



In the eye of the beholder: The role of environmental literacy and psychological distance on green purchase intention. A study on the combination of gain-loss framing

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Doctoral Dissertation

In the eye of the beholder: The role of
environmental literacy and psychological distance
on green purchase intention.

A study on the combination of gain-loss framing

グリーン購入意向における環境リテラシーと心理的距離の役割。

ゲイン-ロス・フレームの組み合わせに関する研究

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1.- Introduction

The greatest challenge that humanity faces is not unknown, and it comes directly from their own hand. Its name is climate change, and every year, the wall to overcome advancing towards humanity gets bigger and bigger. Unprecedented economic development and technological progress bring with them many challenges to the environment, such as rampant pollution, erasure of natural habitats for many species and global warming. It is expected for private household consumption patterns in 2030 to be responsible for up to 60% of the world's greenhouse emission patterns (Ivanova et al., 2016). These figures directly affect how much can this economic development be sustained.

As an unstoppable force of nature fueled by human hand, climate change has started attracting the attention of all parties towards the environment. How to preserve it? To coexist with the Earth, mankind must focus on the balance. A balance that is given by correct use, reduction and recycling of the Earth's natural elements.

As commerce is tantamount to humanity, the need to engage in just commerce that respects the environmental needs that all humanity is facing at the moment has been on the rise since the past few decades, in which environmentally conscious consumers have risen to the occasion, pressuring companies and policymakers, who, in return of long-term relationships with new potential clients, have responded in kind, and a growing body of literature related to environmental protection, activities, attitudes and knowledge has blossomed.

More and more organizations and specially customers, are paying attention to the environment, which is the impact that that have on the production chain, and how to reduce or completely eliminate their footprint in it. In the case of realizing the importance of the environment, many consumers are also realizing that it is not only about reducing, reusing and recycling, but by consuming as well. As consumers began to change their lifestyles, companies have sprung, ready to change their business activities and search for a place in a new and competitive market for sustainable products. These sustainable products are designed to protect or improve the environment, through saving energy, resources, or eliminating the use of toxic substances. These green products not only offer less health risks to their consumers, they also bring up the standard of living for all humanity.

In the present marketplace, customers are able to choose between an increasing range of green products, on top of regular or conventional products (i.e., good that are produced by traditional methods, without specific care for their sustainability). As an example, fast fashion retailer Zara offers its "Join Life" growing line of textile products alongside their conventional counterparts for seasonal lines of textiles products, both of them standing in direct competition. Compared to their regular fashion products, the products of the "Join Life" line use biodegradable, ethically-sourced raw materials and come with a reduced usage in plastics. These green products are sold at an approximate 25% price premium compared to regular products (Gheorghe & Matefi, 2021; Lin & Chang, 2012). In the realm of green marketing, companies make use of several product cues to quickly convey the status of green products: the color of a product's packaging and its contents (i.e., green, pink or colorless), the wording of its category (i.e., Zara's Join Life, Palmolive's Pure + Clear, Clorox's Green Works) and the use of certain labels (i.e., the Environmental Protection Agency's "Design for the Environment" certification, the "Energy Star" rating, the European Commission's "Ecolabel"). Therefore, the differences between green products and their regular counterparts are varied, and can be

observed from several points of view: pricing differences, usage consequences, sourcing of raw materials or social adoption (Lee, 2011).

Prior research on the field of green marketing has focused mainly on the point of view of the consumer, and there are several key topics discussed in the field, such as the motivation behind the acquisition of green products over regular products (Griskevicius et al., 2010; Van Vugt, 2009), the customer characteristics of a typical green consumer (Jo & Shin, 2017; Straughan & Roberts, 1999; Young et al., 2010), the influence of marketing communications in altering the preferences towards green products (Kalafatis et al., 1999; Pelozo et al., 2013; Pickett-Baker & Ozaki, 2008), consumer reactions towards green marketing (Borin et al., 2013; Jo & Shin, 2017), willingness to pay premium for green products (Lee, 2011; Veisten, 2007), perceived quality of green products compared to regular products (Y.-S. Chen et al., 2015; D'Souza et al., 2007) and key attributes of green products (Hasanzade et al., 2018; Van Loo et al., 2015; Wessells et al., 1999). On the other hand, past literature from the field of green marketing that investigates the point of view of corporations and brands have primarily studied the effect of green strategies on life cycle costs (H. J. Park & Lin, 2020), product differentiation (Yang et al., 2015), competitive management (Laurin & Fantazy, 2017; Saeidi et al., 2015) and new market development (Claudy et al., 2013; Cova & Pace, 2006).

As the benefits of green products remains still as untapped potential, consumers' have slowly begun to demand for these green products, and companies have slowly adapted to this new market. Thus, as sustainable development becomes a trend, the development of new types of green products has brought a stage in which consumers and companies can offer social progress through a just and fair way, based on commerce. The development of these new products has also created positive effects for the economy, by stimulating research and development in industries that were thought to be completely solved. Once the products are developed, they need to meet the customer preferences, to achieve long-term business profits. That is where the field of green marketing rises, as the need to match a customer's sensibilities to environmental solutions, with the production capabilities that the company can offer, both tangible and intangible.

However, as the consumer demand for green product rises, and companies follow suit in searching for new markets, the degree of development of these markets by 2024 is still not enough. Prior studies have found that around 30% of consumers of green products have expressed worries about the environment, yet they have been unable to find adequate solutions to their environmental needs (Young et al., 2010). But this problem is not only supply-bound, but also bounded by the demand. The purchase rate of green products remains comparatively low (Rex & Baumann, 2007). Although there seems to be hope for green products in the future with an increase in the purchases of green products by 7.3% since 2015, which is 2.7 times faster than regular products (Tezer et al., 2023), the reality shows that green products are mired in many failures. In the realm of green products, customers are the first movers through pressure, mobilization and demand. For example, in the industry of fast fashion, the use of boycotts has been the most successful method of pressuring companies into taking radical steps towards the creation of green product lines (Locke, 2013). The lack of a true, cohesive community of consumers prevents punctual boycotts from ever springing true change in big corporations for the fast fashion industry. However, the new standards of a fragmentary social media presence, can provide consumers with opportunities to spread movements that pressure companies into complying with environmental practices and offering alternatives to regular products. In general, products that offer quick turnover have remained

unsuccessful in mobilizing individual consumers, and so green products remain a niche option for these industries. Additionally, regardless of the motivation for improving manufacturing processes, political motivations are key in increasing the demand for sustainable products (Soule, 2012). However, sustainability remains an ineffective marketing tool because politically motivated purchases of products such as appliances and automobiles are almost nonexistent. Despite this, some industries have awakened the appeal of green consumption, such as the foods and beverages consumer goods market, as the evolution of dietary and sanitary cultures evolve in first world countries. Therefore, against these failures of green products of remaining relevant in the minds of consumers, a growing body of literature has sprung up positing them as solutions to an issue – a sustainable one – through the manipulation of a customer's mental image of these issues (Aktan & Kethüda, 2023). Therefore, this dissertation will use the concept of psychological distance as a generator of motivation and action for customers of green products.

The expansion of this market has accelerated, but understanding customer behavior in the market of green products is a complex task, as it involves many interlinked factors. For the field of green marketing, a consumer's expressed green purchase intention is a key manifestation of their green consumption behavior, and the study of the factors that affect this purchase intention is of great importance for scholars and companies alike.

Recent research (Thøgersen & Crompton, 2009; Yu et al., 2017) have observed that consumer's that exhibit higher levels of awareness towards sustainable issues are more likely to engage upon their concerns, recognizing a sense of responsibility towards these issues. Through green marketing, brands are able to communicate the urgency of sustainability issues, and create a cascading effect for customers that are persuaded by these messages, as previous case studies of recycling, supply and demand and pricing incentives have shown that green consumers influence others through messages or personal examples, and that preferences towards green products is always born from regular products, and not vice versa, meaning that a customer that is conforming to eco-friendly principles and habits will reengage in them, and serve as a disseminator of these practices to social circles (Akehurst et al., 2012; Yu et al., 2017).

One of the most common sustainable issues tackled in green marketing is climate change (Aktan & Kethüda, 2023; C. Jones et al., 2017; Leiserowitz et al., 2010; A. Spence et al., 2011; A. Spence & Pidgeon, 2010) as its complexity and universal influence, in a temporal and spatial way. As mentioned previously, the circumstances for climate change are particular, and involve a fundamental risk that cannot be fundamentally stopped through the use of green alternatives, and whose circumstances are essentially abstract and far away into the future, pro-environmental behaviors towards lessening the impact of climate change are adaptive, rather than reactive (Yu et al., 2017). It has become imperative for green marketing to appeal to the ethics of every individual to induce them to engage in green behavior (thus seeking green products) and instilling knowledge and skills that affect sustainable behavior.

One common framework through which climate change has been studied is through the framework of construal level theory (CLT) (Liberman et al., 2007; Trope & Liberman, 2010), which uses the concept of psychological distance - the mental image formed when an individual thinks about a specific concept. The way that environmental issues are perceived will affect their purchase decisions, by making them feel closer or far from the source of problems. To promote green products, marketers must pay attention to a consumer's thought process regarding environmental issues like climate change. Previous literature has studied the effect of the perceived psychological distance of environmental issues over green purchase

intention, but the results remain mixed. Due to these controversial findings, there is a lack of comprehensive evaluation on the optimum level of psychological distance to these issues to promote purchase behavior of green products.

This paper focuses on climate change in the context of CLT because of two reasons. Firstly, because of the rising importance of climate change in green marketing as a background motivator for sustainable action (Gifford & Comeau, 2011; León et al., 2021; O'Neill & Nicholson-Cole, 2009; A. Spence et al., 2011, 2012). Secondly, because of the particular characteristics of climate change. Based on CLT, the degree of abstractness (construal level) comes determined by personal experiences, thus manifesting higher or lower psychological distance. Because of its very nature, climate change is abstract in origin and has future consequences, therefore costumers will invariably feel a high level of psychological distance with the issue. Previous research has recognized high levels of psychological distance towards sustainable issues as one of the primary limitations towards sustainable behavior (McDonald et al., 2015). As such, previous authors have argued that in the case of climate change, a high level of psychological distance is a natural state of mind to be (Bar-Anan et al., 2007), and experimentation on customers of green products has shown that marketing communications that focus on single and distant stimuli (such as aiding to solve problems in the far future, to help coming generations or to avoid an uncertain fate) can effectively increase green purchase intention (Lieberman et al., 2007). However, more recent research performed in a sample of UK consumers has shown that manipulation of climate change's consequences and origins towards a lower construal level (lower psychological distance) showed a higher degree of concern and willingness to purchase green products regardless of price or inconveniences (A. Spence et al., 2012). Spence et al. (2011) 's research on mitigation of flood damages found that an individual's psychological distance to climate change is directly correlated to the actions they take to mitigate it. As psychological distance is related to the sentiments and concerns towards climate change, it is a predictor of the intentions to engage in survival strategies and mitigation strategies of it (McDonald et al., 2015). Because of these reasons, this dissertation focuses on the usage of psychological distance as one of the key elements to predict green purchase intention, when the background sustainable issue employed in green marketing is climate change.

The concept of psychological distance is the main basis of this dissertation, as it has been studied previously in the context of green marketing as one predictor of green purchase intention (Aktan & Kethüda, 2023; C. Jones et al., 2017; Kim & Song, 2019; Schill & Shaw, 2016; Zheng et al., 2023). But what does a high or low level of psychological distance towards a sustainable issue (like climate change) mean? Based on construal level theory, and taking climate change as an example, a higher level of psychological distance towards it would mean that an individual thinks of climate change as an event that will take place in the future, is uncertain and will happen far away. Conversely, a lower level of psychological distance towards climate change would mean that an individual thinks of it as an event that is taking place now, is certain and is happening around them. It was argued previously that climate change by its very nature is a future consequence for humanity – therefore, it should only be perceived in a higher level of psychological distance. However, punctual manipulation can reduce an individual's given psychological distance towards climate change, and affect their intentions to engage (or not) in mitigative behavior. Therein lies the strength of psychological distance and its importance to study it in the context of climate change, as it can be manipulated to promote sustainable behaviors, regardless of the nature of climate change itself (Loy & Spence, 2020).

CLT and psychological distance play a key role in the perception of climate change and the motivation of customers to engage in green purchases to combat it – but which mental approach is the optimum is a topic for which there is no consensus in the previous literature. To fill in this research gap, this dissertation aims to understand empirically which psychological distance towards climate change increases the intention to engage in green purchases the most.

Similarly, due to the nature of climate change as an objective high-level construal issue, and the lack of enough evidence towards a high or a low level of psychological distance being the optimum at increasing mitigative behavior, this dissertation offers a third point of view in the context of CLT, it being the “middle level of psychological distance”. This level, which has not been addressed in the literature previously, will be studied as a middle point between the existing bodies of literature, by presenting climate change as an event that is happening relatively closer to the self physically, and in a timespan of between 5 to 20 years. The study of the middle level of psychological distance of climate change will recontextualize part of the existing literature and open new avenues for future research.

Another key concept in the literature of environmental and sustainable behavior is that of a customer’s environmental literacy, and its impact on the promotion of pro-environmental behavior, specifically green purchase intention. The concept of environmental literacy as a consumer characteristic has not been studied together with psychological distance in predicting purchase intention, although the two have been studied separately, thus this dissertation will move to fill in this research gap.

Finally, in the real world, the use of marketing communications comes often with the use of framing devices, often called framing effects. For example, positive or negative depictions of climate change can affect how customers engage with a brand if there is a fit between their expectations and the reality of the brand’s offerings. As is with the concept of environmental literacy, past research has studied the effect that framing effect has on green purchase intention separately to psychological distance, and this dissertation proposes to perform a study to fill in this research gap.

This dissertation’s uses two categories of products as the object of study. First, the quantitative studies focus on the usage of paper packaging products for consumer goods, household foods and beverages. The reason to focus on these products is twofold: firstly, the usage of non-biodegradable packaging has been a key topic in the research of the minimization of environmental degradation (Caspers et al., 2023; Molina-Besch et al., 2019). Thus, the recognition of the importance of environmental packaging has led consumers and governments to work on several policies that address these issues (Radu et al., 2020; Tencati et al., 2016). Secondly, such approaches have led to an increase of knowledge about this topic, as well as the promotion of consumer awareness and education about responsible disposal, benefits of plastic replacements and consumption choices, making the study of packaging products extremely fitting for the goal of this dissertation – observing the effect that psychological distance to climate change and a customer’s knowledge about it affect their intention to purchase products that use sustainable packaging. The ease of communication through labels and the direct comparison of materials (plastic vs paper), make this type of product the best localized case to test the effects of climate change through the lens of green marketing and the consumer.

Since plastic waste is more easily recognized than carbon emissions, the usage of an everyday consumption product in comparison with the automobile or the appliance industry provides more flexibility to studying the effects of psychological distance and environmental literacy over green purchase intention.

The second product category studied in the exploratory case study research, this dissertation studies the industry of furniture retailing, as a way to generalize the findings obtained through quantitative research in response to the paper packaging products industry, and to observe the evolution of the manufacturing process towards the creation of marketing communication materials in long-lasting products, compared to the short life of the paper packaging products.

The usage of two different points of view (consumer vs producer) and industry (paper packaging vs furniture retailing) contributes to the literature by providing an ample spectrum of results and arguments towards a combination of psychological distance and environmental literacy that increases the intention to engage in green purchases.

To address the gaps in the literature mentioned previously, this dissertation uses a combination of qualitative and quantitative methods to analyze the factors that affect consumer's green purchase intention.

This dissertation will base its argumentations on the construal level theory. According to this theory, people create mental constructs when a stimulus or event is given (Trope & Liberman, 2010). Depending on how close or far they imagine these constructs, a specific high or low level "construal" will be supported. Through a match between the imagined concept and the actual construal held by the individual, green purchase intentions and other sustainable behaviors can be predicted.

On the basis of construal level theory, this dissertation presents four studies, using a combination of regression analysis, structural equation modelling, three-way between-subject ANOVA tests and exploratory case study research in order to analyze the factors that influence green purchase intention, with psychological distance as the core element common to all of them.

Therefore, the present dissertation aims to address the following four research gaps:

1. A lack of the study of the middle level of psychological distance. Specifically, the definition of this concept and its impact on the motivation to engage in sustainable behavior and purchases compared to a high/low level of psychological distance, as well as the specific context that leads to the middle level of psychological distance being the optimum level for increasing green purchase intention.
2. A lack of study on the interaction of environmental literacy (consumer characteristic) and psychological distance of climate change (cognitive factor) on the motivation to engage in sustainable behavior and purchases.
3. A lack of study of the use of positive and negative framing effects on the relationship between environmental literacy, psychological distance and green purchase intention, as well as the specific combination of these factors that leads to the optimum level for increasing green purchase intention.

4. A lack of exploratory research about the ways in which brands manage their features and experiences to enhance a customer's environmental literacy and psychological distance to sustainable issues to motivate them into purchase green products.

To cover these gaps, the following research questions are suggested, each one corresponding to one of the studies, and thus answered by each of them:

1. What is the relationship between psychological distance of climate change and green purchase intention? What is the optimum level of psychological distance to increase the sales of green products? (Study 1 – Regression Analysis)
2. What is the effect of customers possessing higher literacy about environmental issues and practices on the psychological distance they have towards sustainable issues, and how does this affect their intention to purchase green products? (Study 2 – Structural Equation Modelling)
3. Does the interaction effect of psychological distance and environmental literacy differ with a positive/negative framing? Which combination increases green purchase intention the most? (Study 3 – Three-way ANOVA)
4. How do companies that invest in sustainable products develop and manage their customer's environmental literacy and psychological distance to sustainable issues in order to promote sustainable products? What marketing elements are employed for this? (Study 4 – Exploratory Case Study Research)

These four studies compose the main body of the dissertation, which is structured in the following way:

- Section 1 – Introduction: provides an outlook of the main motivation of the dissertation, presents the research gaps and questions.
- Section 2 – Literature Review: introduces the concept of psychological distance and brand experience through an exhaustive literature review, as well as the goals of the research.
- Section 3 – Study 1: Regression analysis performed using data gathered from a sample of Japanese consumers, focusing on the proposed inverse U-shaped relationship between psychological distance of climate change and green purchase intention. The importance of the middle level of psychological distance and its usage in the context of climate change is introduced.
- Section 4 – Study 2: Structural equation modelling analysis performed using data gathered from a sample of Japanese consumers, focusing on the proposed relationship of environmental literacy and psychological distance of climate change over green purchase intention. The concept of environmental literacy is introduced and defined through and exhaustive literature review.

- Section 5 – Study 3: Three-way ANOVA test performed using data gathered from a sample of Japanese consumers, focusing on the interaction effect of positive/negative framing effect over the relationship psychological distance and environmental literacy over green purchase intention. The concept of framing effect is introduced and defined through exhaustive literature review.
- Section 6 – Study 4: Exploratory Case Study Research performed on the development of brand experience of a company that develops green products and its influence on the management of customer psychological distance towards sustainable issues and acquisition of environmental literacy. The concept of brand experience is introduced and defined through an exhaustive literature review.
- Section 7 – Conclusion: the practical and theoretical findings of each of the studies are summarized and contrasted with the research gaps previously introduced. A series of limitations for the current dissertation and avenues for future research are introduced to round out the argumentation.

To better understand the structure of this dissertation, Figure 1 shows a diagram of the flow of the different sections.

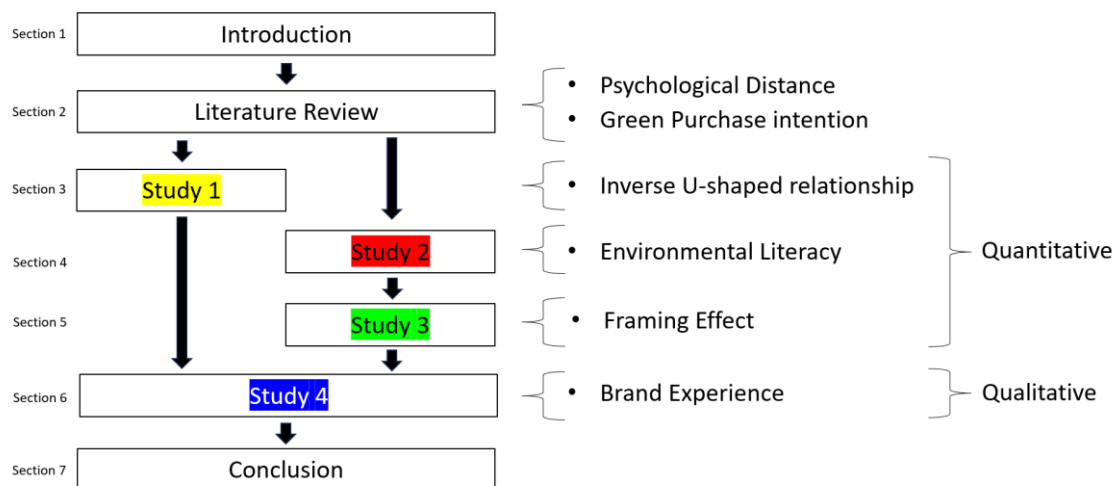


Figure 1.- Flow of the dissertation.

2.- Literature Review

Although concern about the social impacts of commerce can be identified throughout history, it has only been recently when research has started to catch up to studying the environmental impact that commerce has on the world. Thus, the literature surrounding green marketing and its factors is still a nascent one, where several theories are still in dispute. Researchers have agreed that green marketing is too complex to be only understood as simple tactical opportunism or “hype” generated by green products (Punyatoya, 2014).

This dissertation’s broad scope and field is that of green marketing, and its focus is on the interaction effect of several concepts that have been previously researched in this field, but rarely together: psychological distance, green purchase intention, environmental literacy and framing effect. A thorough literature review was performed to ensure that the most relevant

arguments for each concept was understood, and to identify what is missing, so that this dissertation can advance the field of green marketing into its future.

To better structure the narrative of the four Studies that form this dissertation, each concept will be introduced in the study that introduces it into the picture. Since the concept of psychological distance and green purchase intention is common to all studies, Section 2 will introduce them to serve as an axis pillar of the discussion. Environmental literacy will be introduced in Section 4/Study 2. Framing effect will be introduced in Section 5/Study 3. Brand experience will be introduced in Section 6/Study 4.

2.1.- Psychological Distance

Would a person respond in the same way if they are told that they have a meeting in a month from now rather than tomorrow? Would that person conceive mentally the meeting in the same way if the meeting venue is at a country 10.000 km away rather than at the building next door?

These questions illustrate the importance of psychological distance and construal level theory (CLT). Psychological distance (PD) is defined as “an individual’s subjective distance perceived between themselves and a given stimulus”. This distance is perceived in four different dimensions which are defined in Table 1 (Liberman et al., 2007; Liberman & Trope, 2008; Trope & Liberman, 2010). Depending on how close or far they seem mentally to a person, these stimuli are categorized as low (near future, here, someone you know, probable) psychological distance, in comparison with high (distant future, far away, a stranger, improbable).

Psychological Distance Dimensions	Definition
Temporal	<u>Near vs distant future</u>
Spatial	<u>Here vs far away</u>
Social	<u>Someone you know vs a stranger</u>
Hypothetical	<u>Probable vs improbable</u>

Table 1.- Description of psychological distance dimensions, based on Liberman and Trope (2008)

The most common framework to understand psychological distance is construal level theory (CLT), coined by Liberman and Trope (2008). According to it, psychological distance is associated with a series of mental constructs (construals) that people create when an event or stimulus is given. For example, by asking someone about the mental construct of Christmas, answers can vary differently between people that feel the holiday as something close to them (in time or in feasibility of celebrating it) compared to people that feel it as something far (in time or in desirability of celebrating it). Construal levels have a bi-directional relationship with psychological distance: when psychological distance increases, so does the construal level, and the reverse is also true (Trope & Liberman, 2010).

Therefore, CLT associates the feeling an event or stimulus being far from the self psychologically speaking as “high level construal”, and the feeling of an event or stimulus being far from the self psychologically speaking as “low level construal”. Low level construals focus on the details, the context and the feasibility (“how would you do x?”). Meanwhile high level construals focus on the big picture, the goals and the desirability (“why would you do x?”) (Bar-Anan et al., 2007; Pick-Alony et al., 2014). The division between desirability and feasibility is a shared element with the action identification theory, in which an action can be determined as means-oriented or end-oriented (Vallacher & Wegner, 1989). Previous research using the framework of CLT has found that the manner in which people construe events mentally has a

significant influence in decision making and evaluation of alternatives. As an example, Liberman and Trope (2008) asked participants of one experiment to select one option between choices with combinations of high desirability/low feasibility (interesting but inconvenient to take class) and low desirability/high feasibility (uninteresting but convenient but convenient to take class) under different temporal distances. The results showed that high construal participants preferred the high desirability option, where the low construal respondents preferred the more feasible option.

From this point onwards, this dissertation will treat “high level construal”, “psychologically far” and “high level of psychological distance” as interchangeable, and similarly, “low level construal”, “psychologically close” and “low level of psychological distance” as interchangeable.

Figure 2 shows a diagram of the framework.

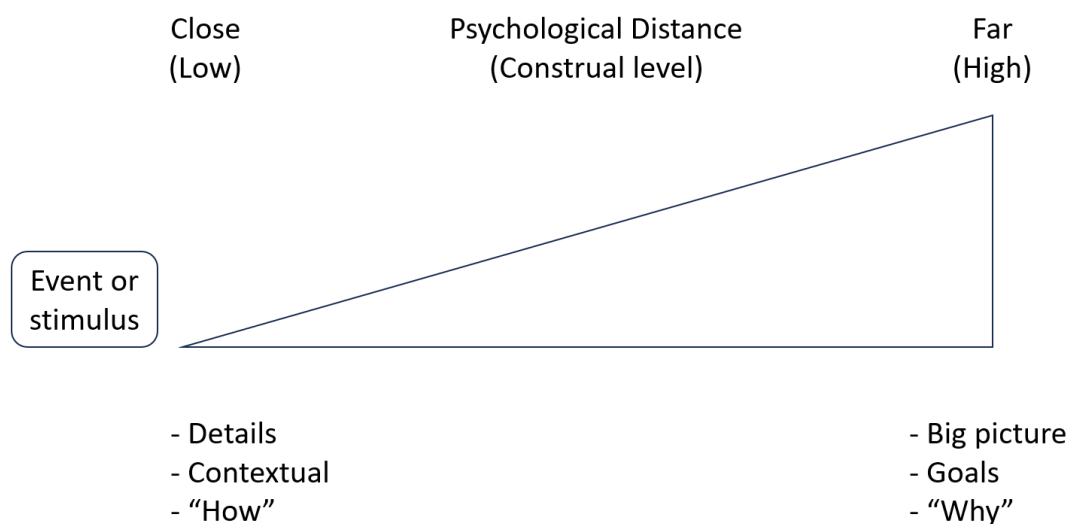


Figure 2.- Construal Level Theory framework, based on Liberman and Trope (2010).

Psychological distance has been studied extensively in the field of consumer behavior. Different combinations of psychological distance/construal level have been linked to several factors and phenomena, for example, promotion-type effectiveness (Cheema & Patrick, 2008), as an antecedent for donation motivation (Zhu et al., 2017), exertion of self-control in impulsive purchases (Agrawal & Wan, 2009), evaluation of product endorsement (Fujita et al., 2008). Psychological distance has been found to be strongly related to the ad performance (Kim & Song, 2019). As an example, consumer appeals through close-up (versus long-shot) visual stimulus have different effect depending on the viewer’s construal image of the topic shown. The fit resultant from a match between hedonic (motivated by pleasure/desirability) or utilitarian (motivated by usefulness/feasibility) product types has been found to improve consumer reaction and purchase intentions (Theodorakis & Painesis, 2022). A study performed on consumer’s reactions to controversial ads and marketing campaigns found that higher (versus lower) psychological distance attenuated (accentuated) unfavorable reactions (Theodorakis & Painesis, 2022). The findings on psychological distance’s role on consumer behavior point out that congruency between construal level and assessment of the product leads to better evaluations and repurchase intention (Martin et al., 2009).

