.8%) falling within the 18–22 age range, primarily undergraduates (46.2%). Most participants resided in Manila City within Metro Manila, providing a localized yet diverse sample that could mirror the urban dynamics of the larger metropolitan area. Concerning household income, a significant proportion (39.3%) reported a monthly allowance of less than 5000.

3.2. Questionnaire

The questionnaire for this study was customized using the conceptual framework (Figure 1) and derived from relevant studies described in Section 2. The survey was conducted via Google Forms, using the comfort and simplicity of online distribution and completion. Five sections make up the questionnaire: demographics, actual purchase, brand equity, and structural equation model (SEM) constructs like the decoy effect. The 5-point Likert scale, with one representing 'strongly disagree' and five representing 'strongly agree', was intended to examine the SEM questionnaire (supplementary material). In the first portion, participants' gender, age, education level, employment status, monthly income, and city of residence within Metro Manila were among the demographic data that were gathered. Subsequent sections delved into the SEM constructs, decoy effect (Hashem & Al-Zyoud, 2020), brand equity (Bakshi & Mishra, 2016; Hashem & Al-Zyoud, 2020), behaviors (Ajzen, 1991; Ong et al., 2021), Marketing Mix (Ong et al., 2021; Yandug et al., 2023), and actual purchase (Ong et al., 2021; Yandug et al., 2023), aiming to comprehensively capture participants' perspectives on these key study areas. Measure items were adapted from the mentioned related studies. The items were created in a unidimensional manner as presented by related studies. For example, brand equity was modified and created to be a subjective construct by Wang et al. (2015). This was further confirmed by Bakshi and Mishra (2016) where the build up of the measure items represented the value of the product the objective wanted to measure. In this study's case, competition, brand image, offers, and up-to-date overall design was considered adapting related studies (Bakshi & Mishra, 2016; Hashem & Al-Zyoud, 2020).

3.3. Statistical analysis

The factors influencing consumers' decisions to purchase insulated water flasks were analyzed using the SEM technique. Farid et al. (2023) state that SEM is utilized to examine the variables about their causal structure. Elvinda et al. (2019) also investigated the impact of the marketing mix on purchase intention using the SEM technique as well. The survey findings were analyzed using partial least squares analysis structural equation modeling (PLS-SEM) (Dash & Paul, 2021). The relationship between indicators and perceived factors influencing customers' decisions to buy insulated water flasks was ascertained using the PLS-SEM, as recommended when considering newly developed frameworks. The analysis in this study was conducted using the SMART-PLS v3.0.

4. Results

4.1. The result of initial SEM

The initial Structural Equation Model (SEM) utilized to examine brand equity's mediating role in the actual purchase of an Insulated Water Flask is shown in Figure 2. There are 51 indicators and 11 latent variables in this model.