In the context of brand management, past research on psychological distance has studied its influence on brand commitment (Connors et al., 2021; J. Park & Stoel, 2005) positive brand evaluation (Helmefalk & Hultén, 2017; Septianto & Pratiwi, 2016) and brand experience (Kim & Song, 2019). Brands that leverage the psychological distance of their customers by manipulating the low or high-level construal terms are able to send congruent messages about brand values, increasing brand trust and purchase intention (Punyatoya, 2014).

The field of study that is most important for this dissertation is the literature of psychological distance surrounding environmental and sustainable practices, including green purchase intention. In this context, a number of researchers have found that variations in psychological distance can alter decision-making preferences, with or without the aid of framing devices (Brügger et al., 2016; Schill & Shaw, 2016; White et al., 2011). CLT posits that the attractiveness of concrete (versus abstract) consumption goals relies on how consumers mentally consider events as concrete (versus abstract) (Liberman et al., 2007). Thus, the effectiveness of marketing communication of green product's features differs depending on the individual's psychological distance. Through the use of positive and negative frames, White et al. (2011) showed that the benefits of the use of each type of frame vastly differed between the construal level of the subjects. Other research has shown that individuals may genuinely prefer sustainable products regarding their benefits in the future, and would not choose a sustainable product because of its benefits in the present (Ibrahim & Al-Ajlouni, 2018; van Dam & van Trijp, 2013).

The social dimension of psychological distance plays a key role in the context of threat perception, which is considered one of the criteria for evaluating the severity of environmental risks (Dessai et al., 2004; Fransson & Gärling, 1999). As one of the earliest forays into the study of sustainable behavior, Fischer et al. (1991) found that subjects that expressed a close relationship with environmental threats were more willing to pay a premium on their everyday purchases, compared to respondents who perceived it as more diffuse. In a similar way, Baldassare and Katz (1992) found that respondents that felt that environmental risk was a liability to their livelihood directly were more prepared to adopt environmental behavior (recycling, reducing the use of plastics, buying green products). Following this line of research, Leiserowitz's (2010) research showed that one of the factors that affected threat perception was the degree of familiarity with its consequences; the more personal that they seemed, the more serious measures were prepared to be taken in response. Despite this, there exists a contradicting body of literature that argues that in the context of persuasive messages, the usage of positive framing led to socially distant messages encouraging sustainable behavior (Nan, 2007), as well as ads targeted for products related to benefitting others than the self (i.e., green products) being conceptualized as high-level construal are more persuasive (Yang et al., 2015).

As environmental threats happen on a longer time scale than most people are used to grasp, the influence of temporal distance has been widely discussed as a source of temporal dilemmas (Milfont et al., 2012). Temporal distance has been found to enhance the effect of high-level (goal focused) information, and reducing the influence of low-level (task focused) information on prediction of behavior. Similarly, prior literature has found that taking when showing green product ads, using a long-term focus trigger high construals of sustainable consumption, which lead to more sustainable choices in average. It is argued that this is due to an emphasis on the hedonic value rather than utilitarian one, with higher temporal distance

(Kivetz & Tyler, 2007). Therefore, to fulfill this dissertation's goals, it is of extreme importance to use this dimension of psychological distance.

Another dimension of psychological distance that has been worked on in the field of green consumption and sustainable behavior is the spatial one. Prior literature has widely acknowledged that the closeness to local impacts of climate change is more effective in creating concern environmental issues (van der Linden, 2015). However, previous literature has been divided on what temporal distance to sustainable issues is the best one at motivating environmental behavior. On one hand, authors under CLT argue that when a mental construct is known clearly, distant perception (high construal) attenuates pro-environmental actions, while proximity (low construal) incentivizes engagement (Loy & Spence, 2020). On the other hand, past research has shown that when environmental issues are not easily defined in the mind of respondents, it is actually a high level of psychological distance that helps aid in easier identifying process of the core problem and solution at hand (i.e., climate change and driving electric cars) (A. Spence et al., 2011). The source of this difference in the literature seems to come from the fact that environmental problems are complex at a global level (high spatial), and uncertainties can arise when considering the effectiveness of local level (low spatial) actions (Moser & Dilling, 2004). Because of its important nuance, this dimension of psychological distance will also be employed in this dissertation to board the effect of psychological distance on green purchase intention.

In summary, findings in previous literature are inconsistent about which level of psychological distance is the most apt for consumer of green products, with both high-level construal and low-level construal being pointed out as the sources of pro-environmental behavior. In the name of advancing the literature, this dissertation proposes the study of an additional level of psychological distance, the middle-level construal, or middle level of psychological distance to climate change.

Since there is currently no literature that has touched upon this level of construal, this dissertation argues that the middle level of psychological distance to climate change is defined as: a mental representation of an event or stimulus that is based on an abstract construal (high-level), but oriented towards feasibility, with clear solutions, in the form of green purchases. Thus, this dissertation aims to add further layers to the current literature by introducing this new construal level, alongside the more commonly researched, high and low construal levels.

2.2.- Green Purchase Intention

What would motivate you to buy an electric car over a regular, gasoline-powered one? Trust in the manufacturer? Better, competitive prices? The feeling of "doing what is right"? Better features or quality? Or as a way to "fit in" with people around you?

The concept of green purchase intention deals with these questions. The concept of green purchase intention (GPI) is defined as "the likelihood and reasons that a consumer would buy a particular product resulting from their environmental needs" (Y. Chen & Chang, 2012). Therefore, green purchase intention is closely linked with the hedonic value assigned to green products. As is with the literature of psychological distance, the literature surrounding green purchase intention also remark on the importance of a fit between the desirability of a green product, over their feasibility of satisfying basic needs. If such a fit exists, the intention to purchase green products will be higher (Jo & Shin, 2017).

Consumers that are buying green products do so to fulfill their own needs to “protect or not damage the environment” (Roe et al., 2001). Previous research has shown that green purchase intention materializes into purchase behavior by two avenues: switching brands for environmental reasons or switching to the same brand’s green version of products (Chan, 2001). Green purchase intention’s place in the literature as an estimator for the green demand of consumers marks it as one of the most important concepts in the field of green marketing.

As one of the factors that influence the purchase of green products, green purchase intention is often studied as the consequence of a series of factors. One the key contributions to understand what factors influence green purchase intention is Zhuang et al.’s (2021) seminal paper that performs a meta-analysis on these factors, dividing them in three categories:

1.- Cognitive factors: based on a consumer’s perception of green products and environmental issues. Some of these cognitive factors are a customer’s environmental awareness, as customers that acknowledge the impact of environmental issues are more likely to seek out products that makes them feel better (Punyatoya, 2014). Green perceived value and quality have been found to increase a customer’s familiarity with green products, as well as being drivers of repurchase intention. When green perceived value and perceived eco friendliness increases, customers will feel more justified in choosing green products (Y. Chen & Chang, 2012; Y.-S. Chen et al., 2015). Other cognitive factors, such a customer’s perceived effectiveness have been studied as key antecedents of green purchase intention. Referring to the degree to which customers think that they are contributing to solving an environmental issue through green purchases, Sharma and Dayal (2016) found that subjects that were told about the contribution that their purchases had on the environment, were more likely to want to repurchase green products.

Since these cognitive factors are closely related with the mental image that is formed when thinking about green products, they are closely linked with the construal level theory and psychological distance (Rabinovich et al., 2009; A. Spence et al., 2011; A. Spence & Pidgeon, 2010; Yang et al., 2015), following previous literature, this dissertation establishes the use of psychological distance as a predictor of green purchase intention.

2.- Consumer individual characteristics: based on a consumer’s particular attributes that set it apart from others. Among these, customer’s environmental literacy has been the focus of past research, that studied how consumers knowledge about green products enhances their intention to purchase them and boost word-of-mouth engagement (Aktan & Kethüda, 2023; Paul et al., 2016). Another important characteristic of a consumer is their trust in green products, that is, how much of the relationship between a sustainable product and consumer is based on a certainty that the product satisfies the consumer’s environmental needs. Chen’s (2010) landmark research about green trust pointed out that in the field of green marketing, trust is often more needed than in the case of traditional products, as their hedonic value is put above any utilitarian case.

3.- Social factors: based on the social pressure or collectivistic tendencies that surround a consumer, and can influence the intention to purchase green products. Societal norms are defined as the social pressure received by individuals to carry out or refrain from particular behaviors. Previous research has pointed out that consumers comply with social pressure to avoid punishment, feelings or shame or to emulate referents of behavior in society. Past literature on social factors has shown that when customers were told that green purchases

were being recognized by their significant ones, they were more likely to engage in it (Bong Ko & Jin, 2017).

In the context of brand management, previous research performed on sustainable product packaging has demonstrated the proper use of tags and informational blurbs can help inform customers about the benefits of sustainable products, increasing their attractiveness and activating the hedonic-seeking nature of green purchase intention (Pancer et al., 2017).

Another concept that has been found to influence green purchase intention is a customer's evaluation of a brand experience. As with other cognitive factors, the evaluation of a brand experience can increase familiarity with sustainable products, their availability and help the congruency effect of hedonic value, if the brand identity is consistent with this evaluation (Jo & Shin, 2017; Saari et al., 2017; Yoganathan et al., 2019).

In summary, green purchase intention is a critical concept in the field of green marketing, one which works as an ancillary pillar for the rest of concepts in the field. Despite this, the research on green purchase intention, with Zhuang's (2021) meta-analysis on the concept having only 54 distinct entries.

Furthermore, the literature about the relationship of green purchase intention with psychological distance is divided, with some authors arguing that it is a high level of psychological distance that increases green purchase intention the most (Leiserowitz et al., 2010; A. Spence & Pidgeon, 2010), and others arguing that it is a low level of psychological distance (Feng et al., 2021; Zheng et al., 2023). With the goal of advancing the current literature, this dissertation will explore the relationships of green purchase intention with psychological distance (Studies 1, 2, 3, 4), brand experience (Study 1), environmental literacy (Study 3) and framing effect (Study 4), as there is currently no precedent in the literature that has sought to study the interaction between these concepts.

2.3.- Research Goals

Overall, although psychological distance has been considered as an antecedent of green purchase intention in the literature, there is still a limited number of studies available in the context of other variables, such as environmental literacy, brand experience and framing effect.

Therefore, this current dissertation employs construal-level theory as a framework for psychological distance to examine its influence on green purchase intention. The psychological distance emphasized in this study is the temporal distance of climate change (when will it happen?) and the spatial distance to its consequences (where will it happen?).

This dissertation aims to further advance the understanding of the role of psychological distance in green marketing by fulfilling the following research goals:

- 1.- Empirically analyzing the relationship between psychological distance to climate change and green purchase intention, and establishing at which level is it more impactful on a customer's desire to purchase green products (Study 1).
- 2.- Empirically analyzing the effect that a customer's existing environmental literacy brings to the relationship between psychological distance to climate change and green purchase intention (Study 2).

3.- Empirically analyzing the effect that a positive/negative framing effect brings on the relationship between psychological distance to climate change and green purchase intention (Study 3).

4.- Understanding how brands create experiences that directly influence a customer's psychological distance to climate change and enhance their environmental literacy (Study 4).

The result of the pursuit of these goals will be summarized in Section 7, alongside the contributions to the theoretical and practical field of green marketing.

3.- Study 1: The impact of the middle level psychological distance on green purchase intention

3.1.- Overview and Aim

Study 1 aims to perform a quantitative empirical research study to fulfill the first research goal of this dissertation: empirically analyzing the relationship between psychological distance to climate change and green purchase intention, and establishing at which level is it more impactful on a customer's desire to purchase green products.

The main research question that Study 1 aims to answer is: "What is the relationship between psychological distance of climate change and green purchase intention? What is the optimum level of psychological distance to increase the sales of green products?"

To that end, a quantitative research based on data collected from a survey of Japanese consumers is employed, using scale items previously employed in the literature to gauge their opinions and thoughts on their perceived psychological distance of climate change and their green purchase intention.

Study 1 serves as the main framework on which the rest of the studies will be built upon, by introducing the empirical relationship of psychological distance of climate change and green purchase intention. Through this quantitative analysis, Study 1 paves way for Study 2 and 3, by providing an early look into the relationship of psychological distance and green purchase intention as well as introducing the measurement tool and model.

Study 1 is structured in the following way:

- Section 3.2 will introduce the hypothesis that is meant to be proven through quantitative analysis. Study 1 proposes the middle level of psychological distance of climate change as the most beneficial one in encouraging green purchases. To that end, an inverse-U shaped relationship between the two variables is proposed as the main contribution.
- Section 3.3 will introduce the methodology of the quantitative analysis, by introducing the tools to be used (survey data and regression analysis), explaining the survey in detail, showing the items and scales adopted from the literature, explaining the flow of the survey and detailing the pretest that was carried out before the main sample was obtained.
- Section 3.4 contains an in-depth analysis of the sample obtained. Firstly, the descriptive characteristics are explained. Secondly, the measurement model for the current dissertation is validated. Finally, regression analysis is carried out.

- Section 3.5 contains the summary of the discussion of the results, as well as the conclusions reached from answering the research question. Theoretical and contributions form are summarized too.
- Section 3.6 addresses the limitations of Study 1, and proposes future avenues for research, as well as directly link it with Study 2.

3.2.- Hypothesis of the relationship between psychological distance and green purchase intention

As mentioned during Section 2, there is no relevant literature in the field of green marketing that has studied the effect that a middle level construal has over green purchase intention, thus one of the goals of this dissertation is to provide an empirical analysis of the relationship between psychological distance and green purchase intention, through the point of view of consumers for green products.

Following previous literature, the dimensions of psychological distance that will be considered for this empirical analysis will be the temporal and spatial ones, based on recommendations for the study of psychological distance and its influence on pro-environmental behaviors (A. Spence & Pidgeon, 2010).

Since there exists a lack of consensus over which level of psychological distance is the highest at increasing green purchase intention (high or low), this dissertation suggests a third possibility: a middle level of psychological distance. This middle level is characterized as a temporal and spatial mental construction of climate change that combines features of high and low level, thus balancing the distance towards an equilibrium. For example, by focusing on a specific point in the future where climate change may affect the individual (i.e., 20 years) and a location (i.e., neighboring country), a mental representation of climate change that sits in the middle of the previously theorized high construal (climate change will happen in the far future, and it will happen far away) or low construal (climate change will happen soon, and it will happen close) is proposed, and the relationship between psychological distance and green purchase intention is theorized as nonlinear and with the shape of an inverse U, so that there exists an optimum point (middle level of psychological distance). This relationship will be tested through a regression analysis of a sample of Japanese consumers, put in a scenario of paper packaging products and its contribution to decreasing the impact of climate change, to activate the specific construal in their minds.

To fill this research gap and introduce the element of the middle level of psychological distance as the optimum distance to increase green purchase intention, it is formally theorized that the relationship between psychological distance and green purchase intention is an inverse U-shaped one.

H1: There is an inverted U-shaped relationship between psychological distance (PD) of climate change and green purchase intention (GPI). That is, there is an optimal psychological distance interval (proposed to be the middle level) at which GPI is the highest, and if the perceived psychological distance is higher or lower, green purchase intention would be lower than the optimal level.

The proposed hypothesis for Study 1 is depicted in Figure 3, which shows a proposed theoretical framework.

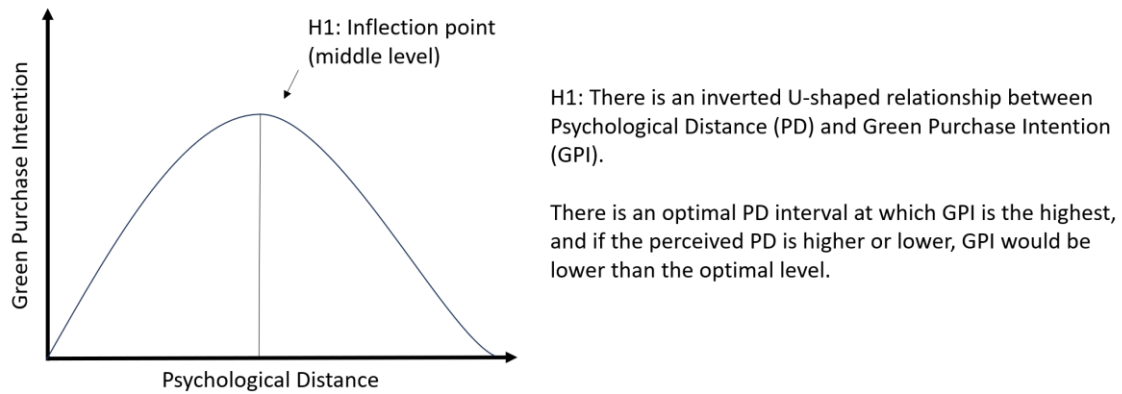


Figure 3.- Proposed theoretical framework for Study 2

3.3.- Methodology

To test the hypothesis of Study 1, it was necessary to gather data regarding the interaction of a sustainable product's customer's psychological distance to sustainable issues and the purchase intention of green products.

The use of this data serves two main purposes. The primary goal of the analysis is to test the impact of psychological distance over green purchase intention.

The secondary goal, which is based on the hypothesis formulated previously, is to test the whether the impact of psychological distance over green purchase intention is the strongest at a middle level, in contrast with a high or low level. As was mentioned previously, this research question has not been posed previously in the literature, and it serves as one of the main ways of this dissertation to contribute to the literature.

According with these goals, quantitative observations of customers of green products' psychological distance towards the sustainable issues and their intention to purchase products that remedy them was required. Since psychological distance and purchase intention are not latent variables, a survey was chosen as the tool for data collection. Through a survey's items, variables that are latent can be inferred from a series of questions that gauge a respondent's opinion and feelings.

Since the data that is to be used in the analysis of the middle impact of psychological distance will be later used to answer different research questions in Studies 2 and 3, this section will deal with the introduction of the data collection instrument in detail, the dependent measures of the latent variables, summarizing the manipulation effect and carrying out a pretest.

3.3.1.- Data collection

The tool employed to collect data was Yahoo! Crowdsourcing. As a crowdsourcing online platform, it allows users to engage in a series of tasks for monetary rewards, often in the form of "Pay Pay Points", a point currency system used by the mobile payment smartphone application "Pay Pay", a platform that belongs to LY Corporation, the holding company that is the owner of Yahoo! Japan.

The advantages to choosing Yahoo! Crowdsourcing as the platform to host the survey were threefold:

1.- Access to diverse data: as the owner of several internet services such as of social network services, internet search engines and telephone providers, Yahoo! offers its users a cohesive integration into its crowdsourcing services, massively increasing the potential pool of registered users in the service. The user base of Yahoo! Crowdsourcing was of approximately 1 million users as of July 2023. In the case domain-specific knowledge or particular skills are required, Yahoo! Crowdsourcing offers the possibility to filter respondents through them. Conversely, there is no specific requirement in skills, location or time for users to take on tasks, which increases the potential pool of respondents.

2.- Cost-effectiveness: the use of a large pool of combined user-bases provides Yahoo! Crowdsourcing the benefit of scalability over other alternatives, such as marketing agencies or consumer panels. At the same time, since each user can undertake as many tasks as they want in Yahoo! Crowdsourcing, payment can be easily scalable and adjusted depending on the difficulty of the task, reducing overall costs to host a specific task and offer payment for said task.

3.- Improved data quality: Yahoo! Crowdsourcing platforms has in place standards of data quality inspection and established recruitment and follow-up processes to ensure accurate and relevant data is provided.

Crowdsourcing samples are widely used in social science studies (Goodman & Paolacci, 2017), as they are more representative than convenience samples and provide data of high quality and validity (Berry et al., 2022).

As was justified in Section 1, since this study focuses on the promotion of sustainable products as the main object for this study, it was decided to use sustainable-labeled paper packaging products as the motivator for purchase intention in this case. Since the goal of this survey was to gauge the sensibility for green purchase intention in a quick and deliberate manner, a scenario revolving around the benefits of sustainable packaging products was created as a priming tool for respondents. The details about this scenario and the rest of the stimuli will be discussed below.

The size of the sample was determined based on the total population size in Japan 123.000.000 (as of October 2023). Given the total population, to achieve a 5% margin of error on statistical estimations, a sample size of 400 is required (Serdar et al., 2021). Knowing this, the goal was to obtain 750 samples, which surpasses that benchmark.

To serve as the basis of Studies 2 and 3 as well, the survey was designed to collect data not only on the psychological distance towards climate change and green purchase intention of sustainable packaging products, but also on the environmental knowledge and practices that respondents have on climate change (herein referred to as environmental literacy) and the effect that a positive or negative framing of climate change's consequences or situation can influence the previous three variables (herein referred to as framing effect). Therefore, the three latent variables (psychological distance, green purchase intention and environmental literacy) were measured through existing scales shown to be valid and reliable in previous research. For the measure of the framing effect, two manipulation scenarios were created based on Tong et al.'s (2021) previous research. Since the scales and scenarios employed by previous research are in English and this survey is meant for Japanese consumers of green products, all of the information contained in the survey was translated into Japanese. Help was enlisted from two local students from Kobe University, who translated from English to

Japanese and then were sent the completed translation from each other to correct it. A final translated version of the survey was finalized incorporating the comments from both students.

3.3.2.- Latent variable measures

Environmental literacy

Environmental literacy was measured by nine 7-point Likert scale items (agree/disagree) based on the revised New Ecological Paradigm (NEP) scale by Dunlap et al. (2000) and the Environmental Attitude of the University (EUA) scale by Manzanal et al. (2007) and Rodríguez-Barreiro et al. (2013). For Studies 1 and 3, responses for all nine items were averaged into one scale (uni-dimensional).

Psychological distance

Psychological distance was measured by six 7-point Likert scale items (agree/disagree) based on previous research by Spence & Pidgeon (2012) and Jones et al. (2017). For Studies 1 and 3, responses for all six items were averaged into one scale (uni-dimensional).

Green purchase intention

Green purchase intention was measured by four 7-point Likert scale items (agree/disagree) based on previous research by Tong et al. (2021). For Studies 1 and 3, responses for all four items were averaged into one scale (uni-dimensional).

Table 2 contains a summary of the items for each variable, their source and translation in Japanese.

Concept	Item	Translation	Source
Environmental Literacy	I am interested in reading and am concerned about the impact of climate change towards the environment	私は気候変動が環境に与える影響について懸念しており、それについての記事を読むことに興味がある。	Rodríguez-Barreiro et al. (2013), Manzanal et al. (2007) Dunlap et al.(2000)
	I am concerned about environmental problems and health hazards caused by air or water pollution	大気汚染や水質汚濁による環境問題や健康被害を懸念している。	
	Most environmental problems can be solved by applying better technologies	環境問題のほとんどはより優れた技術の応用により解決できる。	
	Humans have the right to modify the natural environment to suit their needs	人間は自分勝手に自然環境を改造する権利はないと考える。	
	The loss of rainforest will restrict the progress of humanity	熱帯雨林の消失は人類の進歩を制限する。	
	Conservation improves people's standard of living and contributes to human welfare	保護活動は人々の生活水準を向上させ、人間の福祉に貢献する。	
	I recycle paper and bottles at home	私は家で紙やビンをリサイクルしている	
	I separate burnable and plastic waste	私は可燃ごみとプラスチックごみを分別している。	
	I buy environmentally friendly products	私は環境に配慮した商品を購入している。	
Psychological Distance	Climate change is a significant problem mainly in distant locations.	気候変動は主に遠方で発生している重要な問題である。	Spence & Pidgeon (2012) and Jones et al. (2017)
	Serious consequences of climate change primarily occur in places that are far away from here.	気候変動の深刻な影響は、主にここから遠く離れた地域で起こる。	
	Climate change mostly affects other parts of the world.	気候変動はほとんどの場合、世界の別の地域に影響する。	
	Serious consequences of climate change will be felt primarily in the future.	気候変動による深刻な影響は主に将来に感じられるだろう。	
	Climate change effects will mostly occur in the future.	気候変動による影響は主に将来に起こるだろう	
	Climate change will be more of a significant problem in the future compared with now.	気候変動は現在よりも将来の方がより大きな問題になるだろう。	
Green Purchase Intention	I want to make a special effort to buy products made from recycled materials	私はリサイクル素材から作られた製品を買うように努力したい。	Tong et al. (2021)
	I would switch products for ecological reasons	私は環境に優しいという理由から選ぶ製品を変える。	
	If I had a choice between two equal products, I would purchase the one less harmful to other people and the environment	私は2つの同じ製品から一つを選ぶ場合、人々や環境に害の少ない方を買うだろう。	
	I would avoid buying a product because it has potentially harmful environmental effects	私は環境に有害な影響を及ぼす可能性のある製品を購入することは避ける。	

Table 2.- Questions of the survey used to gather data for Studies 1, 2 and 3.

3.3.3.- Manipulation and stimuli

Framing effect

Framing effect was measured as a control variable, based on dividing subjects into three categories: exposed to no framing effects (control), exposed to positive framing of climate change (positive) and exposed to negative framing of climate change (negative). Respondents were randomly assigned to one of these three groups upon start of the survey. Following a link outside of Yahoo! Crowdsourcing to a Google Forms, participants were shown a text and a corresponding image. The text asked them to imagine themselves in the situation presented. Both negative and positive scenarios expose an environmental pollution problem. These scenarios are based on previous research by Tong et al. (2021).

The positive scenario presents climate change as a side-effect of human development and underlines the importance of human action, as well as the possibility of prevention of further damage, in general posing a hopeful scenario. The scenario also contains a digital drawing that supports the uplifting tone of the scenario.

The negative scenario presents climate change as a consequence of human development and underlines the dramatic effects of ecological disasters, as well as the necessity of human intervention as soon as possible, in general posing a frightful scenario. The scenario also contains a digital drawing that supports the dramatic tone of the scenario.

For measuring purposes, framing effect is measured as a dummy variable, taking values of 0 for the control group, 1 for the positive group and 2 for the negative group.

After reading this scenario, participants were shown a second scenario, that was common to all groups (control, positive, negative). This second scenario focused on showing the benefits of sustainable packaging products over their non-green replacements. The scenario poses that more and more Japanese packaging firms are investing in recyclable and environmentally friendly paper wrappings for their products as a consequence of a new policy to cut down on national plastic consumption from April of next year. Two fictional companies, Company A and B are showcased as spearheads of this movement by developing paper-based packaging that is easily disposed of and has minimal ecological impact. The scenario also contains a picture of several green packaging products to support the mental image that a respondent may have about these.

Table 3 contains a summary of the contents of each scenario, their sources, the images used to support them and translation in Japanese.

Type	Item	Translation	Image
Positive frame	Climate change will lead to a rise in sea-level, especially in the coastal cities. However, if we take timely action to adopt green and energy-saving lifestyles, the sea level rise problem will be alleviated and will not bring great harm for a long time.	気候変動は海面上昇をもたらす、特に沿岸部に影響を及ぼすとされています。しかし、もし我々が緑豊かで省エネな生活様式を早急に実行するならば、海面上昇の問題は軽減され、長期間にわたって大きな害をもたらすことはありません。	
	At the same time, we can also prevent the global ecology from being damaged and also make a contribution to improving the living environment.	同時に私たちは地球の生態系を破壊から防ぎ、さらには生活環境の改善にも貢献できます。	

Negative frame

Our country emits approximately 50 kg. of carbon per person per day, and it will take a thousand trees to fully absorb it. Climate change will cause global sea levels to rise and coastal cities to be destroyed.

If everyone does not take active action to reduce the amount of carbon emissions, the consequences are unimaginable. Your city will face flooding, erosion of coastal lowlands, contamination of water, salinization of farmland, and even the risk of an entire city being swallowed up by the sea.

私たちの国は、1人当たり1日に約50キログラムの炭素を排出し、それを完全に吸収するには千本の木が必要です。気候変動は世界の海面上昇を引き起こし、沿岸都市を壊滅させるでしょう。

誰もが積極的な行動を起こさない場合、その結果は想像を絶するものです。あなたの住んでいる街は洪水、沿岸部分への浸食、水の汚染、農地の塩水化、そして街全体が海に飲み込まれる危険があります。



Table 3.- Scenario items used in each framing group, used in the survey.

3.3.4.- Procedure

A task for completion of a survey titled “Climate change and sustainable packaging” was created in Yahoo! Crowdsourcing. After having created the task, participants that chose to take part in it were instructed about the contents of it, as well as the flow of the different sections. The participants also provided informed consent for providing their personal data.

The survey was divided into four different sections.

Survey Section 1 was the Introduction. Participants read a short description about the goal of the survey, the fact that one section of the survey takes part on a different site (Google Forms), the payment and the maximum time (15 minutes) allowed to complete the task. Respondents were rewarded with 4 “Pay Pay” points for the completion of the survey, which required filling all of the fields and inputting their personal ID.

Survey Section 2 was the Scenario. Participants were given a link to a Google Forms that contains the aforementioned scenarios. In order to select randomly which participants are assigned to which scenario, a webtool based on Fergusson (2016) was created. The webtool randomized which Google Forms was administered for each click, meaning that 33% of the sample was expected to be assigned to each group (control, positive, negative), meaning it was expected to obtain 250 samples for each scenario. Each participant was shown the framing scenario corresponding to their group (positive for positive framing group, negative for the negative framing group and none for the control group, who were only shown the second scenario). Following that, all respondents were shown the same second scenario regarding the benefits of sustainable packaging. After this, participants are given a code that they need to introduce back in Yahoo! Crowdsourcing to proceed in the task. Control group was given the code ECO1, positive group was given the code ECO2 and negative group was given the code ECO3. This method allows for categorization of each participant on the results. When a respondent returned to the main platform, they were asked two questions in a 5-point Likert scale (negative/positive) regarding their opinion on the approach to both climate change and human action in the described scenarios. The ratings of these two items were used to check the effectiveness of the manipulation. Two questions were chosen to check the manipulation effect in order to account for both sides of the scenario (climate change effects vs human action) and reduce risk of not being able to check the stimuli.

Survey Section 3 was comprised of the Main Questions. Participants were instructed to complete a questionnaire about their environmental knowledge and practices, how they felt towards climate change in terms of time and space, and their willingness to purchase green products, on a 7-point Likert scale. To make sure that the subjects were paying attention during this part of the survey, two control check questions were included, asking participants to choose to “strongly agree” and to “strongly disagree”. Responses that did not meet the

control check were discarded. In order to avoid common method bias, the order of each of the items was randomized between latent variables.

Survey Section 4 was comprised of the Demographic Questions. These questions asked participants about their age (in age brackets), sex (male/female), yearly income (in income brackets of \$10.000) and their highest education level.

Figure 4 shows a diagram of the flow of the sections of the survey and the grouping mechanism.

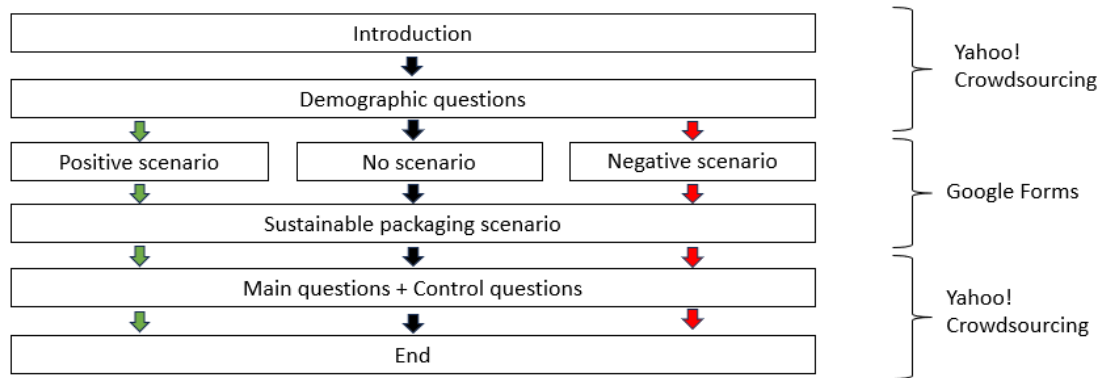


Figure 4.- Flow of the survey used to gather data for Study 1, 2 and 3.

3.3.5.- Pretest

To test the validity of the framing effect as well as the fit of the scales, a pretest with the same exact procedure as the main survey, and was held from November 10 to November 11, set for 100 samples to be gathered. Each respondent obtained 4 “Pay Pay” points for completing the task. To check the effectiveness of the framing manipulation, the mean of the scores of the two manipulation check questions that followed immediately after the Scenario part of the survey. The average rating of these two items were used in a simple t-test comparing the mean score for the positive and negative group.

Regarding Manipulation Check 1 (“What was the approach to climate change of the scenario?”), the results indicated there **is not a significant statistical difference** ($t(19) = 1.791$, $p = .089$, 95% confidence interval) in the mean score for subjects in the positive group ($M_{\text{positive}} = 3.68$, $SD = .83$) and negative group ($M_{\text{negative}} = 3.06$, $SD = 1.29$).

Regarding Manipulation Check 2 (“What was the approach to human action in the scenario?”) the results indicated that there **is a significant statistical difference** ($t(20) = 2.552$, $p = .019$, 95% confidence interval) in the mean score for subjects in the positive group ($M_{\text{positive}} = 3.93$, $SD = .62$) and negative group ($M_{\text{negative}} = 3.25$, $SD = 1.00$).

Table 4 contains the indicators of the t-test for the comparison of means of the manipulation check of the pretest.

	Positive framing		Negative framing		df	t	p	Cohen's d
	M	SD	M	SD				
MANIP 1	3.68	.83	3.06	1.29	19	1.791	.089	.639
MANIP 2	3.93	.62	3.25	1.00	20	2.552	.019	.921

Table 4.- Differences between positive framing and negative framing on manipulation check scores of the pretest.

Since at least one of the two checks provides enough statistical difference between the two groups, the pretest results suggested that the manipulation check worked effectively and could be adopted in the main survey.

3.4.- Analysis

The objective of this section is to carry out an in-depth analysis of the data gathered through the survey, with the goal of understanding the relationship between psychological distance and green purchase intention. This section will be focused on presenting the main characteristics of the sample collected, carrying out an analysis of the measurement model, performing the required statistical calculations to answer the research question and showcasing the results.

3.4.1.- Sample characteristics

The main survey gathered 750 samples from November 16 to November 17. Successful responses awarded each user with 4 “Pay Pay” points, which equated to 110 yen paid per sample. Cases in which the respondents did not reply correctly to the control questions were discarded (n = 40, equating to 5.3%) to lower noise (Thomas & Clifford, 2017).

Table 5 illustrate the remaining 710 samples’ demographic characteristics:

Variables	Items	Frequency	Percent
Sex	Female	465	65.49
	Male	245	34.51
Age	0-17	1	0.14
	18-24	14	1.97
	25-34	52	7.32
	35-44	166	23.36
	45-54	272	38.31
	55-64	155	21.85
	65+	50	7.04
Highest Education level	Middle School	7	0.99
	High School	186	26.20
	Vocational School	97	13.66
	Undergraduate	367	51.69
	Master	43	6.06
	Doctor	10	1.41
Annual income equivalent in Japanese Yen (¥) *	Less than 1.5 million	242	34.08
	Less than 3 million	120	16.90
	Less than 4.5 million	133	18.73
	Less than 6 million	94	13.24
	Less than 7.5 million	52	7.32
	Less than 11.25 million	53	7.46
	Less than 15 million	11	1.55
	Less than 22.5 million	1	0.14
	Less than 30 million	1	0.14
	More than 30 million	3	0.42

* ¥ 1 = \$ 0.0068

Table 5.- Demographic profiles of the respondents of the survey.

As a consequence of the true random nature of the webtool used to divide participants into each framing group, an even split between the groups was not achieved. Out of the 710

samples, 163 samples belonged to the control group; 248 to the positive group and 299 samples to the negative group.

The same manipulation check questions as in the pretest were used. To check if the validity of the manipulation scenarios was met, the previous t-test as employed. For the main survey, both positive ($M_{\text{positive}} = 3.60$, $SD = .793$) and negative ($M_{\text{negative}} = 3.20$, $SD = .972$) groups for Manipulation Check 1 ($t(545) = 5.247$, $p = .001$, 95% confidence interval) and for Manipulation Check 2 ($t(545) = 2.959$, $p = .001$, 95% confidence interval) were proven to be statistically different with enough significance to claim that the manipulation checked successfully worked in invoking the adequate framing to be used in Studies 1, 2 and 3. Table 6 contains the indicators of the t-test for the comparison of means of the manipulation check of the main survey.

	Positive framing		Negative framing		<i>df</i>	<i>t</i>	<i>p</i>	Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>				
MANIP 1	3.60	.79	3.20	.972	545	5.247	.001	.621
MANIP 2	3.65	.44	3.44	.863	545	2.959	.003	.423

Table 6.- Differences between positive framing and negative framing on manipulation check scores of the pretest.

3.4.2.- Measurement model

Before proceeding with the analysis of the sample, confirmatory factor analysis (CFA) was employed to test the suitability of the measurement items validity in properly identifying their latent variables as well as the proper fit that these items provide to the overall proposed model.

All of the 19 latent variable items were assessed to explain over 74% of the total variance, with factor loading from 0.669 to 0.810 (KMO measure of sampling adequacy: .921). Together with Bartlett's test of sphericity ($\chi^2(171) = 6701$, $p = .001$, 95% confidence interval), these results indicate that the multidimensional scale of the measurement items is sufficiently valid. Table 7 contains the estimates for the KMO and Bartlett's test.

To assess common method bias, Harman's single factor test was employed. All 19 latent variable items were analyzed as a common unidimensional construct. Results showed that one factor solution accounted for 39.03% of the total variance, which is below the critical threshold of 50%. Therefore, common method variance was not a significant risk for the analysis.

To assess univariate normality for each of the latent variable items, Kolmogorov-Smirnov (all items: $df = 710$, $p = .001$) and Shapiro-Welk (all items: $df = 710$, $p = .001$) were performed. As per the results, the ratings of the items do not meet univariate normality. Skewness and kurtosis were checked to support the previous tests. Since several critical ratios exceed ± 1.96 , univariate normality is not assumed. The multivariate kurtosis value (154.30) was used to assess multivariate normality and since the critical ratio ($c.r. = 72.78$) exceeds ± 1.96 , multivariate normality is not assumed.

Since multivariate normality is not assumed, the maximum likelihood estimator for confirmatory factor analysis cannot be used. According to Bandalos (2014), when working with ordinal data that does not meet the assumption of normality, diagonal weighted least squares (DWLS) with a robustness can be used as an estimator and was used in the confirmatory factor analysis of the model. Table 7 contains the estimators for KMO, Bartlett's Harman's and normality tests.

KMO and Bartlett's Test		
Bartlett's test of sphericity	KMO test	.921
	χ^2	6701
	df	171
	Significance	.001
Harman's single factor test		
Components		Sums of squared loadings
1		39.027
Tests of normality		
Kolmogorov-Smirnov		All $p < .001$
Shapiro-Wilk		All $p < .001$
Multivariate Kurtosis		154.30

Table 7.- Estimators for the KMO, Bartlett's, Harman's and normality tests of the measurement model used in Studies 1, 2 and 3.

R and the lavaan library were used for the test and validation of the measurement model through confirmatory factor analysis. The measurement model included three latent variables with 19 observed variables. Confirmatory factor analysis demonstrated that the model had a good fit with the data (χ^2/df : $2.17 < 3$, CFI: 0.942, TLI: 0.933, RMSEA: 0.076, SRMSR: 0.084). To check the model's internal reliability, the Cronbach's alpha (CA), composite reliability (CR) and average-variance extracted (AVE) values for each latent variable were checked. As illustrated in Table 8, the CR and CR values surpassed the threshold values, therefore confirming the internal reliability of the measurement model (Cronbach, 1951). The AVE for all latent variables exceeds the benchmark of 0.50, therefore confirming that convergent validity of the measurement model. The square root of the AVE for each latent variable was compared with the inter-correlation values between each variable, and they surpassed them, therefore confirming that discriminant validity was satisfied (Farrell & Rudd, 2009). Table 8 contains the estimators for the confirmatory factor analysis and the reliability tests.

Confirmatory Factor Analysis				
		χ^2/df	2.17 < 3	
		CFI	.942	
		TLI	.933	
		RMSEA	.076	
		SRMSR	.084	
Reliability Tests				
Latent variable	Items	CA	CR	AVE
EL	9	.851	.847	.596
PD	6	.773	.752	.521
GPI	4	.885	.764	.660

Table 8.- Estimators for the confirmatory factor analysis and reliability tests of the measurement model used in Studies 1, 2 and 3

Having met the assumptions the confirmatory factor analysis confirms that the measurement model of the latent variables, as well as the observable items are safe for drawing significant conclusions.

3.4.2.- Regression analysis

As was mentioned previously, for Study 1, the ratings of the observable items were averaged into a single uni-dimensional scale for each observation. This is to achieve the goal of this study to observe the effect of psychological distance over green purchase intention and if the

relationship is inverse-U shaped, meaning that middle points in the scale of psychological distance would beget higher intention to purchase green products.

To observe both of these effects, a scatterplot of the respondents' psychological distance towards climate change against their green purchase intention was created through IBM's SPSS. After observing the data, it became apparent that an inverse-U shaped relationship could be deduced from simple observation. To provide enough evidence of this relationship, a quadratic regression line was fitted to test the relationship between the variables. Figure 5 shows the scatterplot as well as the quadratic regression line fitted. As shown in the graph, the regression line presents a curve, suggesting that psychological distance has a decaying effect over green purchase intention, in other words, there is a point when increasing the psychological distance that a customer feels towards climate issues decreases their intention to purchase sustainable products.

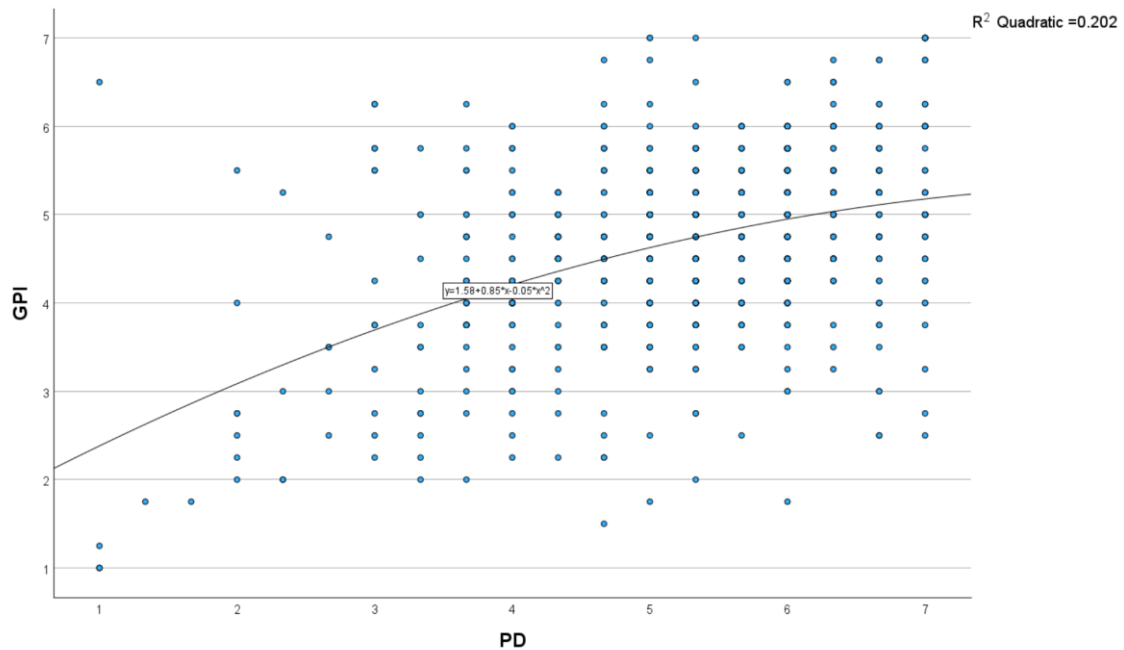


Figure 5.- Scatterplot of the combination of PD and GPI factors, with the quadratic regression line fitted and coefficient of determination of Study 1.

To prove if a quadratic regression line was statistically significant, nonlinear regression analysis with the squared term of psychological distance was carried out. Table 9 summarizes the estimation results of the regression analysis. Apart from the independent variable of psychological distance (PD), the quadratic term of psychological distance (PDSquare) was incorporated to capture the non-linear effect that it had on increasing green purchase intention (GPI). Results showed that there was a statistically significant relationship between the independent variables PD and PDSquare and the dependent variable GPI ($F(2, 707) = 89.402, p < .001$). Combined, these two independent variables account for 20.2% of the variability in GPI ($R^2 = 0.202$).

Regression analysis					
Model	Sum of squares	df	Mean square	F-value	Significance
Regression	151.786	2	75.893	89.402	< .001
Residue	600.172	707	.849		
Total	751.958	709			
Dependent variable: GPI					
Predictors: (Constant), PD, PDSquare					
Coefficient significance					
Model	Coefficient	Std. Error	t-value		Significance
(Constant)	1.58	.406	3.900		< .001
PD	.85	.171	4.959		< .001
PDSquare	-.05	.018	-2.695		.007
Dependent variable: GPI					

Table 9.- Results of the regression analysis of Study 1.

The positive coefficient of PD and the negative coefficient of PD² show that there is an inverted U-shaped relationship: there is a positive relationship between psychological distance and green purchase intention until an inflection point of psychological distance, and after this point, a negative relationship is manifested.

Based on the estimates shown in the non-linear regression analysis, and the quadratic regression line provided by the calculations, the inflection point was calculated as the maximum value of PD where the concavity changes. In the case of a quadratic function, this occurs at the vertex of the parabola.

The given quadratic equation is:

$$y = 1.58 + 0.85x - 0.05x^2$$

To find the vertex (and hence the inflection point), the formula for the vertex of a parabola is used:

$$x_{vertex} = \frac{-b}{2a}$$

In this case, the equation is in the form $ax^2 + bx + c$, where $a = -0.05$, $b = 0.85$ and $c = 1.58$.

$$x_{vertex} = \frac{-0.85}{2(-0.05)}$$

$$x_{vertex} = \frac{-0.85}{-0.1}$$

$$x_{vertex} = 8.5$$

So, the inflection point (value of PD that generates the highest value of GPI) for the given quadratic regression line is PD = 8.5.

With a median average score of psychological distance of 5.33, it can be said that the positive psychological distance/green purchase intention relationship characterizes the entire sample. The inflection point is more than two times higher than the expected score for the middle level of psychological distance, which is 4. As can be observed in the scatterplot in Figure 5, the shape of the curve is wide enough that, for the given sample, higher values of psychological distance result in higher purchase intention of green products.

While it is assumed that there is an inverse U-shaped relationship, therefore there is a middle point in which psychological distance has the highest effect over green purchase intention, and then a decay of the effect, it cannot be concluded that, for the given population, the middle level of psychological distance produces the highest intentions to purchase green products. Therefore, the main hypothesis of Study 1 is only partially supported.

3.5.- Discussion and Conclusions

Study 1 focused on the relationship between psychological distance and green purchase intention, a topic that has seen significant research attention during the past decade and the beginning of the new one (Feng et al., 2021; Ibrahim & Al-Ajlouni, 2018; Schill & Shaw, 2016; Zheng et al., 2023). After having combed through extensive past research of psychological distance and green purchase intention in the field of environmental and sustainable behavior, Study 1 contributes to the current literature by presenting the influence of psychological distance of climate change over green purchase intention in a new light, through the introduction of the middle level of psychological distance.

This study performed an empirical study on a sample of 750 Japanese consumers, polling their opinions on climate change as a way to test their psychological distance to this environmental issue. At the same time, a scenario in the context of sustainable packaging products was provided, with explicit references to climate change, activating their psychological distance to it. This study has sought to gather the opinions about the spatial and temporal dimensions of psychological distance of these respondents, as well as their intention to purchase products. The data was gathered in the span of two days, from November 16 to November 17. The tool used to gather the data was a survey conducted through Yahoo! Crowdsourcing. This study examined previous literature to find scales to measure psychological distance to climate change (C. Jones et al., 2017; A. Spence et al., 2012), measured with a six-item scale, and green purchase intention (Tong et al., 2021), measured with a four-item scale.

A regression analysis technique was employed to show the nature of the relationship between psychological distance and green purchase intention. The results showed that the main hypothesis of the study, that is, that there is an inverse U-shaped relationship between psychological distance and green purchase intention, so that a middle level of psychological distance is the level that will result in an optimum level of green purchase intention is only partially supported.

Theoretically, the hypothesis is supported, as the relationship between the two variables was empirically fitted through a quadratic regression line, which was proven to be significant, with psychological distance and its squared term explaining over 20% of the variance in the green purchase intention expressed by subjects. Since the quadratic term of the regression line is negative, this means that the relationship between the two variables fits under this representation.

Practically, for the given sample, calculating the inflection point, that is, the optimum psychological level at which green purchase intention is the maximum, the result came out to be 8.5. Since the items employed to measure psychological distance in this study only go as maximum as 7, the results point out that the inflection point for psychological distance cannot be reached with the current measure items, thus revealing that the relationship between psychological distance and green purchase intention is a positive one for this study. Figure 6 shows the graphical representation of this inflection point.

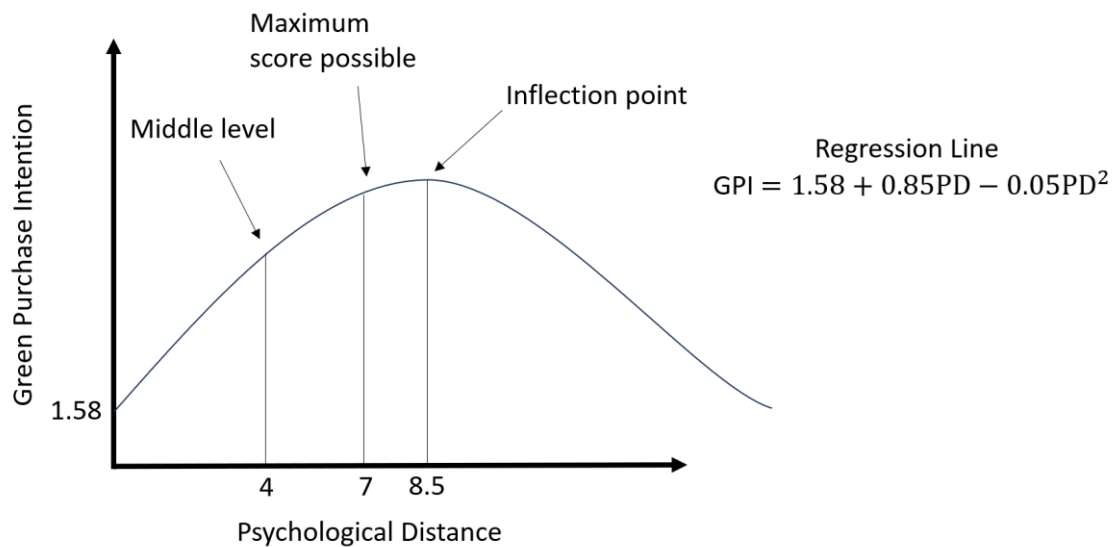


Figure 6.- Graphical representation of the inflection point and the quadratic regression line of Study 1.

Thus, even though this study has proven empirically the existence of an inverse U-shaped relationship for psychological distance of climate change and green purchase intention, in practical terms, the conclusions of this study is that, to increase the intention to purchase green products, customers must feel that the environmental issues that they solve are abstract, imagined as happening far away from them, in spatial and temporal terms. In this way, the findings of this paper align with past research that has found that a high level of psychological distance towards sustainable issues enhances pro-environmental behavior (Ibrahim & Al-Ajlouni, 2018; Kivetz & Tyler, 2007; A. Spence & Pidgeon, 2010; van Dam & van Trijp, 2013; Yang et al., 2015). On the other hand, the presence of a non-linear relationship (inverse U-shaped) merits further research by defying the current body of literature, in theoretical terms. In this way, Study 1 unveils an interesting and meaningful interaction between psychological distance to climate change and green purchase intention, with several theoretical and practical contributions.

3.5.1.- Theoretical Contributions

Study 1 contributes to the theoretical body of knowledge of psychological distance and green purchase intention by offering a framework to study the middle level of psychological distance as an antecedent of green purchase intention, drawing upon construal level theory as a basis. Study 1 aimed at deciphering what the role of psychological distance of climate change would be in relation to green purchase intention. In this case, however, the study sought to contribute to the literature by providing an effect that has yet to be introduced to the literature: the middle construal level.

This middle level of psychological distance of climate change finds its basis on construal level theory, and is formally defined as a mental representation of an event or stimulus that is based on an abstract construal (high-level), but oriented towards feasibility (low-level), with clear solutions, in the form of green purchases. That is to say, a combination of features of a high and low level of psychological distance of climate change. The importance of this middle level is in its approach to motivation for action: as was mentioned in Section 1, climate change is an objectively high-level construal concept for humans, but through manipulation performed

through marketing communications, it is possible to evoke certain levels of psychological distance. By combining a focus on abstract goals and future, but with clear and feasible steps, a middle level of psychological distance combines the most prominent features of a high and low level of psychological distance, which Study 1 proves affects directly the intention to purchase green products, aligning with previous literature and justifying the importance of studying the effect of psychological distance in the context of climate change and green purchase intention.

Theoretically, this study defies the current literature on psychological distance by providing this new avenue of research to test the relationship with green purchase intention. Drawing upon construal level theory, the main ideas behind the concept of middle level of psychological distance come from the congruency effect resultant from a match between hedonic and utilitarian values that a product offers, alongside the mental image that a customer has of environmental issues (Theodorakis & Painesis, 2022). When both of these meets at the middle between a high and low construal, the middle level of psychological distance is reached, and customers feel more motivated to engage in the purchase of green products.

It must be pointed out that the although Study 1 provided enough empirical evidence for an inverted U-shaped relationship between psychological distance of climate change and green purchase intention, careful analysis of the data revealed that the results of the current study only point towards a high level of psychological distance being the optimum point to increase green purchase intention. Therefore, further research avenues are open to the future to further analyze the middle level of psychological distance. Thus, this study serves as an initial effort for future contributions.

In summary, Study 1 serves to confirm the prior literature (Ibrahim & Al-Ajlouni, 2018; Kivetz & Tyler, 2007; A. Spence et al., 2012; van Dam & van Trijp, 2013; Yang et al., 2015), and at the same time, pioneer the environmental and sustainable behavior literature by offering two theoretical contributions:

1. An inverse U-shaped relationship between psychological distance of climate change and green purchase intention: for the current study, the inflection point is a high level of psychological distance.
2. The introduction of the concept of middle level of psychological distance as a construal level that merits study.

3.5.2.- Practical Contributions

From a managerial perspective, Study 1 brings a new concept for both policymakers and marketing managers of green brands: the focus on a middle level of psychological distance of environmental issues. This study serves as empirical proof of the relationship between the two variables not being completely linear, but rather based on an inverse U-shaped relationship, meaning that too close or too far psychologically to environmental issues can hinder green purchase intention in consumers. Success to consider how can marketing efforts, campaign messages and green products appeal towards this inflection point in the relationship can lead to customers feeling more engaged with the brand, being more willing to accept new product lines that are marketed as sustainable and becoming receptive to the organization's future goals. Consequentially, based on the findings, the following recommendations are made to marketing managers of green brands, environmental policymakers and CEOs of green brands:

1. Identifying the mental image of environmental issues that your customers have, and their response to marketing messages of green products.
2. Use marketing communications ensure that this construal level is at a high level, that, that your consumers perceive environmental issues as something that is far away from them, in terms of time and place, so that the message that green products are the solution for a global problem might be better be processed, and generating a match between their mental image of environmental issues and the marketing messages of your brand.