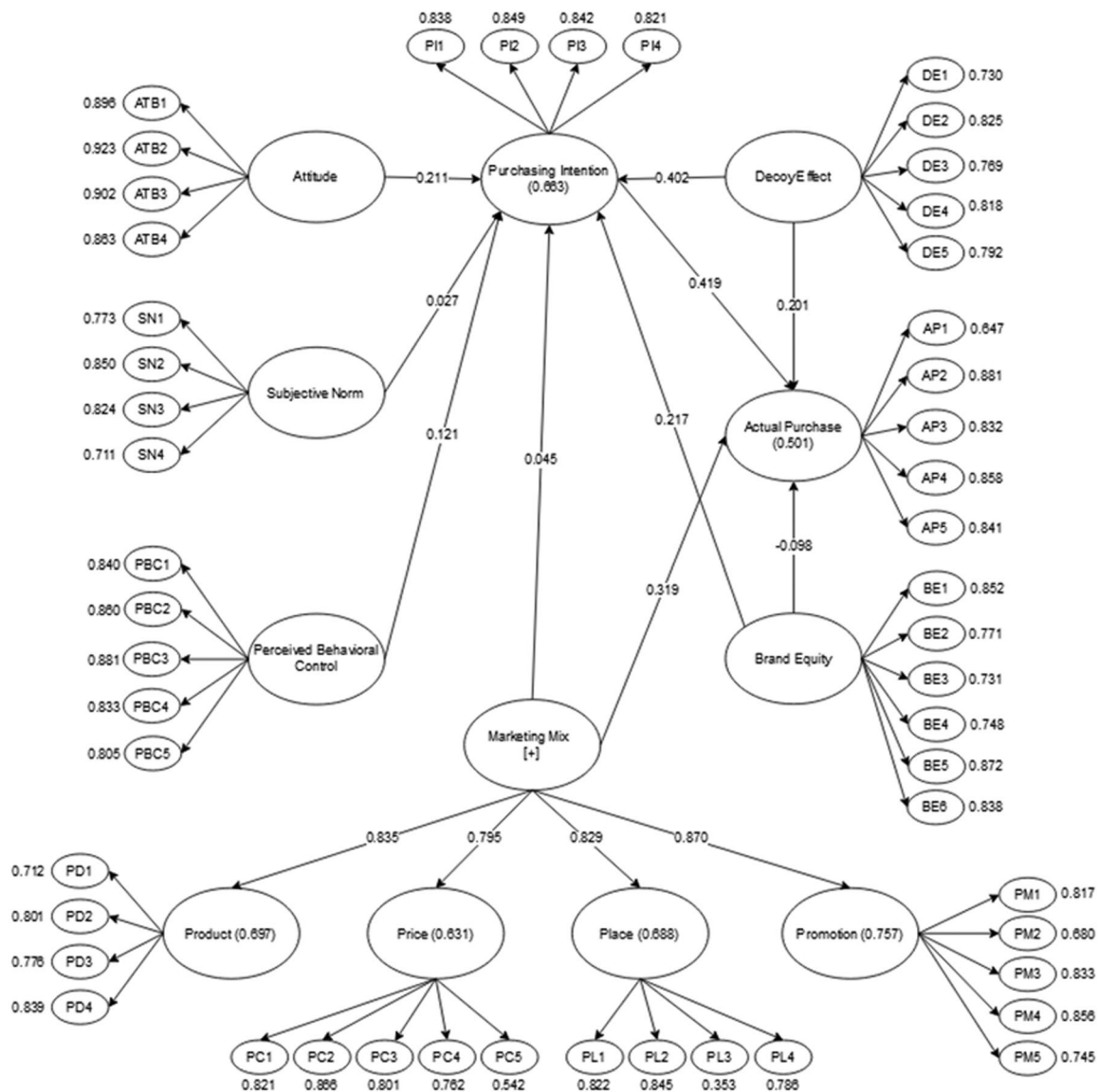


Figure 2. Initial SEM.

Table 2 displays the validity and reliability indicators for the initial and final models. According to Dash and Paul (2021) and Hair et al. (2021) items with initial loadings below 0.7 are removed from the final loading because they do not adequately represent variance, and variables with values less than 0.05 are considered inconsequential (Dash & Paul, 2021; Hair et al., 2021). Additionally, composite reliability (>0.50) and Average Variance Extended (AVE) were used to evaluate convergent validity. Given that all values meet the necessary criteria, Table 3 presents the convergent validity.

Discriminant validity was evaluated using the Heterotrait-Monotrait correlation ratio (Table 4) in addition to the Fornell-Lacker criterion to look at the overall relationship between each variable. According to Kline (2012) a Heterotrait-Monotrait ratio (Table 5) of 0.85 or less is deemed significant. Reflecting with Ab Hamid et al. (2017), the Fornell-Larcker criterion assigned constructs must have values greater than all loadings of other constructs. Values are seen to be within the permissible range, demonstrating good discriminant validity and reliability. As a result, the findings imply the validity of the general correlations between the constructs.

Table 2. Statistical analysis of indicators.

Variable	Item	Mean	SD	Factor Loading	
				Initial	Final
Product	PD1	3.691	1.205	0.712	0.789
	PD2	4.543	0.873	0.801	0.800
	PD3	3.973	1.009	0.776	0.769
	PD4	4.074	1.068	0.839	0.860
Price	PC1	4.067	1.044	0.821	0.82
	PC2	4.165	1.023	0.866	0.863
	PC3	3.973	0.985	0.801	0.791
	PC4	4.227	0.975	0.762	0.774
	PC5	3.541	1.147	0.542	–
Place	PL1	4.017	1.105	0.822	0.846
	PL2	4.106	1.055	0.845	0.887
	PL3	3.304	1.167	0.353	–
	PL4	3.751	1.12	0.786	0.781
Promotion	PM1	3.988	0.995	0.817	0.816
	PM2	3.388	1.233	0.680	–
	PM3	3.714	1.114	0.833	0.827
	PM4	3.763	1.074	0.856	0.862
	PM5	4.304	0.854	0.745	0.792
Attitude Towards Behavior	ATB1	4.121	0.993	0.896	0.896
	ATB2	4.094	0.982	0.923	0.923
	ATB3	4.230	0.921	0.902	0.902
	ATB4	4.000	1.089	0.863	0.864
Subjective Norm	SN1	3.405	1.202	0.773	–
	SN2	3.111	1.277	0.85	–
	SN3	3.402	1.268	0.824	–
	SN4	3.938	1.065	0.711	–
Perceived Behavioral Control	PBC1	3.943	1.124	0.840	0.840
	PBC2	3.963	1.043	0.860	0.860
	PBC3	4.301	0.952	0.881	0.881
	PBC4	4.153	0.997	0.833	0.833
	PBC5	3.990	1.095	0.805	0.805
Purchasing Intention	PI1	3.321	1.292	0.838	0.845
	PI2	3.625	1.260	0.849	0.851
	PI3	3.840	1.087	0.842	0.835
	PI4	3.849	1.066	0.821	0.819
Decoy Effect	DE1	3.827	1.124	0.730	0.737
	DE2	3.462	1.197	0.825	0.826
	DE3	3.254	1.206	0.769	0.767
	DE4	3.030	1.447	0.818	0.814
	DE5	3.341	1.314	0.792	0.790
Brand Equity	BE1	3.681	1.045	0.852	0.851
	BE2	3.965	1.008	0.771	0.763
	BE3	3.079	1.202	0.731	0.740
	BE4	3.965	1.030	0.748	0.743
	BE5	3.691	1.085	0.872	0.871
	BE6	3.432	1.196	0.838	0.844
Actual Purchase	AP1	3.269	1.359	0.647	–
	AP2	4.047	1.016	0.881	0.891
	AP3	4.094	1.021	0.832	0.861
	AP4	4.168	0.962	0.858	0.889
	AP5	4.131	1.057	0.841	0.853