3.6.- Limitations

Study 1, through its empirical analysis of the opinions from consumers of green products, has been able to contribute to the literature by empirically analyzing the inverse U-shaped relationship between psychological distance and green purchase intention.

However, the study presents two major limitations:

1. The main hypothesis is only partially supported. As pointed out previously, the analysis pointed out that, although there exists a significant inverse-U shaped relationship between psychological distance of climate change and green purchase intention, in practical terms, the optimum level of psychological distance is a high one, instead of the middle level of psychological distance as was hypothesized. Therefore, this study, although pioneering the field of psychological distance, lacks true empirical and practical evidence that the middle level of psychological distance is the optimum. Therefore, future research must be carried out with the use of this framework, to bring enough evidence to prove the meaning of the inverse U-shaped relationship.
2. The lack of other independent variables. Study 1 only integrated psychological distance as the main predictor of green purchase intention, due to its relevancy in predicting environmental behavior (A. Spence & Pidgeon, 2010). However, future studies should also examine not only cognitive factors of a consumer, but also their personal characteristics before engaging with sustainable issues.

Studies 2 and 3 will deal with the last limitation of this study, by providing an analysis of environmental literacy and framing effect, respectively, on the framework proposed by Study 1.

4.- Study 2: The role of environmental literacy and its impact on psychological distance and green purchase intention

4.1.- Overview and Aim

Study 2 aims to perform quantitative empirical research to fulfill the second goal of this dissertation: empirically analyzing the effect that a customer's existing environmental literacy brings to the relationship between psychological distance to climate change and green purchase intention.

The main research question that Study 2 answers: "what is the effect of customers knowing and caring more about sustainability on the psychological distance they have towards sustainable products?".

To that end, a quantitative research based on collecting data from a survey of the population of Japanese consumers is employed, using scales and items used in previous literature to capture their environmental knowledge and habits, as well as opinions and thoughts on their perceived psychological distance of climate change and their green purchase intention.

Study 2 serves as a continuation of Study 1, by following up on its main limitation: the lack of other independent variables. To account for possible external factors, and following on the literature of green purchase intention, environmental literacy is proposed as a consumer characteristic that has a sizeable body of literature, proving it as the perfect consumer characteristic to introduce in the framework. Through this quantitative analysis of the role of environmental literacy in the framework proposed by Study 1, Study 2 opens the way for Study 3, by providing a complete framework based on previous literature. Study 2 makes use of the same measurement tool and model that Study 1 used.

Study 2 is structured in the following way:

- Section 4.2 will introduce the concept of environmental literacy through an exhaustive literature review, as well as the proposed theoretical framework and hypothesis that the empirical analysis will follow.
- Section 4.3 will introduce the methodology of the quantitative analysis, by introducing the tools to be used (survey data and structural equation modelling). Since the measurement tool and model are the same ones as in Study 1, they are explained in detail in Section 4.2.
- Section 4.4 contains an in-depth analysis through structural equation modelling of the proposed theoretical model.
- Section 4.5 contains the summary of the discussion of the results, as well as the conclusions reached from answering the research question. Theoretical and contributions form are summarized too.
- Section 4.6 addresses the limitations of Study 2, and proposes future avenues for research, as well as directly link it with Study 3.

4.2.- Literature review of environmental literacy

Following the introduction of concepts and exhaustive look into past research that was performed in Section 2, this section will be dedicated to doing the same for the concept of environmental literacy, defining it, showing its connections with the field of green marketing and finally, present the hypothesis that Study 3 aims to analyze as its main contributions.

Environmental literacy (EL) is defined as the “an individual’s capability to understand and interpret ecological issues while taking necessary actions to restore and enhance the environment” (Roth, 1992). Thus, environmental literacy is not based only on knowledge, but also on habits and action.

Its first appearance in the field of the literature of environmental and sustainable practices was in the early 1990s, in the seminal work of Roth (1992), and since then it has been at the forefront of research focused on sustainable behavior, with environmental literacy deemed as one of its key antecedents.

Environmental literacy has been studied in several journals regarding its application at several stages of the education chain, such as the formation of habits and knowledge during primary and middle schools, universities, etc. (Goldman et al., 2013). Past research has assessed the

level of environmental literacy of subjects by asking about one's knowledge of environmental issues, solutions and current actions (Pothitou et al., 2016). In one such case, Negev et al. (2008) performed an experiment with middle school students by gauging their information based on the meaning of the recycling symbol, the importance of the ozone layer and how to properly separate trash for proper recycling. Some of the survey items used to determine an individual's level of environmental literacy are scales that require respondents to evaluate terms (i.e., global warming, degradable materials, causes of animal extinction) and explain them in detail.

Previous research has shown that the level of environmental literacy of an individual is able to predict how new information about sustainable behavior is processed (Quintero Johnson et al., 2013). In the context of green marketing, past literature on the topic has identified that consumers that feel that green ads are personally relevant or that address issues that worry them, they are more likely to not only be persuaded, but to disseminate their knowledge through word-of-mouth. Therefore, consumers with a high level of environmental literacy are more likely to resonate and be persuaded by green advertising (Quintero Johnson et al., 2013). On the other hand, for consumers that are not concerned with environmental issues, green ads might appear less relevant to them and inherently unappealing, as there is a lack of a fit between the derived pleasure of green purchases and their environmental needs (or lack there-of) (Y. Chen & Chang, 2012).

Of great importance to this dissertation is the previous body of literature that has studied the relationship of environmental literacy with green purchase intention. Following the discussion of Section 2 about the nature of green purchase intention, as pro-environmental behavior comes forth from a place of intrinsic and extrinsic pleasure of engaging in environmentally friendly behavior, with the former referring to the inherent enjoyment of performing the action and the latter to the concerns borne of a desire to sustain or defend the environment (Masson & Otto, 2021). Several past studies about the relationship of environmental literacy and green purchase intention in different cultures (to account for the societal pressure component of green purchase intention) has revealed mixed results. On one hand, a study conducted in Israel with middle-school students showed that in spite of possessing a higher-than-average environmental literacy due to non-formal education, when asked about their willingness to engage in sustainable behavior, many of the students were reluctant to engage in compromise (Böcker & Meelen, 2017). Some research has suggested that consumers with a higher level of environmental concern present a higher green purchase intention, but it does not materialize into purchases, due to avoidance of paying a premium (Lee, 2011), with other scholars agreeing that consumers of green products pay more than the average for similar products in order to engage in green consumption (Royne et al., 2011).

On the other hand, a longitudinal study conducted in China showed that people with higher knowledge about damage from pesticides and the noxious effects of greenhouse gases were more likely to have purchased a green product in the span of 2 years since the experiment (Liu et al., 2020). Another study covering nine European countries was shown to establish a direct relationship between environmental literacy, ecological concerns and sustainable consumption behavior (Saari et al., 2017).

Following this reasoning, it is expected that environmentally literate individuals are more likely to be intrinsically and extrinsically motivated to consume green products.

There is also a growing body of literature that has studied the relationship of environmental knowledge and psychological distance. As has been discussed in Section 2, the perceived mental image of environmental issues and its fit with the construal that a consumer has about it is the main way in which psychological distance can influence green purchase intention. As environmental problems are not only acted upon, but defined and identified better by people with higher environmental literacy, past research has shown how the accrual of more knowledge and habits regarding environmental issues will affect directly the psychological distance, or construal, that a consumer has about them (Aktan & Kethüda, 2023; Brügger et al., 2016). However, findings are mixed when regarding the effect that environmental literacy has over psychological distance. Some scholars argue that when a high level of environmental literacy provides clearer definitions of environmental issues, consumers will construct those issues in a concrete construal in their mind, thus environmental literacy having a negative effect on psychological distance (Aktan & Kethüda, 2023). Opposed to this, past research about the positive relationship between environmental literacy and psychological distance has postulated that it is the increase in knowledge that leads to what is known as the “big picture” effect, in which long-term goals of behavior as well as motivation for action construes environmental issues as a psychologically distant construal in the consumer’s mind (Y. Chen & Chang, 2012). These authors argue then, that there is a positive relationship between environmental literacy and psychological distance.

Therefore, it can be inferred that increases in a customer’s environmental literacy will have a direct effect on their psychological distance of environmental issues

When considering the effect that environmental literacy and psychological distance have on increasing the likelihood that a consumer purchases sustainable products, an interaction effect has also been suggested by scholars in the field. A recent study by Fernández-Ruano et al. (2022) collected data from British and American visitors to Spain, conducting an experiment in the use of promotion to increase environmental awareness, knowledge and habits. The results found that an increase in the environmental literacy of the tourists yielded in average more purchases of environmentally friendly souvenirs, denial to participate in wasteful behavior and energy-consumption behavior. Most importantly, the effects of this increase in environmental literacy and green behavior were shown to be higher when the destination was perceived as psychologically close. In another recent study by Chen et al. (F. Chen et al., 2022), it was found that an increase in subjects’ cognition and repetition of environmentally friendly acts led to those same subjects participating in local ecological workshops. However, this impact was shown to be magnified with subjects that had reported that environmental issues were a thing of the distant future, and that would not happen around them, but identified the effectiveness of their action regardless. Although the findings in the literature so far remain mixed, it provides enough arguments to follow the line of reasoning that psychological distance could mediate the relationship between environmental literacy and green purchase intention.

4.2.1.- Proposed theoretical framework

Based on previous literature, Study 2 proposes the following series of hypothesis, with its justifications having being explained in detail in Section 4.2:

H1: Environmental literacy has a direct positive influence on green purchase intention.

H2: Environmental literacy has a direct positive influence on psychological distance of climate change.

H3: Psychological distance of climate change mediates the relationship between environmental literacy and green purchase intention, so that a higher level of psychological distance provides a stronger effect of the relationship.

Following the results of Study 1, where a direct relationship between psychological distance to climate change and green purchase intention was established, the present Study 2 also incorporates this interaction effect into the study of the role of environmental literacy and green purchase intention to increase green purchase intention.

As the results of Study 1 pointed out, although theoretically, the direct relationship between psychological distance to climate change and green purchase intention is an inverse-U shaped one, practically, for the current sample of study, a higher-level construal will result in higher levels of green purchase intention. On the line of this reasoning, and to include the direct effect of psychological distance of climate change on green purchase intention to the framework, it is formally hypothesized:

H4: Psychological distance of climate change has a positive direct relationship with green purchase intention, up until an optimum point, after which it has a negative influence on GPI.

The proposed hypothesis for Study 2 are depicted in Figure 7, which shows a proposed theoretical framework.

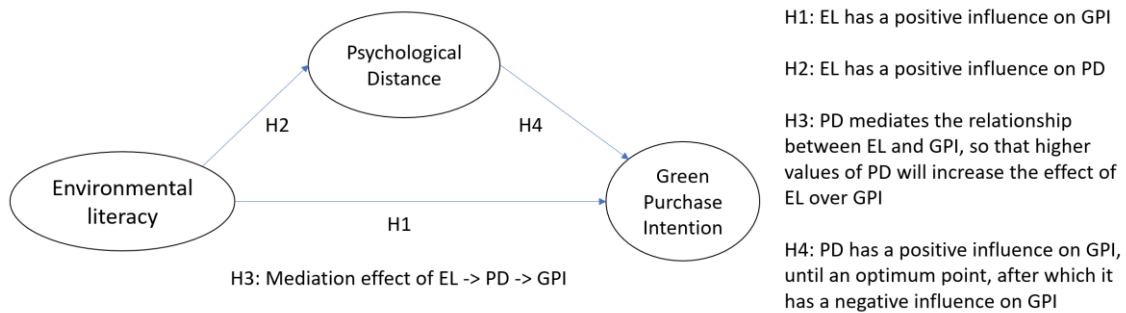


Figure 7.- Proposed theoretical framework for Study 2

4.3.- Methodology

Study 2 makes use of the data gathered to pursue Study 1, using the same measurement model with no direct changes. In this case, the latent variable items for environmental literacy, psychological distance and green purchase intention were used to carry out a structural equation model analysis. This section will present the data that will be used for analysis, as well as the chosen tool of analysis, structural equation modelling.

The data to be analyzed is the same sample gathered in the survey used by Study 1. As commented previously, environmental literacy, along with psychological distance and green purchase intention, is a latent variable that cannot be easily observed. Thus, it was decided on a survey to gather the opinion of Japanese customers on these concepts. Following the same reasoning, as this study sought to illustrate the importance of how marketing messages can appeal to a specific combination of psychological distance and environmental knowledge, the data employed has been contextualized in the industry of sustainable packaging products,

which make particular use of labels to transmit information to position customers in the frame of mind to consume green products (Aktan & Kethüda, 2023; Zheng et al., 2023).

An in-depth look into the data collection process, latent variable measures, manipulation and stimuli, procedure of the survey and pretest can be found in sections 3.3.1 through 3.3.5.

Structural equation modeling (SEM) has been acknowledged as the primary method for assessment of theoretical frameworks where simultaneous relationship of variables is to be tested (Zaman et al., 2021). Study 2 makes use of covariance-based SEM to estimate the proposed hypothesis, since covariance-based SEM is better suited for theory testing and model confirmation, compared to partial-least squares SEM (Zaman et al., 2021). All of the data was analyzed through the use of the lavaan library in R.

For this study, the use of the data gathered serves two main purposes. The primary goal of the analysis is to test the relationships between environmental literacy, psychological distance and green purchase intention.

The secondary goal, based on the third hypothesis formulated in the previous section, is to analyze the mediation effect that psychological distance has on the relationship between environmental literacy and green purchase intention. In reality, knowledge and habits cannot be separated from the purchase rationalization process, as can the psychological distance to a certain issue or brand be separated from what is known about it. Therefore, the analysis of psychological distance as a mediator will help elucidate its effect in interacting with environmental literacy to convince customers to purchase green products

4.4.- Analysis

With the measurement tool introduced and explained in-depth previously in Study 1 and the analysis tool having been chosen as structural equation modelling, the following step is to confirm several assumptions (multi and unidimensional scales, common method bias and confirmatory factor analysis) before proceeding to the structural model.

An in-depth analysis and confirmation of the measurement model can be found in Section 3.4.2. In it, the assumptions for covariance-based SEM are confirmed, therefore it is possible to proceed to carry out the SEM analysis.

As mentioned in section 3.4.2, Kolmogorov-Smirnov, Shapiro-Welk, kurtosis and skewness tests were performed to check for univariate and multivariate normality. As is expected of data gathered by ordinal variables such as survey scales, the results pointed out that there is no univariate or multivariate normality assumed, therefore the standard estimator for SEM, maximum likelihood, could not be used. In order to use an estimator that includes robustness to account for non-normal distributions of data, such as diagonally weighted least squares with robust term, the SEM analysis was carried out in R using the library lavaan.

The structural model reveals a good fit, therefore indicating that the data supports the theoretical model (χ^2/df : $2.17 < 3$, CFI: 0.942, TLI: 0.933, RMSEA: 0.076, SRMSR: 0.084).

Table 10 contains a summary of the relationship between environmental literacy, psychological distance and green purchase intention estimated by the model (regression coefficient values, t-statistic values and p-values). Figure 8 illustrates the effects that variables have on each other as per the proposed theoretical model, as well as the hypothesis that each relationship signifies.

	Path coefficients	t-stats	p-value	Hypothesis
EL→PD	.216	3.603	< .000	H1 = supported
EL→GPI	1.160	19.546	< .000	H2 = supported
PD→GPI	.289	2.060	.040	H3 = supported
EL→PD→GPI	.062	2.068	.039	H4 = supported

Table 10. Results of structural equation modelling of Study 3.

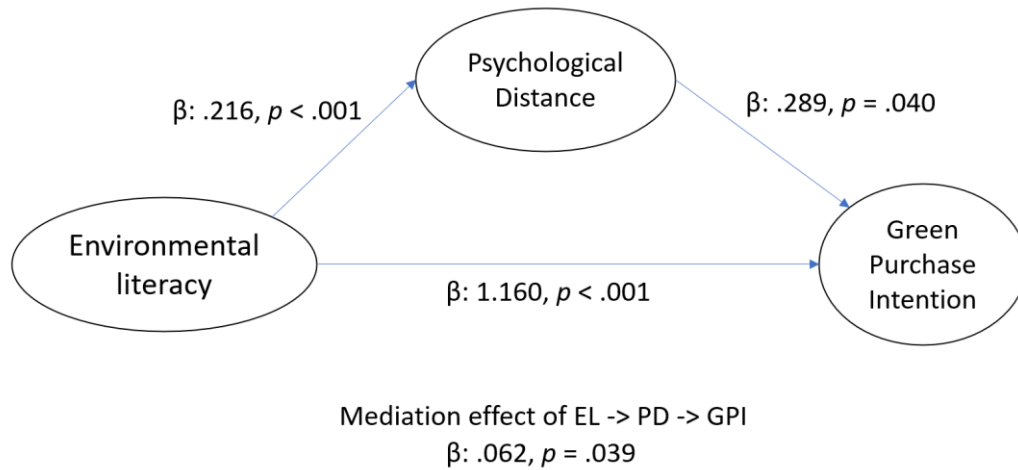


Figure 8.- Structural model and path coefficients of Study 2.

The structural model analysis revealed that there was a statistically significant relationship between environmental literacy and green purchase intention ($\beta = 1.160$, $p = .000$), thus H1 was accepted. As expected, the relationship between environmental literacy and psychological distance turned out to be a lightly positive one ($\beta = 0.216$, $p = .000$), validating H2 and indicating that the more customers are aware of climate change and incorporate it more in their daily life, they have a clearer view of the bigger picture and feel it as a looming threat rather than a proximal one. The structural model reveals that the effect of psychological distance on green purchase intention is a positive one ($\beta = 0.289$, $p = .040$), although its effect is not as strong as the effect of environmental literacy. These results point towards the effect of psychological distance being more punctual and, according to the results of the scatterplot of Study 1, growing steadily up until certain optimum point, and then slightly decreasing. Since the increase is higher at the beginning and slower at the end of the measured psychological distance, this increase is pictured as less strong than environmental literacy, but it must be remembered about the non-linear nature of the relationship of psychological distance and green purchase intention. Because of this, H4 is confirmed as was stated previously.

After having observed the direct effects of each variable, the mediating role of psychological distance on the relationship of environmental literacy and green purchase intention was observed through the use of bootstrapping with 5.000 sample iterations. The structural model estimated that the indirect effect of environmental literacy on green purchase intention via psychological distance was slightly weak, but nonetheless significant ($\beta = .062$, $p = .039$, C.I. = 95, upper and lower = .064; .014), thus validating H3 of this study. The analysis reveals that psychological distance felt towards climate change of customers of sustainable products

functions as a mediator of their environmental knowledge, and as their knowledge and habits manifest more, the more psychologically distant they feel towards these issues, the more they would feel inclined to purchase green products.

4.5.- Discussion and Conclusions

Study 2 focused on the relationship between environmental literacy and psychological distance over green purchase intention, a topic that has begun to attract research attention during the past decade (Aktan & Kethüda, 2023; F. Chen et al., 2022; Fernández-Ruano et al., 2022). After an extensive review of the literature of environmental literacy, psychological distance and green purchase intention in the field of environmental and sustainable behavior, Study 2 makes an effort to present a new theoretical framework of the influence of environmental literacy over green purchase intention, in conjunction with the perceived psychological distance of climate change of an individual, through the introduction of a series of direct relationships, as well as integrating the mediating role of psychological distance of climate change in the promotion of green purchases.

This study performed empirical research on a sample of 750 Japanese consumers, polling their knowledge and habits regarding environmental practices, to test their environmental literacy, as well as polling their opinions on climate change as a way to test their psychological distance to this environmental issue. At the same time, a scenario in the context of sustainable packaging products was provided, with explicit references to climate change, activating their psychological distance to it. This study has sought to gather the opinions about the spatial and temporal dimensions of psychological distance of these respondents, as well as their intention to purchase products. The data analyzed was gathered in the span of two days, from November 16 to November 17. The tool used to gather the data was a survey conducted through Yahoo! Crowdsourcing. This study examined previous literature to adapt two items from two scales to measure environmental literacy (Dunlap et al., 2000; Fernández-Manzanal et al., 2007; Rodríguez-Barreiro et al., 2013), measured with a nine-item scale, psychological distance to climate change (C. Jones et al., 2017; A. Spence et al., 2012), measured with a six-item scale, and green purchase intention (Tong et al., 2021), measured with a four-item scale.

A structural equation modelling technique was employed to show the nature of the antecedents of green purchase intention, and both the direct effect of psychological distance and environmental literacy as predictors of green purchase intention was proven positive and significant. Furthermore, a holistic mediation model that proposed that psychological distance has a positive mediation effect on the relationship of environmental literacy and green purchase intention was proven significant as well.

Therefore, Study 2 proves that its proposed hypothesis are supported, and thus unveils significant empirical evidence about the nature of the construal level of climate change and the knowledge that customers have about it, as factors of key importance in promoting the purchase of green products. Although prior literature has explored the positive direct effect that psychological distance has over green purchase intention (Ibrahim & Al-Ajlouni, 2018; Kivetz & Tyler, 2007; A. Spence & Pidgeon, 2010; van Dam & van Trijp, 2013; Yang et al., 2015), as well as the positive direct effect of environmental literacy over green purchase intention (Böcker & Meelen, 2017; Masson & Otto, 2021; Quintero Johnson et al., 2013; Royne et al., 2011) no previous study has documented the mediation effect of psychological distance in the relationship of environmental literacy and green purchase intention.

This study builds upon recent research on psychological distance and environmental literacy (Aktan & Kethüda, 2023; Zheng et al., 2023) by introducing green purchase intention as the dependent variable, and by pointing out that it is a combination of high construal level alongside great environmental knowledge that is most likely to persuade customers to buy green products. This effect is amplified when both are higher at the same time, compounding on each other.

4.5.1.- Theoretical Contributions

Study 2 contributes to the theoretical body of knowledge of psychological distance, environmental literacy and green purchase intention by offering a holistic model including the positive direct effect of both psychological distance and environmental literacy, as well as a positive mediation effect of psychological distance on the relationship of environmental literacy and green purchase intention, drawing upon construal level theory as a basis. Study 2 aimed at deciphering the roles of environmental literacy and psychological distance of climate change in relation to green purchase intention. In this case, the study sought to contribute to the literature by providing empirical evidence of a positive mediating effect that has not yet been introduced in the literature, as well as support to the body of literature that affirms that there exists a direct positive relationship between both psychological distance and environmental literacy towards green purchase intention.

Regarding the direct positive effect that environmental literacy has over green purchase intention, it can be argued that the accrual of environmental knowledge is a factor that helps process information regarding environmental issues, better discern about green products, and feel motivated for acting towards their acquired learnings and habits, and this study has proven that it results in higher purchase intention of green products, and serves as a confirmation of what other scholars have argued in the literature (Al Mamun et al., 2022; Masson & Otto, 2021; Royne et al., 2011).

About the direct positive effect that psychological distance has over green purchase intention, these findings are in line with the ones from Study 1, therefore serving to confirm previous literature (Ibrahim & Al-Ajlouni, 2018; Kivetz & Tyler, 2007; A. Spence & Pidgeon, 2010; van Dam & van Trijp, 2013; Yang et al., 2015) and at the same time pioneer the current body of literature by providing a non-linear relationship of psychological distance of climate change with green purchase intention, which explains the lower strength of the relationship compared with environmental literacy. Thus, whilst environmental literacy provides a linear relationship with green purchase intention, so that the more knowledge, the better odds at wanting to purchase a green product, there is a non-linear relationship for psychological distance and green purchase intention, and as shown in the scatterplot of Study 1, this relationship grows quickly at the beginning and then plateaus as the peak of the relationship (a value of 8.5 for the given sample) is achieved. For the data at hand, this means in practical terms that higher values of psychological distance towards climate change have a higher effect towards green purchase intention. However, future research done in different industries and samples can reveal a different curvature to this non-linear relationship, thus opening the door for new research about this relationship between the variables in the context of environmental literacy.

Last but not least, Study 2 suggests that for customers with a great knowledge about environmental issues, the presence of high level construals about climate change will incur in a strengthened effect over their purchase intention. As the first contribution to the field that proposes such mediation effect between the three variables, the study rests on the

contributions of Kivetz and Tyler (2007), who argued that temporal distance has been found to enhance the effect of high-level (goal focused) information. Therefore, this study argues towards a framework where the more environmental knowledge and practices are accrued, the easier it will be processing the enhanced effect of high-level information, focused on the desirability to achieve long-term goals, or help in faraway places.

In summary, Study 2 serves to confirm the prior literature, and at the same time, offer a rival explanation in the field of environmental and sustainable behavior literature by offering two theoretical contributions:

1. A positive direct effect of psychological distance of climate change in the context of environmental literacy and green purchase intention.
2. A positive mediation effect of psychological distance over the relationship of environmental literacy and green purchase intention.

4.5.2.- Practical Contributions

From a managerial perspective, Study 2 brings new considerations for both policymakers and marketing managers of green brands. Firstly, the consideration of a customer's previous knowledge regarding environmental issues as a key factor that determines their intention to purchase green products means that now, more than ever, an effort needs to be made for products to engage customer intellectually, and aim to build part of their environmental literacy, as the more they know, the more likely they are to purchase green products. Secondly, the importance of an abstract representation of environmental issues turns even greater when factoring in a customer's environmental literacy. As customers that hold environmental issues mentally as a far event, both in time and space, are able to focus on the big picture, the need for solutions rather than prohibitions, and capture the environmental knowledge transmitted by the brand in an easier way, creating a feedback loop where more knowledge and habits properly acknowledged due to this high-level representation of environmental issues, boost more and more the desires of customers to purchase green products. Consequentially, based on the findings of Study 2, the following two recommendations are made to marketing managers of green brands, environmental policymakers and CEOs of green brands:

1. To implement mechanisms of environmental knowledge transferal in your brand, highlighting important definitions of environmental issues, potential solutions and referral to your own participation in these solutions.
2. To ensure that these knowledge transferal mechanisms focus on environmental issues on an abstract level, providing clear goals and establishing the importance of contribution towards prevention of future threats in terms of space and time, activating a high-level construal in consumers, that will generate a stronger effect of the environmental literacy accrued by customers on their desire to purchase green products.

4.6.- Limitations

Study 2, through its empirical analysis of sample data of Japanese consumers, has been able to contribute to the literature by empirically analyzing the mediation effect that psychological distance has over the relationship of environmental literacy and green purchase intention, as well as presenting the non-linear relationship of psychological distance of climate change with

green purchase intention, compared to the linear relationship of environmental literacy with green purchase intention.

However, the study presents two major limitations:

1. The lack of data pertaining only to consumers of specific green products. As the subjects that comprise the collected sample are only suggested about green products and their intention to purchase them, this limits the possibilities of extending this study to bridging the gap from purchase intention to actual green product purchasing behavior. Therefore, future research must be carried out following a sample of consumers of green products, in an experimental fashion, and testing the effect that heightened environmental knowledge and psychological distance of environmental issues has on their actual green purchase behavior.
2. The lack of framing context. In reality, marketing messages are seldom neutral, and they often come framed positive or negative approaches (De Martino et al., 2006). There is a sizable body of literature that has studied the effect that these framing effects has had on sustainable behavior, thus not including it in this model limits its contributions to the literature by lacking a key concept in green marketing literature. Therefore, future research must be made on the theoretical framework of Study 3, by using positive and negative frames to elicit specific responses to respondents with a specific combination of psychological distance and environmental literacy.

Study 3 will deal with the last limitation of this study, by providing an analysis of framing effect on the framework proposed by Study 2.

5.- Study 3: A study on the usage of positive/negative framing on the relationship between environmental literacy, psychological distance and green purchase intention

5.1.- Overview and Aim

Study 3 aims to perform quantitative empirical research to fulfill the third goal of this dissertation: empirically analyzing the effect that a positive/negative framing effect brings on the relationship between psychological distance to climate change and green purchase intention.

The main research question that Study 3 aims to answer is: “Does the interaction effect of psychological distance and environmental literacy differ with a positive/negative framing? Which combination increases purchase intention the most?”

To that end, a quantitative research based on collecting data from a survey the population of Japanese consumers is employed, using items from scales previously used in the literature to capture their environmental knowledge and habits, as well as opinions and thoughts on their perceived psychological distance of climate change and their green purchase intention. To implement the framing effect, respondents of the survey were shown a positive, negative or no frame during the data collection process, and a manipulation check was carried out to ensure that this stimulus had significant influence.

Study 3 serves as a continuation of Study 2, by following up on its main limitation: the lack of framing context. As it is common in the field of green marketing, literature performed on green advertising usually employs the use of gain (positive) or loss (negative) frames to induce specific feelings and responses from consumers. To provide a more robust framework, that is the summation of all of the latent variables in which a research gap was observed, Study 3 provides a complete framework, including framing effect, based on previous literature. Study 3 makes use of the same measurement tool and model that Study 1 and 2 used.

Study 3 is structured in the following way:

- Section 5.2 will introduce the concept of framing effect through an exhaustive literature review, as well as the proposed theoretical framework and hypothesis that the empirical analysis will follow.
- Section 5.3 will introduce the methodology of the quantitative analysis, by introducing the tools to be used (survey data and three-way ANOVA test). Since the measurement tool and model are the same ones as in Study 1, they are explained in detail in Section 3.2.
- Section 5.4 contains an in-depth analysis through a series of one, two and three-way ANOVA tests of the proposed theoretical model.
- Section 5.5 contains the summary of the discussion of the results, as well as the conclusions reached from answering the research question. Theoretical and contributions form are summarized too.
- Section 5.6 addresses the limitations of Study 3, and proposes future avenues for further research.

5.2.- Literature review of framing effects

Following the introduction of concepts and exhaustive look into past research that was performed in Section 2, this section will be dedicated to doing the same for the concept of framing effect, defining it, showing its connections with the field of green marketing and finally, present the hypothesis that Study 4 aims to analyze as its main contributions.

The framing effect (FRAME) is defined as “the phenomenon in which a change in the way an option is described leads to a reversal of an individual’s choice preferences” (Tversky & Kahneman, 1981). Another definition often used in the literature is “any use of communication to evoke an emotional message or heuristic” (De Martino et al., 2006). Framing effect has also been referred to as “message framing” or “goal framing” (Levin et al., 1998).

The most common way that the framing effect has been used in previous literature has been to elicit positive/negative evaluations by describing gains and losses in a specific scenario. The use of positive framing describes good, desirable, hopeful goals. Meanwhile, the use of negative framing describes punishing, undesirable, fearful consequences (De Martino et al., 2006).

Framing effect is based on the prospect theory (Tversky & Kahneman, 1981), which highlights that people react differently to the same objective information depending on the framing device of the message. As a core part of marketing communications, framing effect is one of the most commonly manipulated concepts that influence consumer behavior (Meyers-Levy & Maheswaran, 2004).

Past research on the effectiveness framing effect has been done mainly in the consumer behavior field of research. For example, it has been used to study in the context of smoking cessation (Goodall & Appiah, 2008), brand evaluation (Toll et al., 2008), disease prevention behaviors (Latimer et al., 2007), and recycling behavior (White et al., 2011).

Since framing effect commonly defects to the use of positive/negative frames, it is easy to wonder: which type is the most persuasive? The literature in the consumer behavior field remains divided. In the seminal work by O'Keefe and Jensen (2007), who performed a meta-analysis of the use of framing effect in 93 studies of the consumer behavior field, found that the use of positive framing had a slight advantage over negative framing, in the context of disease prevention behavior. Due to these mixed results, more scholars joined the discussion to research which contexts serve as the better ones for the use of positive and negative frames (Mann et al., 2004; Rothman et al., 2006; Schneider et al., 2001; White et al., 2011).

The context in which framing effect has been studies that is most important for this dissertation is the context of environmental and sustainable behavior, as it lends naturally to this, since climate change is often represented in media in the context of potential damage or losses to ecosystems and the balance of the Earth (Hulme, 2009). The use of framing effect is especially potent in this context, as environmental issues is something that most consumers believe that is not completely controllable (even if consequences, sources of the problem and actions are displayed to them) (Leiserowitz et al., 2010). As is with the field of consumer behavior, the application of framing effect has resulted in a debate on whether the use of positive or negative frames results in higher likelihood to engage in pro-environmental behavior. It has been theorized that negative frames may be more effective at changing behaviors that are risky, while gain frames are more effective with behaviors that may be considered to be safer (León et al., 2021). On the other hand, Detwailer et al. (1999) found that positive framing effect were more effective in motivating preventing skin cancer by promoting the use of sunscreen.

Regarding the effectiveness of the positive framing effect in the context of environmental and sustainable behavior, past literature has focused on the use of gain-framed (positive) scenarios to lead to more positive attitudes towards climate change mitigation, as well as making it easier for customers to understand the severity of threats by avoiding dramatic enactments, which can lead to distrust in the source (A. Spence & Pidgeon, 2010). The use of positive frames that focus on solutions to environmental issues, instead of negative frames that focus on personal sacrifices or stressful feelings (Gifford & Comeau, 2011). Some scholars have argued that policymakers for environmental laws and practices should focus on the possible gains that environmental behavior brings not only to the environment, but also to consumers, as it was proven to be more effective in promoting green purchases (van der Linden, 2015). Past research conducted with undergraduate students in the US, found that the use of less dire and stressful messaging (negative) could be more effective in communicating the importance of sustainable behavior. Results found that negative framed messages increased skepticism, therefore reducing the likelihood that the subjects would engage in sustainable behavior (Feinberg & Willer, 2011). These studies have given support to the use of positive framing in promoting sustainable behavior. Several researchers argue that the discourse in green marketing should be oriented towards motivation-oriented messages that involve solutions and long-term goals (Gifford & Comeau, 2011).

About the use of negative framing effect in the context of environmental and sustainable behavior, some scholars argue that the use of negatively framed messages can stimulate

protective mechanisms, that help focusing on pro-social behavior (Arthur & Quester, 2004). Research on negative emotions in green marketing has evolved since the beginning of the millennium, with special focus on activating pro-social behavior and protection practices, through the use of fear messages to trigger danger control actions, leading to more concern and intention to engage with green products (Witte, 1992). Empirical studies conducted in the UK have looked at the role of visual representation of climate change ads. Results indicated that the use of negative frames in green ads focused in climate change that include “dramatic, fearful, shocking” can capture individual attention and incite pro-environmental behavior, although there is a possible risk that the individual feels disengaged due to feelings of helplessness (O’Neill & Nicholson-Cole, 2009). These findings have suggested that the use of negative framing must be paired with a semblance of goal that customers can align themselves with, to redirect them towards a specific desired behavior.

In lieu of this division in the literature, some scholars have started to argue that the use of framing effect depends on the dispositional characteristics of the consumers (Updegraff et al., 2007). As an example, in the field of health psychology, individuals who are approach-oriented are more likely to be persuaded with positive frame messages, whilst avoidance-oriented individuals find negative frame messages to be more convincing. Despite this, the ambivalence of the framing effect has been seldomly studied in the context of green marketing, with the only contribution so far by White et al. (2011), in the context of recycling behaviors, which showed that the use of positive framing worked better when the messages were construed with a high-level construal, whilst negative frames convinced subjects to engage in recycling behavior more when the message was construed with a low-level construal. Due to the common use of the framing effect in green marketing, this dissertation aims at establishing its effect on boosting green purchase intention, and its effect on the relationship between environmental literacy and psychological distance.

Previous literature regarding the relationship between framing effect and psychological distance has focused on CLT to explain that, since green ads using framing effect commonly use a temporal focus (i.e., slogan that emphasizes about future or present benefits of adopting a green product), the use of different temporal focus in the framing effect can stimulate different construal level among consumers (Trope & Liberman, 2010). In summary, past research has observed that the use of positive and negative framing can affect consumers with a different temporal distance to environmental issues. It has been theorized that the use of negative framing, which focuses on the present losses if prevention behavior is not engaged, is likely to draw immediate attention and have a more persuasive effect with low construal consumers (Labroo & Patrick, 2009). Following this, it has been explained that the use of positive frame in green marketing will produce better results with consumers with a high construal level to environmental issues, as the highlight in benefits, long-term goals and collaboration aligns well with the basis of a high-level construal (that is, focus on the desirability) (White et al., 2011).

As with the relationship with brand experience, the relationship of framing effect and psychological distance is also founded on a congruency effect, a fit between the message’s main characteristics, which prompts a specific mental image, and the construal level characteristics. This fit between the two created a feeling of fluency, which leads to stronger purchase intentions (Reber et al., 2004).

Despite how important this congruency effect might be for marketing managers of green brands, there are only three contributions in the field of green marketing that have studied the

relationship between framing effect and psychological distance towards green purchase intention, those being the work by White et al. (2011), Liberman et al. (2010) and Labroo & Patrick (2009).

5.2.1.- Proposed theoretical framework

Based on previous literature, and the results of Study 2, that proved there was a significant mediating effect of psychological distance in the relationship of environmental literacy and green purchase intention, Study 3 proposes the following series of hypothesis, with its justifications having being explained in detail in Section 5.2:

H1: Framing effect of climate change moderates the relationship that environmental literacy and psychological distance of climate change have on green purchase intention. This relationship will be stronger depending on the level of environmental knowledge. Specifically,

H1a: Consumers will have higher green purchase intention when a positive framing is used when they exhibit a higher level of psychological distance towards climate change. This relationship will have a stronger effect the more environmentally literate an individual is.

H1b: Consumers will have higher green purchase intention when a negative framing is used when they exhibit a lower level of psychological distance towards climate change. This relationship will have a stronger effect the more environmentally literate an individual is.

H1c: Consumers will have higher green purchase intention when a positive framing is used when they exhibit a middle level of psychological distance towards climate change. This relationship will have a stronger effect the more environmentally literate an individual is.

The proposed hypothesis for Study 3 are depicted in Figure 9, which shows a proposed theoretical framework.

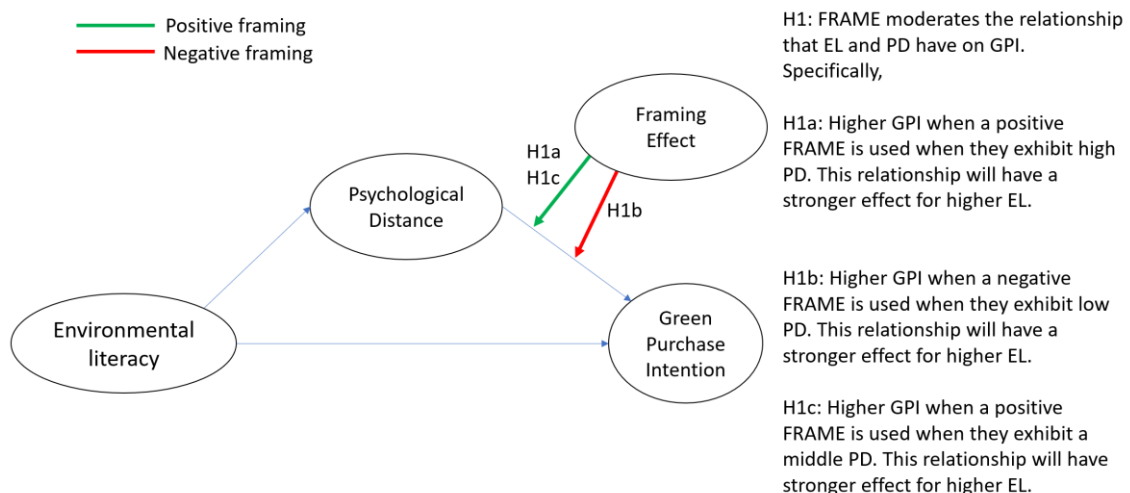


Figure 9.- Proposed theoretical framework for Study 3.

5.3.- Methodology

Study 3 makes use of the data gathered to pursue Study 1 and Study 2, using the same measurement model with no direct changes. In this case, the effect of positive and negative

framing has been included into the model as a way to answer the research question: which combination (positive, negative, no framing) of framing alongside level of environmental literacy and psychological distance produces the highest level of green purchase intention.

The data to be analyzed is the same sample that was gathered in the survey employed by Study 1 and 2. As mentioned previously, the use of a survey is justified as it provides a way to capture through observable scales the latent variables that Study 3 also pursued, those being environmental literacy, psychological distance to climate change and green purchase intention. At the same time, the use of a survey provides the opportunity to administer manipulation and stimuli to a respondent before capturing their opinion, thus being able to posit them a negative or positive frame of mind regarding climate change.

An in-depth look into the data collection process, latent variable measures, manipulation and stimuli, procedure of the survey and pretest can be found in sections 3.3.1 through 3.3.5.

Specially, it is important to underline the results of the manipulation check on the sample, performed in section 3.4.1, in which it is confirmed that the stimuli of the framing scenario did have an effect on the perception of the respondents, therefore validating the premise of the methodology of Study 3.

To answer the research question, the score of the independent latent variable items were averaged into one uni-dimensional scale, and the scores divided into three categories for each of the three latent variables. As the Likert-scales were comprised of 7 values, groups were divided in the following manner:

- Environmental literacy: average values lower than 4 are categorized as “small”; values between 4 and 5 are categorized as “intermediate”; average values between 4 and 5 are categorized as “great”.
- Psychological distance: average values lower than 4 are categorized as “low”; average values between 4 and 5 are categorized as “middle”; average values higher than 5 are categorized as “high”.

For the framing effect, groups were divided depending on the type of framing they received:

1. Framing effect: samples that were exposed to the positive framing are categorized as “positive”; samples that were exposed to the negative framing are categorized as “negative”; samples that were exposed to no framing are categorized as “control”.

These categories were used for a 3 (environmental literacy: small, intermediate, great) x 3 (psychological distance: low, middle, high) x 3 (framing effect: positive, negative, control) between-subject design, with the goal of identifying which combination increases the most a customer’s green purchase intention. The results of this 3x3x3 design will be compared with the results of Study 1 and 2 to better understand the wide array of combinations of conditions that appear in reality when customers are faced with sustainable products. In this way, the methodology of this study is suited to provide several answers to the research question posed previously.

To compare the green purchase intention average differences for each group of a latent variable the sample, three one-way ANOVA tests were conducted as a way to check the effect that belonging to one group had on green purchase intention.

To study the interaction effects between the intersection of two groups of two latent variable, three two-way ANOVA tests were conducted to check the effect that belonging to both groups had on green purchase intention.

Finally, to understand the interaction effect between the three groups of latent variables, one three-way ANOVA test was conducted to analyze the main effects and interactions of environmental literacy (small, intermediate, great), psychological distance (low, middle, high) and framing effect (positive, negative, control).

Green purchase intention was entered as a dependent variable for all of the ANOVA tests.

As the ANOVA tests serve to compare the average of the independent variable for the whole latent-variable, contrast tests using t-tests for individual combinations within each variable were carried out.

As per the grouping of ratings described previously, responses were categorized with the fixed factors of environmental literacy, psychological distance and framing effect. All of the data was analyzed through the use of IBM SPSS.

For this study, the use of the gathered data serves one main purpose. The primary goal of the analysis is to discover what combination of environmental literacy, psychological distance and framing effect can lead to the highest green purchase intention. At the same time, this research goal can be broken down into several smaller questions. For example, for customers with a given environmental literacy, which combination of psychological distance and framing can help aid in the consumption of green products. In this way, the methodology in this study proposes a look into diverse sectors of the data to provide multiple answers to the same question.

5.4.- Analysis

First, to explore the potential effect of each latent variable as a category over the average green purchase intention, three one-way ANOVA analysis for each latent variable separately as the explanator variable separately were carried out.

There was a significant effect of the level of psychological distance that the respondents had over their green purchase intention ($F(2, 709) = 30.139, p < .001$). Respondents with high psychological distance ($M = 5.03, SD = 0.90$) reported higher intention to purchase green products than those subjects that presented a middle psychological distance ($M = 4.51, SD = 1.03$) or low psychological distance ($M = 4.32, SD = 1.32$). These results were in line with the findings of Study 1, in which it was found that there was a positive relationship between psychological distance and green purchase intention up to a certain inflection point, in which the farthest a customer feels to climate change issues, the more motivated they will feel to engage in action to act upon their abstract idea of a solution for these problems. As Study 1 observed, for the given sample, the level of psychological distance that maximizes green purchase intention is a high one, however the relationship between the two variables can be described as an inverse U-shaped one, meaning that middle values of psychological distance are theorized to provide the highest intention of purchase for green products.

There was a significant effect of the respondent's environmental literacy that a customer had over their intention to purchase green products ($F(2, 709) = 356.49, p < .001$). Respondents with greater environmental literacy ($M = 5.16, SD = 0.74$) showed a higher green purchase intention than those subjects that presented intermediate environmental literacy ($M = 4.06,$

$SD = 0.66$), who in turn, want to purchase green products more than respondents with smaller environmental literacy ($M = 2.79$, $SD = 0.86$). These results are also in line with what the results of the structural equation modelling of Study 2, in which environmental literacy was proved to be an antecedent of green purchase intention, as those customers who possess more knowledge and habits regarding what is environmentally friendly behavior, are more likely to want to engage in such behavior by purchasing green products.

There was no significant effect of the framing effect that a respondent was exposed to in regards to their green purchase intention ($F(2, 709) = 0.178$, $p = .837$). Thus, the average green purchase intention for respondents was similar for the control group, positive framing and negative framing (Control: $M = 4.67$, $SD = 0.95$; Positive: $M = 4.63$, $SD = 1.02$; Negative: $M = 4.68$, $SD = 1.10$). These results show that despite how positive or negative the situation about climate change is presented to the respondents, it does not affect the way that the solutions to climate issues are formulated in their minds, leading to an overall same purchase intention across all framing groups.

Table 11 contains a summary of the results of the one-way ANOVA tests.

Relationship	F-value (2, 709)	Significance	Average GPI per group		
			GREAT	INTERMEDIATE	SMALL
EL → GPI	30.139	<.001	$M = 5.16$, $SD = 0.74$	$M = 4.06$, $SD = 0.66$	$M = 2.79$, $SD = 0.86$
PD → GPI	356.49	<.001	HIGH	MIDDLE	LOW
			$M = 5.03$, $SD = 0.90$	$M = 4.51$, $SD = 1.03$	$M = 4.32$, $SD = 1.32$
FRAME → GPI	0.178	.837	CONTROL	POSITIVE	NEGATIVE
			$M = 4.67$, $SD = 0.95$	$M = 4.63$, $SD = 1.02$	$M = 4.68$, $SD = 1.10$

Table 11.- Results of the one-way ANOVA tests of Study 3.

Next, to study the interaction effects between the intersection of two groups of two latent variables, three two-way ANOVA tests for each combination of two latent variables as the explainer variable were carried out.

A significant interaction effect was found between the respondents' environmental literacy and their level of psychological distance ($F(4, 709) = 5.055$, $p < .001$). More specifically, respondents that demonstrated a higher and middle level of psychological distance alongside a greater level of environmental literacy demonstrated higher purchase intentions (PD High, EL Great: $M = 5.27$, $SD = 0.74$; PD Middle, EL Great: $M = 5.11$, $SD = 0.67$) than those at lower levels of psychological distance and greater levels of environmental literacy (PD Low, EL Great: $M = 4.71$, $SD = 0.89$). Therefore, the effect that higher psychological distance has on green purchase intention is magnified by the presence of a greater level of environmental literacy. These results are in line with the structural equation model that was carried out in Study 2, in which the mediation effect of psychological distance on the relationship between environmental literacy and green purchase intention was a positive one, amplifying the relationship.

No significant interaction effect was found between the respondents' environmental literacy and framing effect they were exposed to ($F(4, 709) = 0.889$, $p = .470$). The reported green purchase intention between respondents of the same level of environmental knowledge and habits do not differ in average depending on the negative or positive approach of a scenario presented to them. These results are in line with what the one-way ANOVA test on framing effect over green purchase intention found out, and providing empirical foundation that the level of knowledge about climate change that a respondent had was a stronger influence over

their intention to purchase green products, rather than the outlook of the climate change problem.

No significant interaction effect was found between the respondents' psychological distance and framing effect they were exposed to ($F(4, 709) = 1.044, p = .383$). The reported green purchase intention that differs between respondents of the same level of psychological distance did not differ in average depending on the negative or positive approach of a scenario presented to them. As stated previously, these results are in line what the one-way ANOVA test about the framing effect found out previously. The psychological distance of climate change in a respondent's mind led to similar intention to purchase green products, regardless of how climate change was framed for them.

Table 12 contains the summary of the results of the two-way ANOVA tests.

Relationship	F-value (4, 709)	Significance	Average GPI per group		
			GREAT	INTERMEDIATE	SMALL
ELxPD→GPI	5.055	<.001	HIGH	$M = 5.275, SD = 0.50$	$M = 4.114, SD = .108$
			MIDDLE	$M = 5.209, SD = 0.78$	$M = 3.887, SD = .110$
			LOW	$M = 4.975, SD = .057$	$M = 4.107, SD = .065$
PDxFRAME→GPI	1.171	.314	CONTROL		
			HIGH	$M = 4.984, SD = .124$	$M = 5.105, SD = .103$
			MIDDLE	$M = 4.492, SD = .170$	$M = 4.596, SD = .098$
ELxFRAME→GPI	.889	.470	POSITIVE		
			LOW	$M = 4.426, SD = .170$	$M = 4.132, SD = .136$
			NEGATIVE		
			CONTROL		
			GREAT	$M = 5.158, SD = .073$	$M = 5.224, SD = .058$
			INTERM	$M = 4.024, SD = .100$	$M = 4.042, SD = .086$
			SMALL	$M = 3.028, SD = .243$	$M = 2.688, SD = .163$
					$M = 2.788, SD = .143$

Table 12.- Results of the two-way ANOVA tests of Study 3.

Finally, to study the three-way interaction between respondents belonging to the intersection of three groups of three latent variables, one three-way ANOVA test with the combination of three latent variables as the explanatory variable was carried out.

No significant interaction effect was found between a respondents' environmental literacy, psychological distance, and framing effect they were exposed to ($F(8, 709) = 1.171, p = .314$). The green purchase intention expressed between respondents in the same environmental literacy and with the same level of psychological distance did not differ in average depending on the negative or positive approach of the climate change scenario presented to them. As with the rest of the ANOVA tests, this result points towards outward influences (the framing effect) not having the same effect to influence a respondent's intention to purchase green products as their inward influences (preestablished psychological distance, current environmental literacy).

Table 13 contains the summary of the results of the three-way ANOVA test.

Relationship	F-value (8, 709)	Significance	Average GPI per group				
ELxPDxFRAME→GPI	1.171	.314	FRAME				
			PD	EL	CONTROL	POSITIVE	NEGATIVE
			HIGH	GREAT	<i>M</i> = 5.19 <i>SD</i> = 0.79	<i>M</i> = 5.46 <i>SD</i> = 0.74	<i>M</i> = 5.16 <i>SD</i> = 0.68
				INTERM	<i>M</i> = 3.97 <i>SD</i> = 0.56	<i>M</i> = 4.28 <i>SD</i> = 0.80	<i>M</i> = 3.94 <i>SD</i> = 1.02
				SMALL	<i>M</i> = 3.75 <i>SD</i> = 0.71	<i>M</i> = 3.71 <i>SD</i> = 0.55	<i>M</i> = 3.75 <i>SD</i> = 0.62
			MIDDLE	GREAT	<i>M</i> = 5.00 <i>SD</i> = 0.62	<i>M</i> = 5.35 <i>SD</i> = 0.69	<i>M</i> = 4.92 <i>SD</i> = 0.68
				INTERM	<i>M</i> = 4.14 <i>SD</i> = 0.63	<i>M</i> = 4.04 <i>SD</i> = 0.56	<i>M</i> = 4.12 <i>SD</i> = 0.57
				SMALL	<i>M</i> = 3.08 <i>SD</i> = 0.88	<i>M</i> = 3.00 <i>SD</i> = 0.43	<i>M</i> = 2.92 <i>SD</i> = 0.96
			LOW	GREAT	<i>M</i> = 4.87 <i>SD</i> = 0.67	<i>M</i> = 4.54 <i>SD</i> = 0.83	<i>M</i> = 4.78 <i>SD</i> = 0.82
				INTERM	<i>M</i> = 3.72 <i>SD</i> = 0.70	<i>M</i> = 3.68 <i>SD</i> = 0.73	<i>M</i> = 4.19 <i>SD</i> = 0.60
				SMALL	<i>M</i> = 2.85 <i>SD</i> = 0.45	<i>M</i> = 2.37 <i>SD</i> = 0.70	<i>M</i> = 2.63 <i>SD</i> = 1.02

Table 13.- Results of the three-way ANOVA tests of Study 3.

Although an interaction effect of framing effect with the other two latent variables was not found, when performing contrast t-tests, important significant differences were found, showing the effectiveness of the framing effect.

For the whole sample, the combination that reported the highest green purchase intention was a high level of psychological distance and great environmental knowledge. When divided into framing groups, the respondents that were shown a positive frame reported significantly higher green purchase intention than their peers on control (+5.2%, $p = .034$) and negative framing (+5.8%, $p = .012$). A similar situation was found for the combination of high psychological distance and intermediate environmental knowledge, where respondents that were part of the positive framing group reported higher green purchase intention than other respondents on control (+7.8%, $p = .031$) and negative framing (+8.4%, $p = .035$). There were no significant differences found between respondents with a high psychological distance and small environmental literacy, regardless of the framing they were exposed to. These results offer evidence that respondents that felt like climate change was a faraway event, were more convinced by a positive framing situation that focused on the future of humanity through the help of sustainable practices, which supports the proposed Hypothesis 1a.

Significant differences were found for the second combination that reported the highest green purchase intention: middle level of psychological distance and great environmental knowledge. When divided into framing groups, the respondents that were shown a positive frame reported significantly higher green purchase intention than their peers on control (+7%, $p = .015$) and negative framing (+8.7%, $p = .022$). No significant differences were found for the combination of middle psychological distance and intermediate or small environmental literacy, regardless of the framing. These results support the fact that a positive framing scenario provides a better incentive for respondents that feel in a middle point of psychological distance but have a vast knowledge of environmental practices, and this scenario

helps value that knowledge for the future better. These results offer empirical evidence in favor of Hypothesis 1c.

Significant differences were found for the combination of low level of psychological distance and great environmental knowledge. When divided into framing groups, the respondents that were shown a positive frame reported significantly lower green purchase intention than their peers on control (-6,8%, $p = .009$) and negative framing (-5%, $p = .015$). For a low level of psychological distance and intermediate environmental literacy, respondents in the negative framing group reported significantly higher green purchase intention than their peers on control (+12,6%, $p = .012$) and positive framing (+13,8%, $p = .005$). Finally, for respondents with a combination of low psychological distance and small environmental literacy, significant differences were found between the framing groups, with the highest green purchase intention belonging to the control group ($M = 2.85$, $SD = 0.45$), followed by the negative frame group ($M = 2.63$, $SD = 1.02$) and the positive frame group ($M = 2.37$, $SD = 0.70$). These results support the fact that a negative framing scenario provides a better incentive for respondents that feel psychologically closer to climate change issues, providing them with context about the threats that entail, and activating protective behaviors that lead towards higher purchase intention of green products, as a solution to the perceived risk. Through these contrast tests, it can be said that there is a significant difference between specific groups due to the use of a negative framing, being boosted by higher environmental literacy, thus providing evidence in favor of Hypothesis 1b.