Table 3. Convergent validity.

Latent variables	Items	Cronbach's Alpha	Factor loadings	Average Variance Extracted (AVE)	Composite Reliability (CR)
Actual Purchase	AP2	0.897	0.891	0.763	0.928
	AP3		0.861		
	AP4		0.889		
	AP5		0.853		
Attitude Towards Behavior	ATB1	0.919	0.896	0.804	0.942
	ATB2		0.923		
	ATB3		0.902		
	ATB4		0.864		
Brand Equity	BE1	0.889	0.851	0.646	0.916
	BE2		0.763		
	BE3		0.740		
	BE4		0.743		
	BE5		0.871		
	BE6		0.844		
Decoy Effect	DE1	0.847	0.737	0.62	0.891
	DE2		0.826		
	DE3		0.767		
	DE4		0.814		
	DE5		0.790		
Marketing Mix		0.808		0.601	0.957
Perceived Behavioral Control	PBC1	0.899	0.840	0.713	0.925
	PBC2		0.860		
	PBC3		0.881		
	PBC4		0.833		
	PBC5		0.805		
Place	PL1	0.789	0.846	0.704	0.877
	PL2		0.887		
	PL4		0.781		
Price	PC1	0.828	0.820	0.66	0.886
	PC2		0.863		
	PC3		0.791		
	PC4		0.774		
Product	PD1	0.789	0.789	0.648	0.88
	PD2		0.800		
	PD3		0.769		
	PD4		0.860		
Promotion	PM1	0.843	0.816	0.68	0.895
	PM3		0.827		
	PM4		0.862		
	PM5		0.792		
Purchasing Intention	PI1	0.858	0.845	0.702	0.904
	PI2		0.851		
	PI3		0.835		
	PI4		0.819		

Table 4. Discriminant validity: Fornell-Larcker criterion.

Construct	Actual Purchase	Attitude	Brand Equity	Decoy Effect	Marketing Mix	Perceived Behavioral Control	Place	Price	Product	Promotion	Purchasing Intention
Actual Purchase	0.874										
Attitude	0.605	0.897									
Brand Equity	0.482	0.484	0.804								
Decoy Effect	0.536	0.392	0.668	0.787							
Marketing Mix	0.651	0.623	0.659	0.519	0.775						
Perceived Behavioral Control	0.559	0.622	0.433	0.298	0.589	0.844					
Place	0.457	0.463	0.52	0.439	0.666	0.46	0.839				
Price	0.457	0.45	0.385	0.324	0.648	0.454	0.541	0.813			
Product	0.518	0.63	0.553	0.405	0.656	0.661	0.614	0.596	0.805		
Promotion	0.652	0.573	0.649	0.555	0.649	0.515	0.593	0.597	0.606	0.825	
Purchasing Intention	0.63	0.59	0.686	0.709	0.63	0.502	0.452	0.378	0.543	0.628	0.838

4.2. Model fit analysis

The findings of a model fit analysis done to evaluate the viability of the suggested model are shown in [Table 6](#). All parameter estimations above the minimum threshold value, according to the analysis, indicating the validity and acceptability of the suggested model.

Table 5. Heterotrait-Monotrait (HTMT) ratio.

Construct	Actual purchase	Attitude	Brand equity	Decoy effect	Marketing mix	Perceived behavioral control	Place	Price	Product	Promotion	Purchasing Intention
Actual Purchase											
Attitude	0.667										
Brand Equity	0.543	0.54									
Decoy Effect	0.605	0.432	0.768								
Marketing Mix	0.764	0.724	0.783	0.615							
Perceived Behavioral Control	0.623	0.685	0.489	0.329	0.689						
Place	0.539	0.544	0.624	0.525	0.829	0.548					
Price	0.526	0.518	0.451	0.376	0.786	0.526	0.668				
Product	0.61	0.734	0.671	0.496	0.838	0.781	0.767	0.724			
Promotion	0.745	0.647	0.753	0.65	0.843	0.582	0.713	0.704	0.724		
Purchasing Intention	0.717	0.661	0.784	0.823	0.758	0.571	0.546	0.449	0.667	0.738	

Table 6. Model fit.