Table 14 contains the information for the average green purchase intention for each of the combination of the groups and the p -values of the contrast t-tests.

Psychological Distance	Environmental Literacy	No framing (1)	Positive (2)	Negative (3)	Difference (1) and (2)	Difference (1) and (3)	Difference (2) and (3)
High	Great	$M = 5.19$ $SD = 0.79$	$M = 5.46$ $SD = 0.74$	$M = 5.16$ $SD = 0.68$	$p = .034$	$p = .277$	$p = .012$
	Intermediate	$M = 3.97$ $SD = 0.56$	$M = 4.28$ $SD = 0.80$	$M = 3.94$ $SD = 1.02$	$p = .031$	$p = .859$	$p = .035$
	Small	$M = 3.75$ $SD = 0.71$	$M = 3.71$ $SD = 0.55$	$M = 3.75$ $SD = 0.62$	$p = .978$	$p = .599$	$p = .738$
Middle	Great	$M = 5.00$ $SD = 0.62$	$M = 5.35$ $SD = 0.69$	$M = 4.92$ $SD = 0.68$	$p = .015$	$p = .619$	$p = .022$
	Intermediate	$M = 4.14$ $SD = 0.63$	$M = 4.04$ $SD = 0.56$	$M = 4.12$ $SD = 0.57$	$p = .258$	$p = .346$	$p = .238$
	Small	$M = 3.08$ $SD = 0.88$	$M = 3.00$ $SD = 0.43$	$M = 2.92$ $SD = 0.96$	$p = .461$	$p = .682$	$p = .541$
Low	Great	$M = 4.87$ $SD = 0.67$	$M = 4.54$ $SD = 0.83$	$M = 4.78$ $SD = 0.82$	$p = .009$	$p = .219$	$p = .015$
	Intermediate	$M = 3.72$ $SD = 0.70$	$M = 3.68$ $SD = 0.73$	$M = 4.19$ $SD = 0.60$	$p = .651$	$p = .012$	$p = .005$
	Small	$M = 2.85$ $SD = 0.45$	$M = 2.37$ $SD = 0.70$	$M = 2.63$ $SD = 1.02$	$p = .002$	$p = .034$	$p = .042$

Table 14. Contrast t-test between the average green purchase intention for each of the combination of groups for Study 3.

5.5.- Discussion and Conclusions

Study 3 focused on the impact that a framing effect had on the relationship between environmental literacy, psychological distance and green purchase intention, a topic that has begun to attract research attraction especially during the past decade (H. Chang et al., 2015; Tong et al., 2021). After an extensive review of the literature of the framing effect in the field of environmental and sustainable behavior, Study 3 makes an effort to present a new interpretation of the use of framing effect on the framework suggested by Study 2, by suggesting that the use of positive frames strengthens the mediation effect that a high level of psychological distance has on the relationship of environmental literacy and green purchase intention. Additionally, Study 3 suggests that the use of positive frames in cases with middle levels of psychological distance and negative frames in the case of low levels of psychological distance can also strengthen the previous relationship, therefore this study builds upon the foundation created by previous research on the use of framing effect and its interaction with psychological distance (Tong et al., 2021; White et al., 2011) and the framework proposed in Study 1.

This study performed empirical research on a sample of 750 Japanese consumers, polling their knowledge and habits regarding environmental practices, to test their environmental literacy, as well as polling their opinions on climate change as a way to test their psychological distance to this environmental issue. To introduce the framing effect into the framework, the respondents were divided into three groups randomly: a positive frame group, a negative frame group and a control group, which were shown no additional framing. The framing messages were based on previous literature and around the effects of climate change, with a positive or negative outlook, depending on the framing group. After this first scenario another one in the context of sustainable packaging products was provided, with explicit references to climate change, activating their psychological distance to it. This study has sought to gather the opinions about the spatial and temporal dimensions of psychological distance of these respondents, as well as their intention to purchase products. The data analyzed was gathered in the span of two days, from November 16 to November 17. The tool used to gather the data was a survey conducted through Yahoo! Crowdsourcing. This study examined previous literature to find scales to measure environmental literacy (Dunlap et al., 2000; Fernández-Manzanal et al., 2007; Rodríguez-Barreiro et al., 2013), measured with a nine-item scale, psychological distance to climate change (C. Jones et al., 2017; A. Spence et al., 2012), measured with a six-item scale, and green purchase intention (Tong et al., 2021), measured with a four-item scale. The framing effect was introduced adapted from previous literature, and paired with images that were hopeful or frightful in nature, and related to the topic of climate change (Tong et al., 2021). For this study, the independent variables of environmental literacy, psychological distance and framing effect were defined under cutoffs for their values and a group was assigned to each respondent depending on their average score for the items of psychological distance of climate change and environmental literacy or the framing group they belonged to.

A series of one-way, two-way and three-way ANOVA tests were conducted to determine the differences in average expressed green purchase intention, for each combination of the groups, with green purchase intention as the dependent variable. Furthermore, to observe the specific differences between average green purchase intention between two specific groups, a series of contrast tests between the 3 (environmental literacy: great, intermediate, small) x 3 (psychological distance: high, middle, low) x 3 (framing effect: control, positive, negative) groups were carried out, demonstrating significant, albeit punctual and not generalized, differences between each framing group.

Furthermore, the findings of Study 3 align with the proposed hypothesis, which are supported, and unveil significant empirical evidence about the nature of the framing effect and its effects on the relationship of psychological distance and environmental literacy over green purchase intention. Although prior literature has explored the effect of framing effect on high and low level construals on the context of sustainable behavior (H. Chang et al., 2015; Tong et al., 2021; White et al., 2011), no study has studied the effect that environmental literacy has on this relationship, as well as no other study has included the middle level of psychological distance as a valid level of construal.

Therefore, Study 3 builds upon recent research on framing effect and psychological distance by introducing the strengthening effect of environmental literacy into the framework, and by pointing out the use of the middle level of psychological distance as a construal level that is positively affected by the use of positive framing.

5.5.1.- Theoretical contributions

Study 3 contributes to the theoretical body of knowledge of framing effect, psychological distance, environmental literacy and green purchase intention by offering a holistic model that includes the positive effect that positive framing has on individuals with high psychological distance of climate change, the positive effect that negative framing has on individuals with low psychological distance of climate change, and most importantly for the theoretical contribution of this study, by providing evidence that a individuals with a middle level of psychological distance are more likely to engage in green purchases if green marketing messages are framed in a positive way. Study 3 also introduces the compounding effect of environmental literacy on the effect that the framing effect has on the construal level of climate change. Therefore, Study 3 aimed at deciphering the role that positive/negative messages have on both the construal level of climate change of an individual as well as that individual's knowledge of environmental issues and practices.

Regarding the effect that a positive framing has on a high level of psychological distance, it can be argued that the focus on benefits and future-term goals creates a fit effect with the basic effect of the high-level construal, which is built on a future-oriented, collaboration-focused, hopeful and desirability basis, thus the use of positive messages enhances the value given to the content, increasing persuasion and fluency, leading to higher purchase intention (White et al., 2011). As was discussed in Study 2, higher environmental literacy increases the capability to digest and act upon new knowledge accrued about pro-environmental behaviors, thus enhancing the effect more.

Regarding the effect that a negative framing has on a low level of psychological distance, it can be argued that the focus on dramatic, shocking elements creates a fit effect with the basic effect of the low-level construal, which is built on a present-oriented, reduction-focused, avoidance of consequences and feasibility basis, thus the use of negative messages enhances the value given to the content, increasing persuasion and urgency and leading to higher willingness to sacrifice one's pleasure in order to stop an imminent perceived threat (O'Neill & Nicholson-Cole, 2009). Same as the previous effect, higher environmental literacy increases the capability to assimilate new information regarding environmental matters, and enhances more this effect.

Last but not least, Study 3 suggests that customers on a middle level of psychological distance of climate change are more persuaded by positive messages. As a pioneer in the proposal of

middle level of psychological distance in the context of framing effect, there is no previous body of work yet that has acknowledged this level in the relationship, therefore there is much future discussion possible. At the moment, this study's findings suggest that a middle level of psychological distance of climate change benefits from these positive messages as the main outlook towards these issues, the way they are defined mentally for these customers, is in an abstract way, although the way of achieving feasibility of these goals resembles a low-construal. As the middle level construal shares the same "big picture" effect of the high-level psychological distance, the use of positive messages that encourage teamwork, global support and possibility of change, are able to increase processing fluency and create a fit between needs and expectations, increasing the intention to engage in sustainable behavior, like green purchases. As with the other two previous effects, higher environmental literacy is found to increase the effect of framing effect for customers in a middle level of psychological distance, by providing tools for self-assessment about the information provided in green marketing.

In summary, Study 3 serves to confirm the prior literature, and at the same time, offer a new explanation in the field of environmental and sustainable behavior literature by offering three theoretical contributions:

1. Positive framing of climate change has a positive effect on the green purchase intention of individuals with a high level of psychological distance of climate change. This effect is stronger with higher environmental literacy.
2. Negative framing of climate change has a positive effect on the green purchase intention of individuals with a low level of psychological distance of climate change. This effect is stronger with higher environmental literacy.
3. Positive framing of climate change has a positive effect on the green purchase intention of individuals with a middle level of psychological distance of climate change. This effect is stronger with higher environmental literacy.

5.5.2.- Practical contributions

From a managerial perspective, Study 3 brings new considerations for both policymakers and marketing managers of green brands. First, the consideration of marketing communication's frame, whether positive or negative, is a key factor that influences the green purchase intention of customers, by interacting with their mental image of environmental issues, and feeding off their initial environmental knowledge. As the results of Study 2 show, companies can manage both psychological distance to environmental issues and transfer environmental knowledge to customers, therefore completing the circuit in which a brand can influence customers to purchase green products: manipulation of framing messages in the brand's communications, driving the construal level of sustainable issues to a certain level, and informing customers about these issues and the solutions needed to progress in a long lasting relationship with the customer. Consequentially, based on the findings of Study 3, the following recommendation is made to marketing managers of green brands, environmental policymakers and CEOs of green brands.

1. To study the mental image towards sustainable issues that the brand is communicating. It can be either far (in the future, or far away), close (in the present, or near), or in the middle (soon, or around) and adapt marketing messages accordingly with a positive

frame in the case of a far or middle mental image, or negative in the case of a close image.

5.6.- Limitations

Study 3, through its empirical analysis of sample data of Japanese consumers of green products, has been able to contribute to the literature by empirically analyzing the effects that framing effect has over different levels of psychological distance for the relationship of environmental literacy and green purchase intention.

However, the study presents three major limitations:

1. The main interaction effect between groups for the framing effect is not significant. Although the contrast tests reveal that there are significant differences between specific groups, these differences are not significant for the wide categorization of the groups. This means that in general, the framing effect affected mainly the groups for which the contrast tests were significant. As it turns out, these groups are the ones with greater or intermediate environmental literacy. This could be due to the framing message not being completely processed by individuals who do not have that much knowledge about environmental issues, who do not care much about these messages, thus not generating any difference in green purchase intention. Future research must make sure to ensure that all of the groups receive a more nuanced framing effect, that bypasses the negative effect that smaller environmental literacy has on the relationship.
2. The sample only proposed products of the sustainable packaging product industry, therefore limiting the generalizability of these contributions, until applied in a different industry, or country, to account for cultural differences between Western and Eastern, or first and third world countries.
3. The lack of practical and qualitative data that serves to illustrate how the combination of positive/negative framing effects, customer environmental literacy and psychological distance towards sustainable issues is employed by companies to direct its customers towards engaging in green purchases. The use of an in-depth case study that tries to understand the motivations and actions that a brand takes when designing their marketing communication materials and how these affect the three latent variables researched in Study 3 would provide a context to rationalize the results obtained through Studies 1, 2 and 3.

Study 4 will deal with the last two limitation of this study, by providing an exploratory case study research analysis of a company that provides green products to its customers, studying the way that environmental knowledge is transferred to its customers and their psychological distance towards the sustainable issues that they tackle is manipulated in deliberate ways, and the goals of such manipulation.

6.- Study 4: How companies manage the psychological distance towards sustainable issues and environmental literacy through brand experiences: the case of IKEA

6.1.- Overview and Aim

Study 4 aims to perform a qualitative case study research to fulfill the fourth research goal of this dissertation: understanding how brands create experiences that directly influence a customer's psychological distance to climate change as well as enhance their environmental literacy.

The main research question that Study 4 aims to answer is: "How do companies that invest in sustainable products leverage their brand experience in increasing sales of sustainable products? How is the psychological distance towards sustainable issues of customers manipulated?".

To that end, a qualitative case study is employed to research the process of the creation of brand identity, how brand experience is defined around it, and how brand experience and construal level of sustainable issues can work together transfer environmental knowledge and practices to customers, with the goal of motivating the purchase of green products.

Study 4 serves as the complement to the quantitative analyses performed in Studies 1, 2 and 3, by providing a qualitative argumentation from the point of view of a producer of sustainable products, and asking "how" and "why":

- Are their brands identities designed.
- Is the psychological distance of customers to sustainable issues manipulated.
- Is environmental literacy transferred from brand to customer.

In this way, Study 4 also provides a rational conclusion on the motivations of these corporations in engaging in green production and green marketing.

Study 4 is structured in the following way:

- Section 6.2 will introduce the concept of brand experience through an exhaustive literature review, as well as the proposed theoretical framework that the case study data will follow.
- Section 6.3 will introduce the methodology of the case study research, provide justification about the selection of the case and summarize the data collection process.
- Section 6.4 contains the case study analysis, in which the main research question is broken into three parts, and the data is arranged to form a narrative that covers these three parts.
- Section 6.5 contains the summary of the discussion of the results, as well as the conclusions reached from answering the research question.
- Section 6.6 addresses the limitations of Study 4, and proposes future avenues for research.

6.2.- Literature review of brand experience

Following the introduction of concepts and exhaustive look into past research that was performed in Section 2, this section will be dedicated to doing the same for the concept of brand experience, defining it, showing its connections with the field of green marketing as well as brand management, and finally, present the theoretical framework that Study 1 proposes as its main contribution.

Brand experience (BE) is defined as “subjective, internal consumer responses and behavioral responses evoked by brand-related stimuli that are part of a brand’s design and identity, packaging, communications and environments” (Brakus et al., 2009). Brand experience is categorized in four dimensions, which are defined in Table 15.

Brand experiences can occur in online or offline environments, and from indirect or direct interactions with the product/service (W.-J. Chang, 2020; Hoch, 2002; Jo & Shin, 2017), retail environments (Rodrigues & Brandão, 2021; C. Spence et al., 2014; Yoo et al., 1998), marketing communication (Iglesias et al., 2011; Zarantonello & Schmitt, 2013) and purchasing place (Agapito et al., 2014; Hultén, 2012; Rodrigues et al., 2020; Yoganathan et al., 2019). Although brand experiences affect retail experiences and vice versa, they are different concepts.

The idea of a brand experience comes from a holistic brand-building approach, that combines hedonic and utilitarian perspectives (Klaus & Maklan, 2007; Payne et al., 2009; Prahalad & Ramaswamy, 2004). Many scholars argue that in order to build brand experience, emotional and functional elements must be managed simultaneously (Iglesias et al., 2011; R. P. Jones & Runyan, 2013; Rodrigues & Brandão, 2021).

As argued previously, both psychological distance and green purchase intention deal with the pursue of hedonic fulfillment through a fit between the mental idea and the construal level, in the case of psychological distance, and one’s environmental needs and the act of purchasing a green product, in the case of green purchase intention. Therefore, brand experience is a natural fit to explain how brands can develop products that satisfy the desirability towards green products.

Brand Experience Dimensions	Definition	Examples
Sensory	Appeal to the five senses.	Use colors, textures, sound, temperature.
Affective	Create of feelings and sentiments and	Inspirational messages, customer communities,
Behavioral	Physical activity, changes routine, purchasing habits.	Events sponsoring, co-creation, in-store activities.
Intellectual	Curiosity, critical thinking, problem-solving, transfer of knowledge	Newsletters, CSR reports, trivia, pamphlets, social media

Table 15.- Description of brand experience dimensions, based on Brakus et al. (2009).

Research on the concept of brand experience has been performed mostly in the field of brand management literature, with contributions from both practitioners and scholars (Keller & Lehmann, 2006; Schmitt, 1999). Research on brand experience has studied its effect on brand loyalty and brand commitment (Brakus et al., 2009; W.-J. Chang, 2020; Das et al., 2019; Iglesias et al., 2011). Brands that create experiences that cater to their customers’ needs and emotions can generate feelings of positivity, and customers seek these out in the long term, becoming loyal to the firm. Brand experience has also been studied as an antecedent to customer satisfaction (Bennett et al., 2005; Sahin et al., 2011). Meaningful experiences that are in line with what customers expect of a brand will lead to a customer feeling that they get what they want from a brand and makes them feel satisfied. Since brand experiences rely on

communicating the brand's design and identity to a customer, higher exposure to them has been studied to increase brand awareness (J. Park & Stoel, 2005).

Brand experience has also been at the forefront of marketing literature, as previous research has pointed out that brand experiences can be used by companies as a tool of experiential promotion by using their circumstances, past and objectives to affect a customer's perception of their brand. In order to do so, some researchers propose that a brand's experience is only as effective as its consistency is (Brakus et al., 2009; Das et al., 2019; Frow & Payne, 2007). Consistency is pointed out as a requirement to build brand experiences and defined as "the way that a brand stands for the same set of attributes throughout the relationship with the customer" (P. Jones et al., 2010). A consistent design of brand experience helps customers identify themselves relative to the product, the store, and the retailer (R. P. Jones & Runyan, 2013). Past research has shown that brands that are perceived as consistent have a higher chance of incurring in repurchases from customers (Sahin et al., 2011).

Brand experiences have been studied in the field of retailing commerce. Scholars have argued that it is the first step in the relationship between brand and consumer (Oliver et al., 1997). Consistent brand experiences lead customers to pleasurable outcomes when they match their expectations and knowledge, and as such customers are more likely to repeat these positive experiences (Das et al., 2019). A positive brand experience can result in changes in opinions and behavior, in light of a positive relationship with the brand (Chaudhuri & Holbrook, 2001).

Most importantly for this dissertation, brand experience has also been studied in the context of environmental and sustainable practices, including green purchase intention. Since green purchases are defined as a hedonic value-driven style of consumption, when brands are able to appeal to these values by crafting appropriate experiences that activate this sense of desirability, customers can feel more motivated to engage in sustainable behaviors and consumption (Bray et al., 2011; Jo & Shin, 2017; Yoganathan et al., 2019).

There have been few attempts to research the relationship between brand experience and psychological distance. Scholars have agreed that brand experiences serve as vehicles for knowledge, therefore providing customers with new mental construals about environmental issues (Kim & Song, 2019). Since psychological distance and construal level are closely related to an individual's mental image, and brand experience includes dimensions that can affect that image (such as intellectual or emotional appeals), then there is room for brand experience to influence the psychological distance felt towards stimuli (Kim & Song, 2019; Septianto & Pratiwi, 2016). Customers with strong brand experiences gain knowledge and information about the brand, as well as any additional information conveyed in advertising, such as environmental information (J. Park & Stoel, 2005), thus aiding in the transferal of environmental literacy, proving to be a key antecedent of it.

Consumers that are exposed to brand experience elements of sustainable brands compatible with their pleasure-seeking consumption patterns based on green purchases are more receptive with green ads (Ruiz & Sicilia, 2004; Septianto & Pratiwi, 2016; Van Boven et al., 2010).

On the basis of CLT, the construal level that affects the relationship of brand experience and psychological distance depends on which value brand experience is communicating – hedonic or utilitarian. In the case of hedonic value, following CLT, high-level construals lead to an easier time distinguishing information and lessening judgement bias ("why is something important"), thus improving action (Trope & Liberman, 2010). Previous research on the field has shown that

psychologically distant messages are perceived as more convincing and agreeable when a product is related to benefitting others rather than oneself. An example of such product are sustainable products (Yang et al., 2015). In the case of utilitarian value, findings in the literature point towards the use of low-level construal messages in brand-related stimuli in order to increase persuasion towards brand commitment and repurchase intention.

Based on the conclusions of previous research, it is suggested that brand experiences influence how customers position themselves towards a brand or an event, as psychological distance is dependent on knowledge and experience. The strength of the brand experience felt will impact the effectiveness of appeal type.

Despite this commonality of CLT and brand experience being founded on a division between hedonic and utilitarian views, there is a significant lack of literature regarding the interaction between the two, and to date, no research has been carried out trying to understand the relationship of the two concepts with green purchase intention. Furthermore, there is no theoretical framework to explain these relationships.

Therefore, based on the conclusions of previous research that has studied how brand experience, psychological distance and green purchase intention has been related, this study seeks to contribute to the literature by proposing a framework through an explanatory case study. To serve as a foundation for the whole dissertation Study 1 will attempt to explain this relationship through the point of view of the producer, and subsequent Studies will focus on the point of view of the consumer in this relationship. Through the use of qualitative research, Study 1 aims to provide insight on the way how brand experiences are developed and the way they are developed to affect customer's psychological distance.

6.2.1.- Proposed theoretical framework

A causal relationship is proposed between the perception of brand experience and its effect on modifying the psychological distance felt to climate change, and how experimenting a fit between the expected mental image of a solution for climate change certain level of psychological distance of green consumption by motivating to act in a sustainable way. The proposed theoretical framework is based directly on the quantitative results of Studies 1, 2 and 3.

The framework is explained as follows: brand experiences that are designed in a consistent way with a sustainable brand's identity, and that manage hedonic and utilitarian driven values, will successfully transfer knowledge about the brand's green offerings and activities to a customer and involve them in experiences which will influence how the customer perceives the environmental issues that the brand's products serve as a solution of. When the construal level towards these environmental issues matches the brand's proposed image of it, customers will feel more motivated to act upon sustainable behaviors and will seek out green products, increasing their green purchase intention.

The proposed relationship between the variables that is to be analyzed is depicted in Figure 10, which shows a proposed theoretical framework.

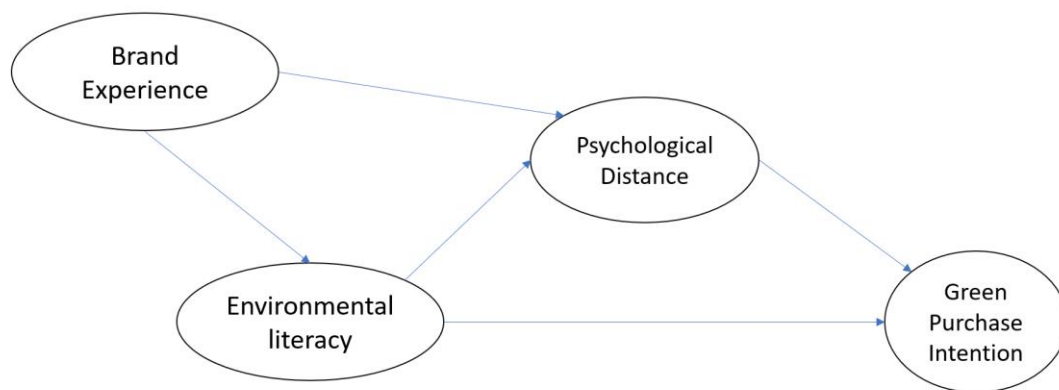


Figure 10.- Proposed explanatory theoretical framework for Study 4.

6.3.- Methodology

Case studies are a fit for exploratory studies (main research questions are “how” and “why”), evaluation of real time circumstances and for little to no control over behavioral events (Gibbert et al., 2008). The aim of case study research is to provide rich descriptions of the social scene, paint a whole picture of the context surrounding the event and offering the chance to see the studied phenomena in the researcher’s own experience (Dyer & Wilkins, 1991).

Rich case studies offer avenues for future research, are able to move field forwards and assist in developing new theoretical grounding (Yin, 2018). As it is intended to perform an explanatory study by closely studying the relationships between the variables previously presented and proving the causal relationship between them, case study research will help by providing a rich description of a brand in a holistic view. In this research, the use of case study provided an opportunity to generate deep insight into the phenomena, produce rich explanations and offer propositions for further research and development (Eisenhardt, 1989; Yin, 2018).

The goal of this case study is threefold:

1. To understand the process of brand experience building and its influence on psychological distance, environmental literacy and green purchase intention, from the producer’s point of view.
2. To answer to questions of “how” and “why” about this process
3. To understand the reasoning behind the process and the peculiarities of the industry studied. The way to achieve these goals is through a series of questions that will be answered through data analysis. Table 16 shows the questions and the proposed answers of what the expected theory behind the relationship of the variables is.

Questions	Proposed answers
How is the brand experience developed and what are they key ideas behind it?	A brand experience is developed when combining utilitarian and hedonic values that are consistent with previous corporate brand image.
How does the brand experience aid in manipulating the customer's psychological distance to sustainable issues?	Customers learn from experiences with the brand, accrue knowledge about sustainable issues and form emotional ties, modifying their psychological distance to these issues
How does brand experience aid in the transferal of environmental literacy?	Customers with strong brand experiences gain knowledge and information about the brand, as well as any additional information conveyed in advertising, such as environmental information and practices

Table 16.- Questions and propositions of the case study for Study 4.

6.3.1.- Case selection and Justification

According to Eisenhardt (1989) and Yin (2018), a single case study can be particularly appropriate when the case is unique or critical. A critical case gives base for newly discussed theories. To knowledge, no documented implementation of case study research of the topic has been found, further stressing the vital importance of choosing a single representative case that serves the scope of the investigation (Yin, 2018).

IKEA aligns well with the goals of this research and was chosen for three reasons:

1. For being a global firm at the forefront of sustainable design and reporting on environmental impact.
2. For providing customers with identifiable retail experience across diverse touchpoints.
3. For successfully developing and implementing sustainability features and knowledge in its experience.

IKEA is a known leading retailer of design-sell, prepared furnishings, and accessories worldwide. Founded in 1943 in Sweden by Ingvar Kamprad. With 392 large brick-and-mortar stores in over 31 countries that generate over 657 million in-person visits per year, it also has a sizable online commerce presence, with its website IKEA.com receiving yearly 4.3 billion visits in 2022. In the 2021 financial year, IKEA generated EUR 44.6 billion in total retail sales (IKEA, 2022). The company's vision is to create a better everyday life for the many people by offering a wide range of well-designed, functional home furnishings at prices lower prices so that as many people as possible will be able to afford them (IKEA, 2020).

IKEA's products and services are offered with five core pillars of design: low prices, high quality, clear function, simple form, and sustainability. The company offers around 12,000 products, with nearly 2,000 additions to its catalogue per year. In addition to the aforementioned retail shops and online commerce services, IKEA offers restaurant, playground, product delivery and office design services. Benefitting from strong corporate image, the company has built its brand around offering modern, affordable products (perceived utilitarian value) that offer "a better everyday life for the many people" (perceived hedonic value). The IKEA brand is based

on a combination of awareness of societal problems and minimizing production costs/prices (Tarnovskaya & de Chernatony, 2011). With its detailed and curated stream of sustainable information, it can be argued that the company carefully studies how to communicate sustainable values to its customers in a hopeful way and position themselves to a certain distance of global issues, empowering them with utilitarian and hedonic solutions (Rodrigues & Brandão, 2021).

The retail brand is perceived as one of the global forerunners of corporate social responsibility (Morsing & Roepstorff, 2015), strongly shaping its corporate brand image globally. With a proactive approach to sustainability issues, IKEA is one of the first companies in the world to receive forest certification, an internationally recognized certification regarding the supply of wood, one of its main raw materials (Elanchelian et al., 2022).

IKEA is a global retailer that pursues a high degree of brand internalization in markets alongside a standardized entry strategy (Tarnovskaya & de Chernatony, 2011). In the case of Japan, IKEA experienced failure in responding to the demand and expectations of customers and, from its entrance in 1974, it had to withdraw from the country in 1986. 20 years of research provided the company with insights that made its re-entry successful, by targeting the smaller size of Japanese rooms and the design sensibilities of the country where large is not always better (Jonsson, 2008) and now boasts 12 brick-and-mortar stores in Japan.

IKEA is a representative player of brand relationship building practices, by combining sensory, intellectual, affective, and behavioral brand experiences. There has been evidence of the IKEA brand engaging emotionally with its retail brand experience, technological and innovations in sustainability (Rodrigues & Brandão, 2021; Singh et al., 2021). This is a key feature to disrupt the market, allowing itself to thrive in a competitive retail environment.

Past literature has looked into IKEA's customer behavior (Sin et al., 2021), success factors (Singh et al., 2021), brand experience (Elanchelian et al., 2022; Rodrigues & Brandão, 2021), sensory cues (Hultén, 2012), sustainability and environmental performance (Hultman et al., 2012; Lindgreen et al., 2012; Shuwaler et al., 2020). As noted in this previous research, IKEA's uniqueness, criticality, and global reach make the company particularly relevant for use as a case regarding sustainability and brand experiences (Hultman et al., 2012; Lindgreen et al., 2012). Thus, IKEA is deemed as an appropriate case to study themes of brand experience, sustainable consumption, and management of psychological distance.

6.3.2.- Case study data collection

The collection of empirical data for this case was initiated in November 2022, and data analysis has been performed in overlap with continuous data collection throughout December 2022 and January 2023. The overlap of collection and analysis is a common practice in case study research (Dyer & Wilkins, 1991). Within the context of IKEA, the marketing and sustainability department were the most important units of analysis, since they are in charge of the elements that suit the research purposes.

When planning for the study it was decided to search for multiple sources of evidence and to build a qualitative database to produce a chain of evidence when performing the analysis. Data was collected with three overlapping methods: in-depth semi-structured interviews, direct observation of main stores and document analyses (for an overview, see Table 17).

Type	Purpose	Description
Interviews	-To understand the perspective of IKEA workers about their brand and sustainability. --To understand “how” and “why” things happen. - To get context for the rest of the findings. - To hear about rival explanations.	1-hour, semi-structured interviews with previous IKEA employees, recorded and transcribed.
Observations	-To understand the physical and psychological marketing elements used in offline and online stores. -To observe first-hand the intended customer experience and psychological distance elements.	-In-situ field observations of IKEA stores (Kobe & Tsuru Hama), taking notes, photos, and videos within the store, in total 10 hours. -Documentation of IKEA’s website pages for 4 hours.
Documents	-To retrieve past and present information on brand experience and sustainable promotion. -To understand how sustainability is communicated externally to customers. - To understand past research insights on IKEA.	- Written and visual documents of three different types: -IKEA TV Spots uploaded to YouTube -Public IKEA websites -Past research on IKEA as a case study

Table 17.- Types of data sources for the case study for Study 4.

First, interviews were carried out using a topic guide (Appendix). The focus was on explanations on the processes of brand experience building, CSR promotion and promotion of sustainable products. The interviews lasted for approximately one hour. The interviews were recorded and verbatim and translated in case they were not in English. The interviews combined retrospective questions on IKEA’s marketing model and sustainable product promotion, with inquiries on the perception of customers of these. The goal with the interviews was to understand the “why” and “how” actions happen in IKEA to obtain a better context to analyze the rest of data. A secondary goal of the interviews was to hear about possible rival explanations that could contradict the theoretical framework.

Second, direct observation data was collected throughout the span of two months, from November 2022 to December 2022. These consisted in in-store observations, lasting 10 hours in total, whilst visiting the IKEA stores of Tsuruhama (Osaka) and Kobe. During the observations, field notes were taken for data about the layout of the store, the different elements comprising IKEA’s customer experience and recognizable elements of the brand, product and service design, emotional appeals in communication channels, patterns in sustainable messaging, how sustainable issues were reported throughout all touchpoints and how green consumption is encouraged as a solution to these problems. The field notes were comprised of photography and recordings, obtained with permission from the store managers. IKEA’s website was also visited for 4 hours in total, gathering links to pages that contained the topic “sustainability”, “CSR”, “retail”, “stores” and “brand”.

Lastly, documents and visual communication from public and internal sources were collected for study. The internal documents comprised information on IKEA history, vision, business, customer experience efforts, retail, stores, sustainability development and CSR reporting. External documentation included previous qualitative and quantitative research performed on IKEA (Alänge et al., 2016; Elanchelian et al., 2022; Garnier & Poncin, 2019; Hagberg & Jonsson, 2022; Hellström & Nilsson, 2011; Hultman et al., 2012; Komassi & Pal, 2013; Laurin & Fantazy, 2017; Lindgreen et al., 2012; Morsing & Roepstorff, 2015; Pérez-Pérez et al., 2022; Rodrigues &

Brandão, 2021; Sin et al., 2021; Tarnovskaya & de Chernatony, 2011; Yurt & Deniz, 2021), to afford the opportunity to better explain the processes studied.

6.4.- Case study Analysis

To perform data analysis, systematic combining was the approach decided on (Dubois & Gadde, 2002), an abductive approach to case study research based on alternating focus between collected material and theory – developing the case study and building a theoretical framework at the same time. In order to prove the validity of the constructs, triangulation of the three sources of data was employed (interviews, direct observations, and document analysis).

First, data was tagged in reference to dimensions of brand experience, psychological distance, sustainable product promotion and possible rival explanations. Second, the process-related data was written down by drafting a general description of the processes with support and quotations of material collected. Third, while working abductively between the material, the theoretical framework, and a case narrative is written based on the previous three steps, and this narrative is displayed as the discussion of the case. Data collected is categorized and summarized in Tables 18, 19, 20 and 21.

To start with the findings of brand experience and psychological distance crafting approach that IKEA uses, the analysis must start by going over the starting place for both of these: the brand's identity.

The identity of IKEA is knowledge owned by a small group of people, the so called “concept keepers” present at Inter IKEA Systems. Inter IKEA Systems is IKEA's franchisor, and they continuously develop the “IKEA Concept” and also watch closely for the implementation of it globally. The first attempt to create a “concept” out of IKEA's brand identity started in 1992-1993 and has been growing since then by discarding what did not work and adding what was successful. These concept keepers have the objective of ensuring IKEA's brand identity is followed, with a degree of freedom based on culture and local customs.

IKEA's brand identity is crystallized in its motto “to create a better everyday life for the many people”. It can be interpreted as the combination of two concepts: the idea concept and the concept in practice. For the idea concept, it is based on offering products that improve customer's daily lives, producing them in a sustainable and responsible way and minimizing costs so that prices can be as affordable as possible. These ideas are found in the cultural manifest of IKEA, a document produced by the concept keepers: the IKEA Way.

The way these concepts are put into practice is what IKEA's brand experience and sustainable practices are, the objective efforts towards making the “IKEA concept” manifest in customer's minds. Through analyzing the ideas that make up the elements of IKEA's brand experience in their four dimensions, it is possible to see how they aim to form emotional ties with customers, and transfer knowledge and experience (hedonic and utilitarian), ultimately affecting the way they consider sustainable issues, which lay at the core of IKEA product design and marketing communications.

The combination of a brand experience that has a foundation on sustainable messages, proper usage of tags and relying on customer's manipulated psychological distance is one of the success factors of IKEA in the promotion of sustainable products.

To fully explain these points, the questions posed previously will be answered using the evidence gathered through triangulation method.

Brand Experience Dimension	Observations	Appeal	Evidence
Sensory	- Use of earthen colors to make product range uniform and lower cost of production. - Use of light in showrooms to influence mood. - Use of arrows to streamline the customer journey. - Can touch and compare products, use of scents in candle selling points. - Main entrance contains wall of attractive furniture with low prices, designed to guide eyes to escalator to showrooms.	Hedonic	- Interviews - Offline and online store observations - Hultén (2012)
Affective	- Customers feel it is cool to buy in IKEA. - Products are aimed to make the customers happier at home with their family. - Stores count with zones aimed at kids, such as a playground (Smöland). Products aimed at children have posters about safety in composition and choking hazards. - Showrooms include positive feedback from other customers, marketed as “Co-creation with IKEA family”, showing families describing their happiness at designing the home with IKEA. - Some products feature the face, name of the designer and the emotions they want to communicate.	Hedonic & Utilitarian	- Interviews - Offline and online store observations - IKEA website brochures - Elanchelian (2022)
Behavioral	- Available services are explained in detail inside the store. - IKEA teaches customers how to do their shopping in IKEA in an automatized way through their app. Physical shopping list and memos also available in offline stores. - Showrooms include notes and ideas on sustainable lifestyles and provide challenges to daily routine to be more sustainable using IKEA products. - Online planning tools (sofa, kitchen, office) available to be used in offline stores. - IKEA digital catalogue available to be used in touch panels in offline stores. - Customers are encouraged to use products for a long time, recycle and save money.	Utilitarian	- Interviews - Offline and online store observations - Sin et al. (2021) - Garnier and Poncin (2019) - Hagberg and Jonsson (2022)
Intellectual	- In-store information about energy efficiency. Communication of goals to be energy positive in 2030. - Showrooms display furniture laid out in use case scenarios, suggesting design ideas and tips for furnishing. - Customers and workers in IKEA are taught about equality, which is at the core of IKEA’s code of conduct. - Showrooms dedicated to co-living space information emphasize the benefits of it for sustainable goals and for reducing living costs. - Customers are encouraged to be creative with using IKEA products. - Information on sustainable sourcing of products, including pictures of people with raw materials and the challenges of production. - IKEA inspires customers to think functional, simple, useful, frugal. - Reviews of past customers are found in some rooms, not all of the comments are positive. - IKEA teaches Scandinavian culture and encourages to take the best out of each culture.	Hedonic	- Interviews - Offline and online store observations - IKEA website brochures - Yurt and Deniz (2021) - Tarnovskaya and de Chernatony (2011)

Table 18.- Analysis of IKEA’s brand experience findings for Study 4.

Psychological Distance & Environmental Literacy	Observations	Evidence
Brand experiences lead to middle level of psychological distance	- Information about environmentally friendly raw material sourcing. Suppliers are carefully selected. - Customers are taught sustainable living practices and are encouraged to save money doing them (utilitarian) and feel better about helping save the environment (hedonic) - CSR and sustainable efforts are explained in store posters, social network posts and television spots. - Sustainable living practices are taught to customers in store tags/posters, social network posts and television spots. Communicated benefits: save money (utilitarian) and contribute to the future (hedonic). - Small technical details about sustainability are not presented. Products are addressed as solutions to environmental issues. - Competitors focus on explaining the source of sustainable issues, IKEA does not and promotes sustainable living behavior and products as solutions. - Long-term minded sustainability plans, People & Planet Positive Plan (2030/2050) - Action is motivated because of a future-focus of experiences (sustainable living) and immediate value (environmentally friendly furniture)	- Interviews - Offline and online store observations - Competitor's website brochures - Morsing and Roepstorff (2015)

Table 19.- Analysis of IKEA's psychological distance and environmental literacy findings for Study 4.

Green Consumption Intention	Observations	Evidence
Middle level of psychological distance increases green consumption intention	- Early movers in offering plant-based foods. Low cost and healthy, vegan friendly. - Majority of customers believe that IKEA's products are the solution to environmental issues, and they like purchasing them to help the environment - Customers are aware of IKEA's efforts to contribute to the environment outside of their products - IKEA focus is on environmental solutions are given through products and CSR initiatives, information on sources of environmental problems is not reported. - IKEA's "sustainable life at home" range increase every year. Sustainable products are priority in design	- Interviews - Offline and online store observations - IKEA website brochures - Alänge et al. (2016)

Table 20.- Analysis of IKEA's green consumption intention findings for Study 4.

Rival explanations	Observations	Evidence
Do other non-studied factors affect our variables?	- Competitors that use low/high psychological distance are also successful. - Perceived product quality and price influence green consumption intention in a stronger way than psychological distance. - Brand love, customer satisfaction or brand trust influence psychological distance - Service brands do not benefit from a middle level of psychological distance in the same way that retail brands do.	- Interviews - Offline and online store observations - Yurt and Deniz (2021)

Table 21.- Analysis of rival explanations for Study 4.

6.4.1.- How is the IKEA brand experience developed and what are the key ideas behind it?

As mentioned previously, IKEA's brand experience is based on the IKEA concept and its slogan "to create a better everyday life for the many people". "A better everyday life" can be broken into two ideas:

- low cost and affordable products that last a long time.
- products that improve the lives of everyone involved in its lifecycle (through utilitarian and hedonic appeal).

And "for the many people" can be broken into one core idea:

- appeal to all cultures and with a simple, functional design.

When asked about the IKEA slogan, a previous worker answered:

IKEA would like to make the customers learn how to buy at IKEA first, and finally make them live a better life. With the slogan, "to create a better everyday life", those words by Mr. Kamprad are written all over the office, and we see it every day.

Because they [IKEA] handle furniture, the "better everyday life" is in terms of living, housing, interior. To customers, it is expressed that if they have IKEA furniture, your lifestyle will become better, in many meanings.

These key ideas are behind of all of the brand experiences that IKEA develops. Another important factor is to understand who IKEA's target is, as these are the people for whom the brand experience is developed. In the analysis, 3 main types of customers were identified:

- Young (20 to 40 years old) couples.
- Recently married couples, who are moving out together.
- Families with 1 to 2 children, who are between 0 and 8 years old.

IKEA's brand experience then serves to transport the IKEA concept and its slogan to the minds of these customers, by appealing to the four dimensions of brand experience delineated by Brakus et al. (2009) and combining hedonic and utilitarian values.

IKEA designs a brand experience that wants to transmit through the senses a welcoming and calming image of their products and services. That is why most of them are made with earthen and flat colors, and this lowers costs of production and showrooms use light to increase the mood of the design (Figure 11). Customers can touch and measure products to have a better understanding of them, increasing impulse buying chance. The main entrance of the store presents attractive furniture with low prices, and it is designed to guide the customer's eyes towards the escalators that bring them to the showroom, kickstarting the customer journey (Figure 10). In the words of a previous worker at IKEA:

When you go through the main entrance you can see a wall of products that are cheaper than usual, very attractive, that enter your eyes, and from there is an escalator to the showroom, you get the idea "let's go to the showroom, to see more good things to find".



Figure 11.- Use of color and lighting in showrooms and main entrance furniture display, photos taken in IKEA Kobe.

The emotions that IKEA wants to communicate are those of happiness, mindfulness, safety, and companionship. They do so through their marketing communications, depicting images of happy families, focused young people, entertained and curious kids, and a promise of a better world by buying IKEA products. Stores present many services and products tailored for kids, and marketing communications material usually shows young families with their kids, creating the image that IKEA is a brand to be enjoyed in family (Figure 12). As noted during an interview:

The sayings from Ingvar Kamprad are “kids are also important,” and they are always family friendly stores, where they put the Smöland, which is like a kid’s nursing area, where they keep the kids, and adults can go shopping.

Customers feel that IKEA is a cool and modern brand. As one interview revealed:

They [customers] thought items are very cheap, but good design. Many varieties to choose from. Compared to other stores in Japan, it felt cool to buy in IKEA.

One of the goals of IKEA is teaching customers how to do their shopping at offline and online stores seamlessly, offer help with post/pre purchase services and automatize the purchasing process for customers. In the words of a previous IKEA worker:

IKEA would like to make people go shopping and buy things in the store automatically.

IKEA publishes information on sustainable lifestyle ideas, in online and offline touchpoints, and suggests daily routines to be more sustainable using IKEA products, in this way making their brand identity as a lifestyle partner and place of learning about living (Figure 12). Customers are encouraged to be frugal, use products for a long time, learn about recycling and reusing, for both sustainable and monetary reasons. IKEA offers design tool and catalogues readily available through apps and touch panels in stores, and these offer design insights.

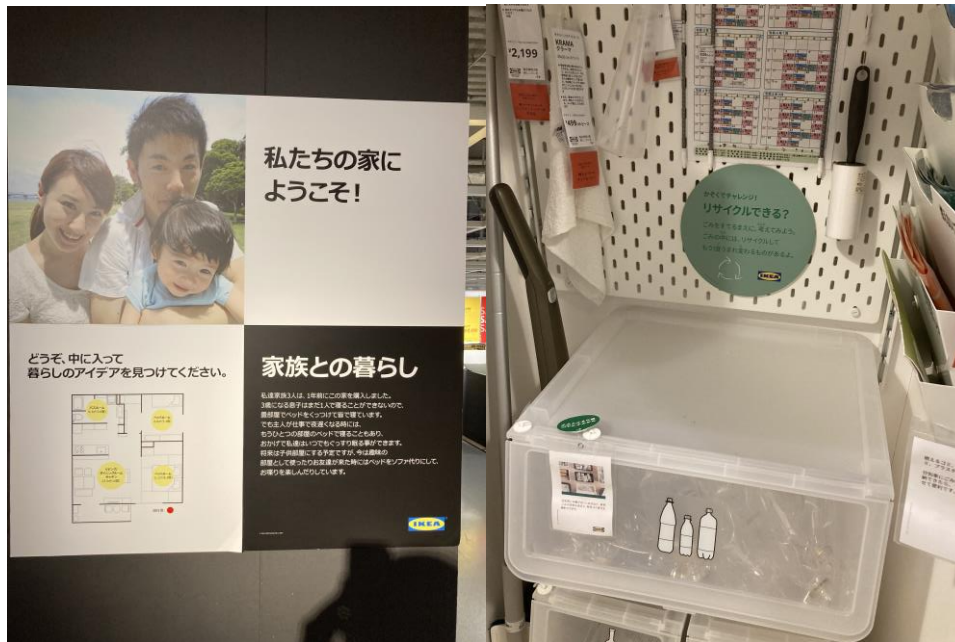


Figure 12.- Use of family in marketing messages and sustainable routines, photos taken in IKEA Tsuruhamu.

It is also argued that the intellectual dimension plays an important role in shaping customer's perceptions of the brand. IKEA strives to make their customers think by displaying use case scenarios of their products but suggesting customers to try being creative and unique. Products display the ecological sourcing of their raw materials and inform why they are beneficial to the environment, in simple terms. As one previous worker put it:

They put many communication messages in the floors about thinking in a green way.

Ideas like co-living and gender equality are also presented as desirable by the marketing communications channel. The idea of equality is at the core of IKEA, as described by one interviewee:

But in IKEA, everyone was equal, regardless of what time of the day you worked

And their marketing actions are based on equality. And this equality is adopted in the relationship between IKEA workers and customers.

IKEA's brand experience is based on ideas of equality, happiness, better life at home, and contributing to sustainable causes. Customers are encouraged to understand their identity through offline and online touchpoints, designed expressly. The findings on brand experience and its causes are summarized in Figure 13.

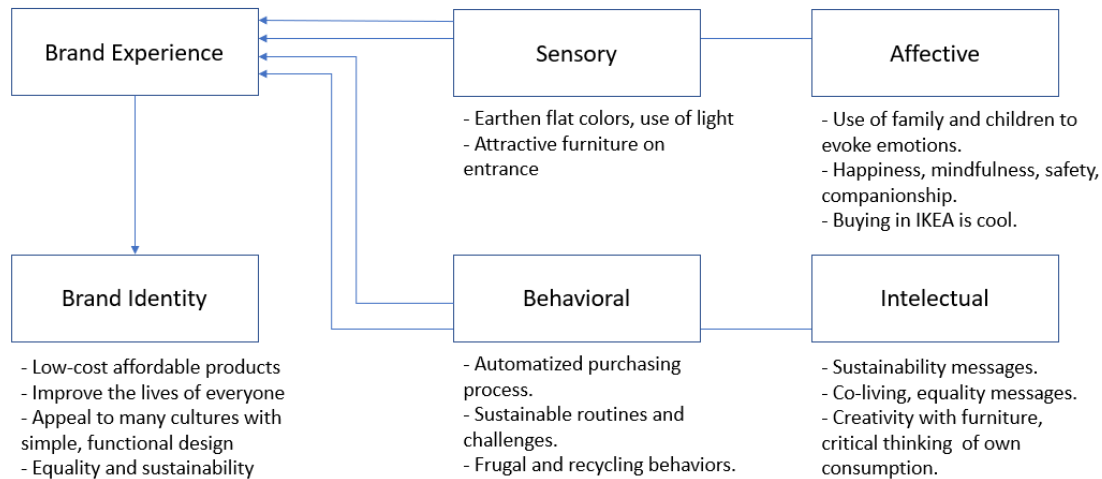


Figure 13.- Findings on brand experience and its causes.

6.4.2.- How does brand experience aid in managing customer's psychological distance to sustainable issues?

When customers perceive the IKEA concept through the brand experience that IKEA deliberately crafts, they are equipped with a series of points of view over the issues of sustainability, living habits, furniture consumption and furnishing. Through information provided in different offline and online touchpoints, customers are also taught about facts on production, lifestyles around the world and other families. As illustrated previously, some of the aspects of the crafted brand experience are hedonic and some of them are utilitarian. A brand's experience is complete when both of these aspects are brought together.

Psychological distance in all dimensions is influenced when new knowledge or experience with a phenomenon occurs. As can be seen from the efforts into CSR that the company is partaking in since the last two decades, IKEA is one of the forefront players in the creation of sustainable production culture. They do so through the information found on posters and tags in offline stores (Figure 14), social network services/television spots, and their reports on sustainable efforts. Out of the three, only the first two are communicated during the purchasing process and are the ones where the brand's identity can best be communicated.



Figure 14.- Sustainability promotion marketing messages in offline stores, photos taken in IKEA

As depicted in the FY2021 CSR Report (IKEA, 2021b), 73% of IKEA's product range is now based on sustainable sources. It follows that their marketing campaigns leverage this factor as a differentiating factor and competitive advantage. As it forms part of the brand identity, IKEA must ensure that customers are aware of the issues that their products are solutions for. A previous worker at IKEA said that:

IKEA does not only think about saving money with its products, but also contributing globally.

Research performed by Yurt and Deniz (2021) showed that most customers do not believe that they harm the environment, but the majority believe that IKEA offers solutions for environmental issues. They thought that they can contribute to the environment positively by using IKEA products and sustainable living tips. The main idea behind this is that IKEA's brand experience is successful at placing customers to a certain psychological distance of their customers: they believe in environmental issues yet believe themselves to not be the main actors behind the issue. This approach is consistent with IKEA's brand experience, in which the solutions to environmental issues are presented, but they are not explained in detail through the main two communication channels discussed previously (Posters and tags, and social networks). It was observed that even in CSR reports, IKEA does not show images of human involvement in pollution, but rather, of IKEA suppliers' workers in improved environments, and IKEA's workers involved in socially and environmentally just situations with their partners (IKEA, 2021b). As noted by a previous worker in IKEA:

Because they [environmental explanations] are considered smaller details, IKEA is thinking in larger terms. IKEA works in a lot of countries, so they need to adapt to each store locally, and be proud of their brand. [...] Not showing pollution, but rather why the product is important. [...] small details about sustainability are not disclosed.

IKEA has global goals for sustainability for 2030 and 2050, so these products are introduced as ways to achieve those goals, like recycling plastic, and they try to show solutions in long-term.

This approach must be compared to some competitors of IKEA in the sustainable sphere. For example, Patagonia, with the slogan "Everything we make has an impact on the planet" (Patagonia, 2021), shows images of landfills, oil spills and polluted waters in the introduction of the company's sustainable efforts (Figure 15). The company makes clear that it is down to an individual level to deal with sustainable issues through changes in lifestyle. Patagonia's most watched television spot is titled "Buy Less, Demand More", and opens up showing statistics on the pollution that the clothing industry contributes, and then details how much water a sole person uses in a single day. This strategy laden with hard-facts appeals to a different type of psychological distance – one that on a closer construal level than IKEA's. When asked about this difference in approach to ecological issues, the following comment by a previous worker in IKEA was offered:

They [Patagonia] talk about garbage plastic, and when you read it, you were able to understand that these products came from that same garbage plastic. [...] In that book there were many sea turtles trapped in plastics left in the sea. That was the story.

When asked if IKEA showed garbage plastic problems in the sea compared to competitors (in a direct and detailed way), the following response was obtained:

I don't think so, only products that [IKEA] addressed are recycling garbage plastics, more or less.

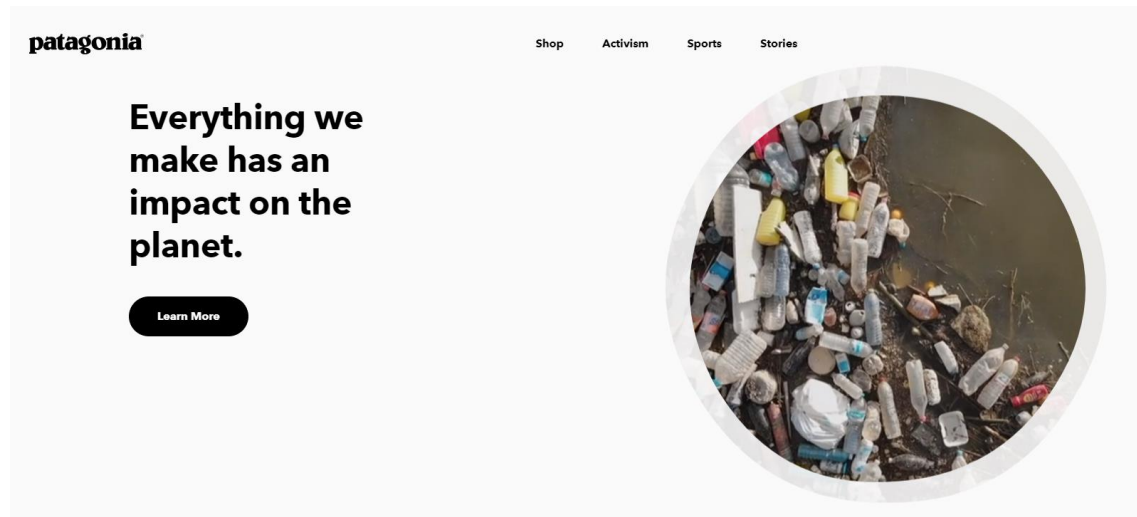


Figure 15.- Patagonia's slogan and CSR homepage. Retrieved from <https://www.patagonia.com/our-footprint/>, accessed January 18, 2023.

Thus, it can be said that managing the mental image of sustainable issues as a high-level construal, but focusing on the short-term effectiveness of solutions and not the source of problems IKEA transfers knowledge about sustainable living and experience on sustainable solutions to customers. Since the marketing communications focus on the solutions to the problem and not the origins, most customers do not think that they are the main problem in sustainable issues, but they believe that IKEA offers appropriate solutions, and enjoy the living tips offered by the brand. Since they do not believe in the source, but believe in the remedy, brand experience leads them to a middle level of psychological distance, which, as it was theorized previously, increases the consumption of green products. The findings on brand experience's impact on psychological distance are summarized in Figure 16.