Goodness of fit measures of the SEM	Parameter estimates	Minimum cut-off
SRMR	0.069	<0.08
Chi-Square	3.621	<5.00
NFI	0.838	>0.80
CFI	0.985	>0.80
IFI	0.986	>0.80
TLI	0.969	>0.80
GFI	0.865	>0.80
AGFI	0.825	>0.80
RMSEA	0.066	<0.07

The structural equation model (SEM) for investigating the mediating function of brand equity in the purchase of an insulated water flask appears to be a good match to the data, according to the model fit analysis. Since it is less than the 0.08 criterion, the Standardized Root Mean Square Residual (SRMR), which calculates the absolute difference between the observed and predicted covariances, is 0.069, suggesting a successful match Hu and Bentler (1999). According to Hooper et al. (2008) the model effectively captures the relationships between the observable variables, as indicated by the substantial chi-square value of 3.621. Furthermore, the observed covariances' proportion of variance explained by the model is evaluated using the Normal Fit Index (NFI), and the value of 0.838 falls within the suggested threshold of 0.8 Baumgartner and Homburg (1996).

Additional parameters of Comparative Fit Index (CFI), Goodness of Fit Index (GFI), Adjusted Goodness of Fit Index (AGFI), and Incremental Fit Index (IFI) with values greater than 0.80 were also included and tested (Gefen et al., 2000), and Root Mean Square Error of Approximation (RMSEA) less than 0.70 (Steiger, 2007). The dG and dULS values, according to the data, are 1.231 and 7.036, respectively, indicating a flawlessly matched measurement model. These fit indices show that, overall, the SEM model fits the data well, indicating that it is a valid tool for examining how brand equity influences consumers' decisions to buy insulated water flasks.

4.3. The result of final SEM

Figure 3 displays the final SEM result, which includes 43 indicators and 11 latent variables. The R² values and beta coefficients of the hypothesis model were calculated. According to the model, the marketing mix had the largest significant effect ($\beta=0.510$, $p=0.000$), followed by the decoy effect on purchasing intention ($\beta=0.422$, $p=0.000$), the decoy effect on actual purchases ($\beta=0.272$, $p=0.000$), the brand equity effect on purchasing intention ($\beta=0.236$, $p=0.000$), the attitude toward behavior effect on purchasing intention ($\beta=0.228$, $p=0.000$), and the perceived behavioral control on purchasing intention ($\beta=0.132$, $p=0.000$) with the lowest beta coefficient effect.

The suggested hypotheses were tested using the PLS-SEM. Table 7 displays the summarized outcome. The results showed that the following factors significantly influenced purchasing intention: attitude toward behavior ($\beta=0.211$, $p=0.001$), brand equity on purchasing intention ($\beta=0.217$, $p=0.001$), decoy effect on actual purchase ($\beta=0.201$, $p=0.001$), decoy effect on purchasing intention ($\beta=0.402$, $p=0.001$), marketing mix on actual purchase ($\beta=0.319$, $p=0.001$), marketing mix on place ($\beta=0.829$, $p=0.001$),

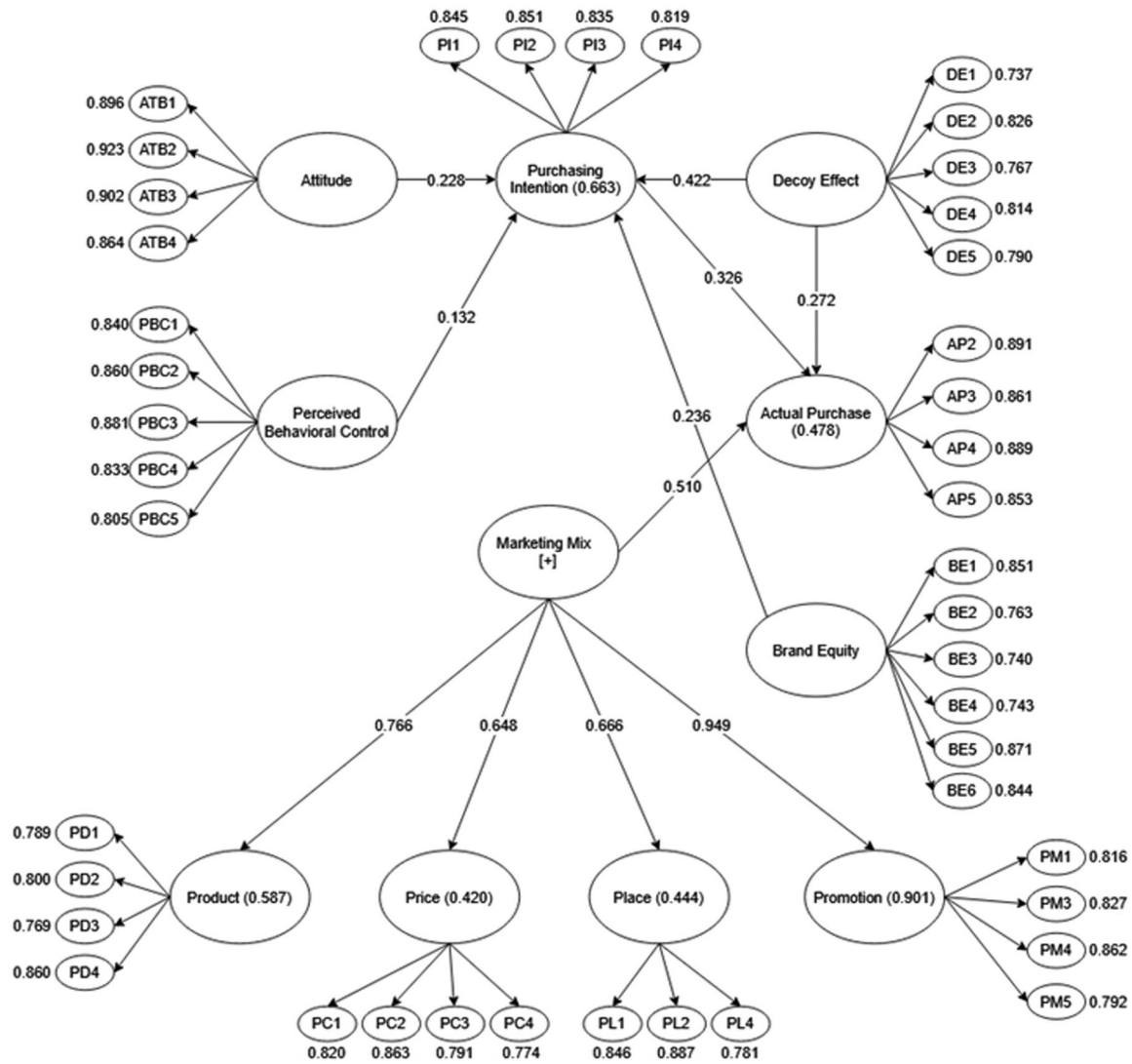


Figure 3. Final SEM.

Table 7. Summarized hypotheses test.

No	Relationship	Beta coefficient	p-Value	Result	Significance	Hypothesis
1	ATB → PI	0.228	<0.001	Positive	Significant	Accept
2	BE → AP	0.002	0.978	Positive	Not Significant	Reject
3	BE → PI	0.236	<0.001	Positive	Significant	Accept
4	DE → AP	0.272	<0.001	Positive	Significant	Accept
5	DE → PI	0.422	<0.001	Positive	Significant	Accept
6	MM → AP	0.510	<0.001	Positive	Significant	Accept
7	MM → PL	0.666	<0.001	Positive	Significant	Accept
8	MM → PC	0.648	<0.001	Positive	Significant	Accept
9	MM → PD	0.766	<0.001	Positive	Significant	Accept
10	MM → PM	0.949	<0.001	Positive	Significant	Accept
11	MM → PI	0.045	0.438	Positive	Not Significant	Reject
12	PBC → PI	0.132	0.001	Positive	Significant	Accept
13	SN → PI	0.029	0.532	Positive	Not Significant	Reject
14	PI → AP	0.326	<0.001	Positive	Significant	Accept

marketing mix on product ($\beta=0.835$, $p=0.001$), marketing mix on promotion ($\beta=0.870$, $p=0.001$), perceived behavioral control on purchasing intention ($\beta=0.121$, $p=0.012$), and purchasing intention on actual purchase ($\beta=0.419$, $p=0.001$). These partnerships were all meaningful and accepted. Conversely, the study found no significance and rejection for the following variables: subjective norm on purchasing intention ($\beta=0.027$, $p=0.549$), marketing mix on purchasing intention ($\beta=0.045$, $p=0.409$), and brand equity on actual purchase ($\beta = -0.098$, $p=0.124$).

Table 8. Coefficients.

	Model	Unstandardized coefficients		Standardized coefficients	t	Sig	Collinearity statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.072	0.133		15.612	0.000		
	PI	0.557	0.035	0.621	15.906	0.000	1.000	1.000
2	(Constant)	1.955	0.137		14.284	0.000		
	PI	0.453	0.049	0.504	9.291	0.000	0.507	1.974
	DE	0.148	0.048	0.166	3.055	0.002	0.507	1.974

^aDependent Variable: AP.

The test for mediating effects were tested using Baron and Kenny (1986), following the study of German et al. (2022). It was suggested that only presence of indirect effects could be tested with the mediating effects. From the output, only decoy effect presented an indirect significant effect ($\beta=0.136$, $p\text{-value} > 0.001$) and no other variables showed effects. Therefore, the mediation effect was tested using SPSS v25.

It could be from the results in Table 8 that the purchasing intention is significant ($\beta=0.621$, $t=15.91$, $p\text{-value} < 0.001$) on its direct effect, and partial mediation was seen when decoy effect was added due to the statistical output (Baron & Kenny, 1986). It could be deduced that since the t-value was less than the direct effect ($\beta=0.504$ & $\beta=0.166$; $t=9.291$ & $t=3.055$; $p\text{-value} > 0.001$ & $p\text{-value} = 0.002$, for purchasing intention and decoy effect respectively), German et al. (2022) suggested that partial mediation is seen. Only when purchasing intention becomes insignificant would decoy effect a full mediating variable.

5. Discussion

In capitalist ventures, it is understood that consumer purchase decisions are not solely affected by company marketing; it is an amalgamation of personal, environmental, and market-based components. The marketing mix concept—acknowledging said amalgamation—capitalizes on four (4) components: product, place, promotion, and price (Nuseir & Madanat, 2015). These factors greatly influence the incidence of actual product purchase as well as other consumer intentions.

Contextualizing this to the insulated water flask consumer base, the research findings indicated that the marketing mix (MM) exerted the most substantial and statistically significant effect on actual purchase (AP) ($\beta=0.510$, $p<0.001$) as consumer behavior is limited by lifestyle beyond marketing but did not affect behavioral purchase intentions (Iqbal et al., 2023). It can be concluded from the output that promotion impacts the actual purchase of an insulated water flask ($\beta=0.949$; $p<0.001$). Promotion is defined as communication programs and strategies that manipulate product ideas amongst consumers and influence their behavior (Kaveh et al., 2021). With this, it can be expected that promotional activities that highlight the benefits of insulated water flask manufacture both a visual and utilitarian appeal and impulse that leads to actual purchases (Liao et al., 2009). Continuously creating a brand identity that advertises their products as an essential part of the mobile, trendy, and expense-reducing consumer base of Metro Manila and other urban life settings can incite actual purchases that stem from the perceived value created by product campaigns.

Product is placed second as an influential factor ($\beta=0.766$; $p<0.001$), it is given more priority as brand association, preferences, and other product concepts manifest a significant value to consumers (Iqbal et al., 2023). Its high place in the influences for actual purchase is justified by the purpose of the insulated flask. It posits itself as a product that centers around a cost-saving, eco-friendly, portable, and visually appealing solution against conventional reusable and single-use water bottles. The product, although not a necessity, presents itself as valuable, more beneficial (due to insulation), and of good quality above those present options in the market. For a product to succeed, customer value must be addressed for their purchase motivations to manifest into an actual purchase (Zeithaml et al., 2020). As for the flasks, their product concept aligns with the value-seeking of customers who desire a product that can help in their hydration, money-saving, and ecological pursuits without sacrificing portability or visual appeal.

Place, being the location and accessibility of products (Iqbal et al., 2023), is the third most influential factor ($\beta=0.666$; $p<0.001$). Products are becoming more accessible in this day and age. With the advent of e-commerce, place of purchase has been a less influential factor in actual purchase decisions; however, physical stores often provide a sense of tangibility and self-mediated product quality assessment by the consumer (Zhang et al., 2022). In the context of flask purchases, the consumer may find it amiable where accessibility and ensuring that the promised solution (product) is received without damage and can deliver its benefits fully. However, beyond that, place exerts less influence as other factors touch on more consumer concerns that relate with the product benefits.

Surprisingly, price exerted the least influence on the marketing mix ($\beta=0.648$; $p<0.001$). Reusable water bottles, although expensive relative to single-use water bottles, advertise cost-saving in water purchase, drinking paraphernalia purchase, and waste disposal at workplaces which may explain a laxer reception to flask product price (Smith et al., 2021). Moreover, in the context of Manila, the average salary according to Cahigas et al. (2022) is PHP 403,000+/year (7200 USD). This means that the purchasing power of potential consumers within Metro Manila can accommodate a handful of upfront bulk purchases such as insulated water flasks to both save money and gain the advantages of insulation and portability.

Beyond the marketing mix, the research venture also aims to explore the decoy effect which—in this study—is one of the most influential factors in forming purchase intentions among consumers ($\beta=0.422$, $p<0.001$). Insulated flasks often present themselves as superior options, options that will save you money in the long run, which the decoy effect capitalizes on. Brands that utilize the decoy effect often produce impulses within the consumer's intentions for purchase (Hashem & Al-Zyoud, 2020). Moreover, labels that present welfare-related and ecological benefits in the flask industry adhere to the same effects incited by brand decoys—increasing desirability against other conventional products of the same kind (Xu et al., 2021). With this, it can be understood that the insulated flask industry can utilize such strategies to instill purchasing intentions among the Metro Manila consumer base which is often composed of mobile consumers (students, workers, and other relevant consumer types).

It was also seen that brand equity significantly affects purchasing intention with accepted hypothesis and positive results ($\beta=0.236$, $p<0.001$). The highest indicator under brand equity is the consumer's purchasing needs that are reliant on the offers of their favorite brand. Consumer's loyalty towards a brand, followed by consumers being up to date on their favorite brand, their favorite brand as their first option, consumers can easily recognize their favorite brand, and the consumers do not give consideration to competing brand's offers were relevant factors. Brand equity means to objectively evaluate brand customers and identify the factors that influence their opinions toward the brand. According to Al Koliby and Rahman (2018), customer branding is the process by which brand equity influences a buyer's intention to buy and encourages them to make further purchases. This, therefore, highlights the justification on the findings.

It could also be seen in this study that attitude towards behavior significantly influences purchasing intention ($\beta=0.228$, $p<0.001$). The highest indicator under the latent variable states that investing in an insulated water flask is an excellent choice. Moreover, many consumers find it nice to purchase an insulated water flask, buying an insulated water flask, and consumers found the act of purchasing enjoyable. Customers typically purchase insulated water flasks due to their preferences, attitudes, and choices. According to the study of Koththagoda and Herath (2018), a mediating impact on variables is played by attitude. While some of their associates can have unfavorable views toward buying, some potential customers might have good sentiments. Relevant social and psychological traits of consumers are mostly obtained from psychology theories like social cognitive theory and TPB.

The study also revealed a significant positive influence of purchase intention on actual purchasing behavior ($\beta=0.419$, $p=0.001$). Among the factors influencing PI, the strongest desire comes from various options for use through an insulated water flask, the willingness to recommend it to others, the intention to include it in the next shopping trip, while also having many purchase opportunities. Purchase intention indicates a consumer's preparedness or intention to purchase a product (Pebriani et al., 2018). Studies show solid purchase intention increases purchase likelihood and frequency (Indiani & Febriandari, 2021). This highlights the importance of understanding and influencing consumer intention as a critical driver of purchasing behavior.

The findings revealed that the latent variable subjective norm does not significantly influence purchasing intention ($\beta=0.029$, $p=0.532$). This lack of significance extends to the indicators for subjective norm, suggesting that the people's decision to purchase an insulated water flask are not influenced by those around them. It can be inferred that neither friends nor family play a role in anticipating or influencing the decision to buy an insulated water flask. On the other hand, the study highlights that attitude and perceived behavioral control significantly impact purchasing intention, suggesting that an individual's willingness drives the decision to purchase an insulated water flask. This is supported from the suggestion of TPB development of Ajzen (1991), wherein the weakness in the connection between subjective norms and intentions is apparent. He attributed this to the significant impact of personal factors like attitudes and perceived behavioral control on intentions. These results further aligned with Ham et al. (2015), emphasizing the weaker influence of subjective norms compared to attitude on purchasing intention. Likewise, research conducted by Sun and Xing (2022) suggested that the intermediary function of subjective norms in influencing intention to purchase green products is frequently disregarded.

Furthermore, as depicted in Figure 3, another underlying factor that did not influence actual purchasing was brand equity. The data demonstrated that brand equity exerts a significant influence on purchasing intention, causing an indirect effect on actual act of making a purchase. This aligns with earlier research by Aji et al. (2020), emphasizing the role of brand awareness and fostering a positive consumer attitude toward a brand in shaping purchasing intentions, which may lead to actual purchase behavior. This conclusion is further supported by the findings of Erlangga (2021), which shows that brand equity—which is developed via enhanced brand awareness and the sharing of customer feedback on social media platforms—plays a critical role in influencing customers' intentions to make real purchases.

Furthermore, the study revealed that consumers who purchase insulated water flasks are motivated by factors such as their eco-friendly features, safe usage, commitment to cruelty-free practices, and their ability to help maintain hydration levels. These important indicators have a significant impact on the actual purchasing decisions made by customers. In conclusion, knowing the importance of these variables clarifies the variables that influence consumers' decisions while purchasing insulated water flasks.

5.1. Theoretical contribution

The framework's theoretical value is found in its capacity to give organizations and industries a comprehensive grasp of the variables affecting customer behavior when it comes to insulated water flasks. The incorporation of the marketing mix (MM), brand equity, and decoy effect into the Theory of Planned Behavior (TPB) signifies a considerable progression in comprehending customer involvement in purchasing behavior, intentions, and purchasing choices. This integration of MM is recognized for its potential in developing effective marketing strategies. Thus if future researchers need to identify key variables affecting marketing strategies, or to build up efforts for company goal, the inclusion of MM may be utilized. The construct and items may be modified to fit the target objective of the study. Furthermore, the study adds to the understanding of the psychological mechanisms that underlie positive consumer behavior by analyzing how brand equity affects customer preferences and decisions about insulated water flasks, especially when a decoy alternative is available. Proven to have a mediating effect, future research may perform experiment to delineate higher effects of decoy effects among products for promotional and selling aspects. Researchers may opt to include both brand equity and decoy effects as deemed applicable in the target objective and outcomes in line with marketing strategy build up with MM.

The questionnaire design that incorporates the research of Ajzen (1991), Hashem and Al-Zyoud (2020), Ong et al. (2021), and Yandug et al. (2023), as well as the conceptual framework that is subsequently adapted for the current study improve the theoretical validity. The significance of MM and attitude in influencing purchase intention, as supported by Farid et al. (2023) and Elvinda et al. (2019), further reinforces the theoretical foundations of the study by providing evidence that supports the relationships proposed in the conceptual framework. This empirical support strengthens the theoretical basis of the study's hypotheses and adds credibility to the framework's ability to explain consumer behavior in the context of purchasing insulated water flasks. This can be further applied and extended by future researchers in the field of consumer behavior and purchasing behavior analysis by incorporating the different significant variables, even testing out those with low significance. This may result to other findings related to this study.

Businesses and industries can further use this framework to gain insights into consumer preferences, perceptions, and behaviors. This enables them to create more targeted marketing campaigns, improve the range of items they provide, and streamline their whole strategy for promoting insulated water flasks and even other environmentally friendly goods. This comprehensive understanding can lead to more targeted and impactful business decisions, ultimately improving market performance and competitiveness.

5.2. Practical implication

The industries engaged in the manufacturing and distribution of insulated water flasks can benefit greatly from the study's conclusions, particularly those aiming to leverage brand equity to influence consumer behavior. For example, companies operating in the outdoor recreation, sports, or eco-friendly products sectors can use the study's insights to develop branding and marketing strategies that capitalize on the mediating role of brand equity. This may include emphasizing brand values, reputation, and consumer perceptions in advertising campaigns to differentiate their products from competitors. Companies may capitalize on the findings like making the design up-to-date, promotion like decoy effects, competitive pricing, and social media presence. Moreover, targeted markets and actual alignment of product, design, and overall branding may promote positive intention and actual purchase.

Additionally, understanding the decoy effect's influence on consumer choices can help these industries design product lineups that strategically position certain products as decoys to drive consumers towards preferred options, ultimately increasing sales and market share. By aligning their branding and product offerings with the findings of the study, businesses can enhance their competitive advantage and better meet the evolving needs and preferences of consumers in the market for insulated water flasks. For brand equity to be positively established, businesses can use the study's insights to ensure consistent brand messaging, maintain high product quality, differentiate their brand, engage consumers, and form strategic partnerships. These strategies can strengthen the brand's influence on consumer choices, especially in the context of the decoy effect; ultimately improving its competitive position in the market for insulated water flasks and applications may be done with other eco-friendly products.

5.3. Limitations and future research

Despite the findings that are presented, there are limitations in the current study. The authors only focused on conducting the online survey on the capital of the country. Future research may consider larger scope and utilized this study as a benchmark. This could provide a more holistic assessment to generalize a developing country perspective. This could be an aspect that other researchers could consider when conducting their own studies since the insulated water flasks have a wide range of consumers. Additionally, because they have greater access to the internet and social networking sites like Facebook and Instagram, the majority of responders are between the ages of 18 and 22. Future research may obtain wider perspective among diverse culture since the age group who may utilize most the insulated water flasks have been covered. Moreover, future research may consider cross-sectional studies, predictions of purchase intention through the use of machine learning, and feature assessment for a more accurate understanding of consumer behavior.

6. Conclusion

Numerous studies have explored the decoy effect, such as analysis of its influence on impulsive purchasing behavior among tech-related market, focusing on brand equity as a mediator. However, a considerable knowledge gap remains about the decoy effect's efficacy in many product scenarios, especially concerning insulated water flasks as a sustainable alternative and their impact on consumer purchasing behavior. Thus, the purpose of this study was to look into the roles of brand equity and the decoy effect on actual purchase of insulated water flasks. The research included 405 participants who completed an online survey. The study's findings, based on higher-order structural equation modeling, revealed that both the marketing mix and the decoy effect significantly influence actual purchases.

It could be suggested that despite the potentially higher cost, consumers are willing to invest in reusable insulated water flasks due to their long-term savings and the advantages of insulation and portability. Although the marketing mix did not directly affect behavioral purchase intentions, the decoy effect emerged as one of the most important elements in shaping consumer purchase intentions. Brands that leverage the decoy effect can effectively stimulate impulsive buying behavior. Furthermore, the study demonstrated that purchase intention was significantly influenced by brand equity, which in turn led to actual purchases. Interestingly, it was discovered that buying intention was not significantly impacted by the subjective norm, suggesting that individuals' decisions to buy insulated water flasks are not influenced by social factors. Instead, the study highlights the importance of individual attitudes and perceived behavioral control in driving purchasing decisions. Proper advertisement and sales promotions were identified as important factors customers consider when purchasing insulated water flasks. Additionally, industries can benefit from incorporating marketing strategies like the decoy effect to engage consumers and encourage continued purchases of insulated water flasks.

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Authors have read and agreed to the published version of manuscript.

Informed consent

Informed consent was obtained from all subjects involved in this study (FM-RC-23-02-76).

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Data availability statement

Data will be made available upon reasonable request to the corresponding author.

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