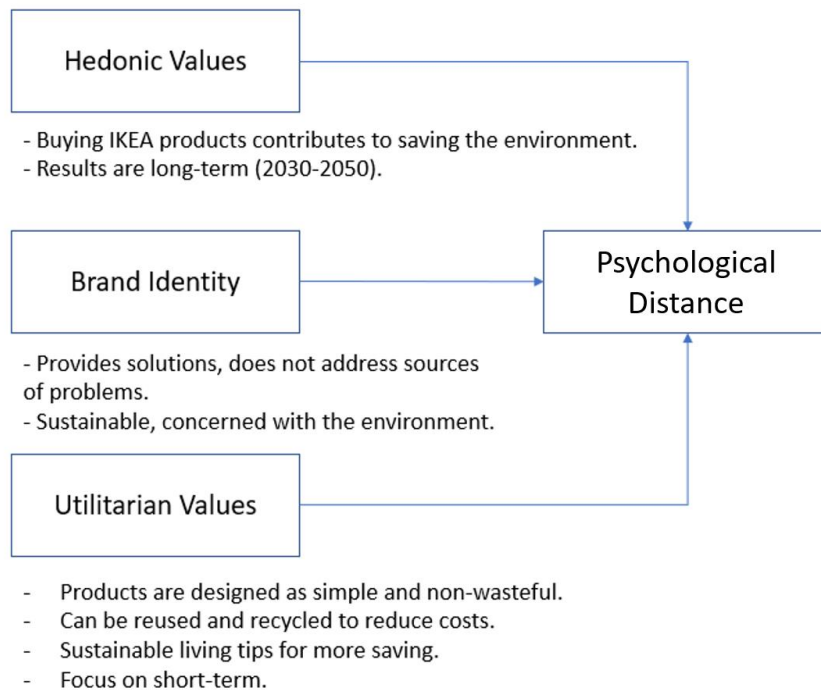


Figure 16.- Findings on brand experience impact on psychological distance.

6.4.3.- How does brand experience aid in the transferal of environmental literacy?

When the brand's identity is communicated through brand experiences, and customers grasp the knowledge and experiences that the brand intends to deliver, their environmental literacy is increased. According to the results obtained in Studies 2 and 3, customers that show a greater level of environmental literacy are more likely to engage in green purchases. Thus, when a brand experience serves as a vehicle for the transmission of knowledge and practices that are environmentally friendly, customers can be influenced to engage in more or less green consumption.

In the case of IKEA, following the argumentation based on the evidence found previously, it was possible to find out that the way in which sustainable living and issues are communicated in IKEA is through a very particular lens: customers are not told of the origins of sustainable problems, they are taught about IKEA's involvement in bringing them the solutions to the problem. The brand positions itself as a solution and points towards the future of the relationship with the customer, empowering them to be the solution. Through this way, psychological distance is manipulated, enough that, as Yurt and Deniz's (2021) research shows, over 70% of the interviewed customers knew about IKEA's sustainable living concept and thought it was important for the future. Customers are given the choice to select products depending on their environmental awareness, as told in one of the interviews:

They [sustainable and regular products] are usually sold in the same place, and the customer is given the choice to select them based on their difference.

Through feedback, customers that are aware of sustainable living and engage in such will drive the sales of green products and solidify IKEA's approach to branding. Evidence of this increase in green products sales can be found in IKEA's FY 2021 CSR Report (2021b) where the group's "sustainable life at home" product line had reached €2.503m in 2021 compared with €641m in

2013, as well as their early movement in the distribution of plant based foods in many countries, which is consistent with their brand identity – healthier, environmentally friendly addition to their restaurants. As noted by one previous worker at IKEA:

IKEA is trying, in the food area, to introduce plant-based foods, not using meat. That type of food was introduced very early as a global company. [...] The priority is very high. Even if it's not so popular, in Japan, they have introduced plant-based food I think very fast, and I was very interested in those type of foods being available in Japan, most of the items are very expensive to get in other stores, but for IKEA it is not so expensive, and a very good option for people who don't eat meat.

IKEA's brand experience does not inform customers about their harmful impact on the environment, and it does not rely solely on this type of low construal level approach to generate action on the customer's side. The branding efforts are made to communicate the IKEA concept in a balance of concrete solutions and long-term goals, and communicate about the solutions offered (sustainable living, environmentally friendly production, socially just) for a better tomorrow (Figure 17). As it can be seen in evidence, IKEA is fostering success with this brand strategy and approach to psychological distance of their customers to environmental issues. In the words of a previous worker at IKEA:

People who buy sustainable products feel happy to buy them [...] and customer's family can also learn about these issues.

This particular approach is one of the main competitive advantages of IKEA and is able to happen because of its approach to responsible raw material sourcing and long-term strategic relationships with local and global CSR partners.



Figure 17.- Sustainable solutions in marketing messages in offline stores, photos taken in IKEA Tsuruhamu.

The future of IKEA's approach to sustainable messages will focus on their People & Planet Positive strategy (IKEA, 2021a), with goals for 2030, and with the theme of giving back to the environment the resources it is consuming. The three approaches to this strategy are based on "sustainable living", "circular and climate positive" and "fair & equal". From the evidence gathered, it can be seen that the main impact of brand experience is in communicating about "sustainable living", so the future of IKEA's sustainable messages will have to build upon the

last two pillars, and thus their brand experience will have to shift to accommodate this knowledge and experience to conduct customers to a greater level of environmental literacy.

The findings on the environmental literacy and green purchase intention are summarized in Figure 18.

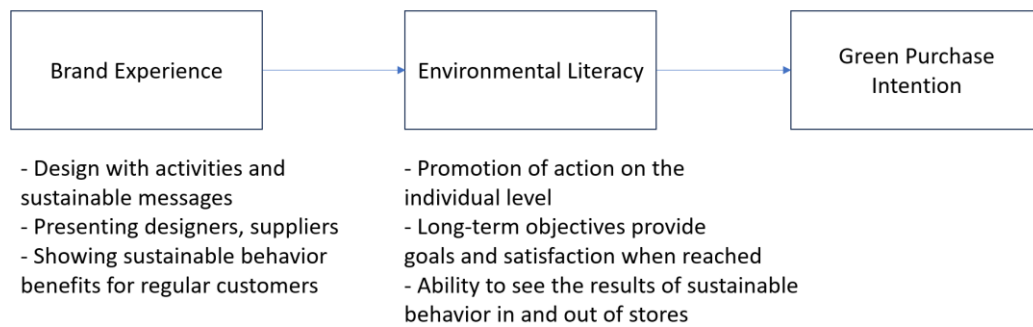


Figure 18.- Findings on the middle level of psychological distance and green consumption intention.

6.5.- Discussion and Conclusions

6.5.1.- Theoretical Contributions

Study 4 has sought to illuminate how companies can make use of their brand experiences in order to manipulate the psychological distance of their customers, to promote purchase of green products. To this end, an in-depth case study of IKEA has been provided, as well as a recount on and how the company leverages its brand identity in order to communicate experiences and knowledge to its customers, and promote their sustainable products. The case study research analysis is aimed at presenting the evidence gathered whilst building towards a theoretical framework, in which brand experience is shown as a latent variable that influences the level of psychological distance to climate change that customers of IKEA feel, and when there is a congruency effect between the values expected from sustainable products and the construal level of sustainable issues that customers change, there will be an increased intention to purchase green products.

Study 1 has contributed to current literature of brand management and environmental and sustainable behavior in two ways:

1. By proposing a framework in which brand experience and perceived psychological distance to environmental issues are tools that can be used by brands to drive up green purchases. Thus, the first contribution to the literature of Study 1 is that of the theoretical framework presented previously.
2. By highlighting the importance of a middle level of psychological distance, as so far, no contribution has included the analysis of a middle construal level. Through the presentation of this concept, Study 1 contributed to the literature of psychological distance.

A case study allowed to do this type of research as it gave the necessary depth to prove the context and subtext surrounding the case of IKEA's branding and sustainable promotion and point out that their strategy differs from other competitors and allowed IKEA to be successful.

Previous studies on branding experience in sustainable consumption (Das et al., 2019; Khan & Fatma, 2019; Yoganathan et al., 2019) have shown that offline and online customer experiences with sustainable products and services leads to better customer evaluation, brand trust and commitment, the impact of brand experience on a middle level of psychological distance has not been researched, and this research stands to contribute by studying this relationship. In the context of psychological distance (Kim & Song, 2019), previous research has shown the ability of a manipulated level of psychological distance to affect purchase intention, and brand and environmental awareness, all research has been performed considering high or low psychological distance as the best approach, and, based on the framework of CLT, this study contributes to the literature by suggesting how a middle level is one of the ways that sustainable brands can aim to position their consumer towards. The study further contributes to the literature by striving to prove the causal relationship between the variables and providing a conceptual framework (Figure 19) to provide avenues for future research. When brand experiences are perceived by customers, knowledge and emotions are communicated, and when these experiences are aligned with a customer's mental image of sustainable issues, their psychological distance environmental issues are influenced thus. In the case of IKEA, manipulation of the psychological distance to a middle level is possible through curated events, experiences, and communication by the brand, that aim to convince about the legitimacy of sustainable behavior, the future goals of sustainable consumption, while properly defining and delineating what environmental issues are, mixing both signals from high and low level construals, in summary, a middle level construal. IKEA proposes that customers feel more inclined when they are presented about environmental issues in their particular way, presenting environmental solution and behaviors that align with their needs.

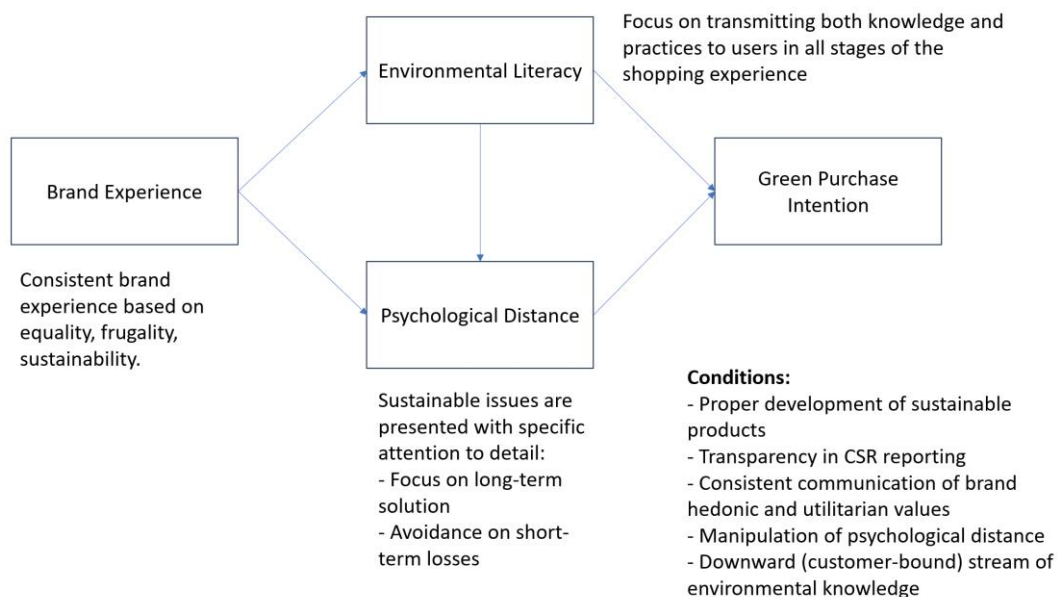


Figure 19.- Conceptual framework with concepts and conditions found in the case study.

6.5.2.- Practical Contributions

From a managerial perspective, Study 4 challenges marketing managers of green brands to think about the psychological distance to environmental issues that their brand experience communicates. This study highlights the importance of crafting a brand experience that can both communicate the main pillars of brand identity and at the same time manipulate the way

customers think about the challenges and goals that the environmental problems that the brand solves. Success to do so can provide benefits to long-term relationships with customers and competitive advantage, through increased purchase intention. Consequently, based on the findings, it is suggested CEOs, marketing managers and store designers for green brands follow these three recommendations:

1. To identify the key ideas behind their brand identity, to clearly define the knowledge, experiences, and emotions they want to communicate and craft brand experiences consistent with the previous points.
2. To consider how the brand experiences affect customer's mental image about environmental issues, and craft marketing communications that are consistent with the proposed psychological distance to them.
3. To understand how presenting environmental issues to their customers in the context of brand experience can motivate green consumption, by matching a customer's mental construal of environmental issues, with the proposed brand's solutions and outlook on these issues.

6.6.- Limitations

Study 4, through the use of an exploratory case study, has been able to contribute to the literature by providing a logical argumentation for the theoretical framework of the relationship of environmental literacy, psychological distance of climate change and green purchase intention.

However, the study is not without its limitations. Study 4 presents three major limitations:

- 1.- Only using one single case study. The usage of IKEA, a very critical company, provided evidence in favor of the contributions, but single case studies present weaknesses in replication and comparison. Future qualitative research on the topic should be done by integrating several green brands and examining the differences in the design of brand experience and psychological distance level that their marketing communications aim for.
- 2.- Lack of financial performance evidence. Due to accessibility constraints, it was not possible to obtain detailed financial performance indicators of IKEA's sustainable products. Due to this, the implications of the case study remain on the theoretical side, and future research should look into integrating detailed financial data that shows the success rate of green brands' brand experiences that properly match a customer's mental image of environmental issues

With all of the limitations in mind, Study 4 serves as the summary of the main points of this dissertation, by introducing the concept of brand experience as the tool that companies make use of to manipulate the level of psychological distance and transfer environmental literacy to its customers, with the goal of increasing green purchase intention in the context of a producer of a green brand, such as the case for IKEA. Study 4 is supported by the empirical data obtained in Studies 1, 2 and 3, showing a vast array of qualitative data spun in the narrative built by the previous studies. However, future research must make sure to use multiple case studies to increase the generalization of the results, as well as have access to financial performance evidence, to compare the success rate of companies that create brands that successfully manipulate psychological distance and transfer environmental knowledge.

7.- Conclusion

After an exhaustive review of relevant literature, collection of data from both quantitative and qualitative sources, analysis from the point of view of producers and consumers of green products and explaining in detail the findings in each study of this dissertation, this last section will serve as a summary of the core ideas of the studies, serving as a recapitulation of what has been learned so far.

Thus, this section is divided as follows: first, Section 7.1 will contain an overview of the findings in each study, along with the logical thread that unites all the conclusions together. Next, Section 7.2 will highlight the specific findings that serve to move marketing theory forward and contribute to the field of green marketing, brand management and environmental behaviors. As well as argue on the worth of the findings in the development of new marketing theories. Finally, Section 7.3 will delineate the main limitations of this study and propose avenues for further research.

7.1.- Overview of findings

Through the use of both qualitative and quantitative analyses, this dissertation has sought to establish the roles that several latent variables in the literature of green marketing, brand management, consumer behavior and environmental behavior have over green purchase intention. The decision to focus on green purchase intention as the main dependent variable is twofold. First, because of its wide presence in the literature (Feng et al., 2021; Schill & Shaw, 2016; Tong et al., 2021; Yang et al., 2015) and due to its practicality in applying it to practical contributions. As is the work of many scholars in the field of marketing, this dissertation aims to not only contribute a series of findings to a growing body of knowledge, but to provide easily digestible recommendations for practitioners.

The ancillary pillar behind the findings of this dissertation is the concept of psychological distance, and its basis on construal level theory, as an antecedent of green purchase intention (Kim & Song, 2019). As the topic of green purchases is linked to a hedonic value derived by the pleasure of matching one's environmental needs with an appropriate solution, the solution must solve an issue. Indeed, this issue, in the form of environmental issues, such as climate change, deforestation, animal extinction, or greenhouse gas effect, all are events that are hard to define, and harder event to conceptualize. Therefore, the use of psychological distance and the construal level provides a very important leverage of this nebulous concept that is an environmental issue, and can turn it into an ally for the green marketing literature.

The first study in this dissertation uses empirical quantitative analysis to explain the nature of the relationship between psychological distance of climate change and green purchase intention, in the context of a consumer, in this case, of a Japanese consumer of green products. The analysis is done through regression analysis, and aims to prove that there exists an inverse U-shaped relationship between psychological distance of climate change and green purchase intention. The findings point out that, theoretically, this relationship is indeed an inverse U-shaped one, meaning that there is an inflexion point which marks the maximum achievable green purchase intention before it diminishes the higher the construal level is imagined. Practically, for the current study, the analysis reveals that it is a higher level of psychological distance the one that provides the highest green purchase intention, formalizing the relationship between the two as a positive one, for this sample.

The second study in this dissertation uses empirical quantitative analysis to explain the nature of the relationship between environmental literacy, psychological distance of climate change and green purchase intention, in the context of a consumer, in this case, of a Japanese consumer. The analysis is done through structural equation modelling, and aims to prove that there is a positive direct relationship between environmental literacy, green purchase intention and psychological distance, as well as psychological distance working as a positive mediator of the relationship of environmental literacy and green purchase intention, by amplifying its effects the higher the construal level perceived by the consumer. The findings confirm the aim of the study and explain that environmental knowledge is a factor that help process information regarding environmental issues, and improves fluency of the construal level, therefore increasing green purchase intention at higher levels of psychological distance. At the same time, the presence of high level construals about climate change will enhance the effect of environmental knowledge, through a matching effect of desirability towards future-oriented goals.

The third study in this dissertation uses empirical quantitative analysis to explain the nature of the relationship between framing effect, environmental literacy, psychological distance of climate change and green purchase intention, in the context of a consumer, in this case, of a Japanese consumer. The analysis is done through a three-way ANOVA between subject's test, and aims to prove that framing effect has an interaction effect with psychological distance and environmental literacy in their prediction of a customer's green purchase intention, so that positive frames benefit customers on high and middle construal level, and negative frames benefit customers on low construal level. Although no direct interaction is found between the framing effect and the latent variables, concrete differences between the groups confirm the aim of the study and explain that only in the case of individuals with greater levels of environmental literacy, positive framing effect provides the hypothesized effects, by increasing the relationship of environmental literacy and psychological distance for high and medium level of psychological distance and negative framing does the same for customers in the low level of psychological distance.

The fourth and final study in this dissertation employs an exploratory case study research to explain how the brand experience of a green corporation is created, and what the ideas behind it are, in the context of a producer, in this case, of the Swedish furniture retailer company, IKEA. The case study presents brand experience in the context of its manipulation of psychological distance and transferal of environmental knowledge, based on previous research hypothesis (Yoganathan et al., 2019), and the findings point out that when brand experiences are perceived by customers of a green brand, knowledge and emotions are communicated, and when these experiences align with a customer's perceived psychological distance to environmental issues and knowledge and practices are communicated towards customers, the fit between the two leads to a higher engagement with the brand and its green products, therefore driving green purchase intention up.

7.2.- Overview of theoretical contributions

The value of any dissertation is what it contributes to the current stream of knowledge in the field. To make a valuable contribution, a research gap must be filled.

Following this line of reasoning, this dissertation first defined the concepts of psychological distance and green purchase intention, their most relevant contributions in the present literature, and elucidated which research gaps are present at the moment. The main research gaps in the literature of framing effect, environmental literacy, psychological distance and green purchase intention are identified as:

1. A lack of the study of the middle level of psychological distance. A lack of clarity on which level of psychological distance provides the most motivation to engage in sustainable behavior
2. A lack of focus on the interaction of environmental literacy (consumer characteristic) and psychological distance of climate change (cognitive factor).
3. A lack of study of the use of framing effect on the relationship between environmental literacy, psychological distance and green purchase intention.
4. A lack of exploratory research about the ways in which companies design their brand identities and experiences and how these influence the psychological distance to sustainable issues and environmental literacy of their customers.

And the way that the marketing literature has been advanced by filling in these gaps is described as:

1. Proposed a definition based on previous literature of the middle level of psychological distance. Conducted an empirical regression analysis of the relationship of psychological distance of climate change and green purchase intention. Theoretically proved the relationship to be an inverse-U shaped one. Proposed further research this framework to study the middle level of psychological distance. Formulated an inverse-U shaped relationship between psychological distance and green purchase intention, through which it is possible to ascertain which construal level is the optimum to maximize green purchase intention. Proposed that a high level of psychological distance is the one to work in the practice, until further research is conducted on the middle level of psychological distance.
2. Conducted a structural equation modelling analysis of the relationship of environmental literacy, psychological distance and green purchase intention, identifying the positive direct relationships of environmental literacy and psychological distance on green purchase intention, as well as the model of mediation that psychological distance has on the relationship of environmental literacy and green purchase intention.
3. Conducted a three-way ANOVA between subject's test to test the framing effect on the relationship between environmental literacy, psychological distance and green purchase intention, identifying that positive frames benefit the relationship of high

and middle level construal, and negative frames benefit the relationship of low-level construal, with environmental literacy and green purchase intention.

4. Conducted an exploratory case study research about the process that IKEA follows to create their brand identity, and the sustainable messages contained inside. IKEA employs their brand experience to transmit knowledge and practices to their customers, and manipulate their psychological distance to sustainable issues by focusing on long-term solutions and avoiding the stress of short-term losses.

Through the findings of the dissertation, these research gaps have been fulfilled and new research avenues for the future have been proposed. Thus, this dissertation has not only proven new relationships between established latent variables in the field of green marketing, but also provided avenues for future research.

7.3.- Limitations and future research

The present dissertation presents a series of limitations that need to be addressed in future research, as a way to build upon the theoretical body proposed in Studies 1 through 4. There are four major limitations to this dissertation, and they are presented from less important to more important for future research.

1. Lack of comparative case study data. In the case of Study 4, the use of a critical case, such as IKEA, can help bridge the gap between the observations and the theory, but can also hurt the generalizability of the results. The main problem behind this is due to the importance of Study 4 as an exploratory case study, by which the ways that companies use their brand experiences to manipulate the environmental literacy and psychological distance to climate change of their customers. Because of only making use of one case study, from data collected from an industry that differs from the previous studies, it makes it hard to concisely define the use of brand experience in all companies. As this limitation was not addressed during the argumentation of Study 4, it must be addressed in future research by performing a multiple case study research, comparing IKEA with its competitors, and observe the differences that brand experience crafting process has over the manipulation of psychological distance to climate change and environmental literacy of their customers.
2. Lack of the clarification of the scope of climate change (and the psychological distance of it), as the background motivator for green purchases, in the literature review and the scenarios presented in the survey data used in Studies 1, 2 and 3. As is defined in the introduction of this dissertation, the issue of climate change is a multifaceted issue, affecting several facets of the production process for companies engaged in the creation and improvement of green products, and whose scope (both temporally and spatially) is far beyond the understanding of individuals, specially customers of these products. In this dissertation, climate change is presented as a background and issue which green products are aimed on solving, specifically, green packaging products and ecologically-sourced furniture. But the scope of “how” these products contribute towards reducing the impact of climate change is not explored. This creates a limitation in the interpretation of the results of this dissertation: the specifics of exactly what the green products do towards climate change is not addressed in the

literature review, or specified in the scenario posed to the respondents. Therefore, this makes the assumptions that higher environmental knowledge about climate change, or a high construal level in the minds of customers when thinking about climate change are having the desired effect of increasing green purchase intention, less convincing. As climate change is composed of several issues, a general background does not provide enough evidence for it being the motivator for green purchase intention. Therefore, future research must properly address the role of the green product regarding a specific issue of climate change (food shortages, floodings, rise in temperatures, change in habitats and extinctions, greenhouse effect, etc.) and its effect on the information regarding a specific issue is processed by the customers of said green product, as well as the causes and effects of a customer's purchasing behavior. Building upon this dissertation, it is suggested to present products that have a substantial and factual effect on a specific issue, for example, automobile CO₂ emissions and the greenhouse effect, and study the processing of information that customers of this specific industry face when green marketing messages that manipulate environmental literacy and psychological distance towards the greenhouse effect are introduced.

3. Lack of a differentiation in dimensions for the measuring of environmental literacy. The concept of environmental literacy is based on the conceptual definition by Roth (1992), as is described in section 4.2. This definition mentions the "(individual's) capability to understand and interpret ecological issues while taking necessary actions to restore and enhance the environment", thus focusing on actions taken. However, the concept of environmental literacy used in this dissertation, and the measurement items employed to measure this concept, described in section 3.3.2, include not only the actions that individuals take towards ecological issues, but also their knowledge, attitude and beliefs. As is also pointed out in section 3.3.2, the scaled employed to measure environmental literacy is a combination of relevant items from the revised New Ecological Paradigm (NEP) scale by Dunlap et al. (2000) and the Environmental Attitude of the University (EUA) scale by Manzanal et al. (2007) and Rodríguez-Barreiro et al. (2013). These scales contain sub-concepts in themselves (beliefs, practices, attitudes, knowledge and anthropocentrism) and therefore there is a gap in the way that the concept of environmental literacy is defined and measured, and the items that comprise the scale used in this dissertation. Future research must make sure to further itemize a concept into its sub-concepts, and avoid averaging the score of these items in one dimension: customers that have higher environmental knowledge may not be engaged in more common environmental practices, but given the average items of the present dissertation, one concept can be confused for the other, making the results of Study 2 and 3 less impactful than if the sub-concepts of environmental literacy were treated, measured and analyzed separately. A proper expansion of the concept of environmental literacy into the sub-concepts that the EAU and NEP scale provide, is the next step to improve the results of Study 2 and 3.
4. Lack of practical significance on the middle level of psychological distance being the optimum level for increasing green purchase intention. In the case of Study 1, the results for the inflection point in the inverse-U shaped relationship of psychological distance and green purchase intention reveal that the squared term of psychological distance is found to be negatively significant, affecting the relationship when a certain

optimum value is reached. For the current sample, this optimum point it is far above the maximum score that the scales employed, therefore it is assumed that it is a high level of psychological distance that is the most optimum one, and not a middle level, as was theorized. Therefore, it cannot be said that there is a middle level of psychological distance, or that it is the most optimum one to increase green purchase intention. The meaning of this inverse-U shaped relationship then, needs to be focused in the scope of information processing and environmental literacy for the customer, and as a spectrum, not a single point. Interpreting the optimum interval after which psychological distance has a negative impact on green purchase intention as a flexible spectrum allows for a less rigid interpretation of the concept in the background of climate change. For this dissertation, the results show that the optimum level to aim for in customers of green products is a higher interval of psychological distance, having its peak outside of the measurement model. This result could happen because of the way that climate change itself is processed in the mind of customers: as a distant, unknown and far away event. Therefore, it is to be expected that this effect persists in future research, and thus, the definition of a middle level of psychological distance is not adequate for this phenomenon. This limitation is the most important one in the paper, as it opens new possibilities to continue researching about the topic of the importance of an optimum interval of psychological distance to a given sustainable issue and its impact on green purchase intention, once the inverse-U shaped relationship has been contributed to the literature. As it stands, future research on this topic must be made analyzing this relationship in the background of concrete issue/product/solution combinations, such as the aforementioned greenhouse effect/automobiles/reduction of CO₂ emissions. The usage of different industries and issues will help generalize the meaning of this inverse-U shaped relationship and reveal the extent in which it is relevant to the study of green marketing, as a way to settle a dichotomy actually present in the literature.

Through all of its limitations, this dissertation serves to contribute to marketing theory by providing a new scope in which the concepts of psychological distance, environmental literacy, positive/negative framing effect and green purchase intention are studied together. Furthermore, the concept of an inverse-U shaped relationship of psychological distance and green purchase intention is theorized and its limitations exposed, so that future research can build upon a better understanding of the concepts that drive green purchases, so that consumers and producers might engage in this business in a fruitful and prosperous way.

8.- References

Agapito, D., Valle, P., & Mendes, J. (2014). The sensory dimension of tourist experiences:

Capturing meaningful sensory-informed themes in Southwest Portugal. *Tourism*

Management, 42, 224–237. <https://doi.org/10.1016/j.tourman.2013.11.011>

Agrawal, N., & Wan, E. W. (2009). Regulating Risk or Risking Regulation? Construal Levels and

Depletion Effects in the Processing of Health Messages. *Journal of Consumer Research*,

36(3), 448–462. <https://doi.org/10.1086/597331>

- Akehurst, G., Afonso, C., & Martins Gonçalves, H. (2012). Re-examining green purchase behaviour and the green consumer profile: New evidences. *Management Decision*, 50(5), 972–988. <https://doi.org/10.1108/00251741211227726>
- Aktan, M., & Kethüda, Ö. (2023). The role of environmental literacy, psychological distance of climate change, and collectivism on generation Z's collaborative consumption tendency. *Journal of Consumer Behaviour*, n/a(n/a). <https://doi.org/10.1002/cb.2159>
- Al Mamun, A., Hayat, N., Mohiuddin, M., Salameh, A. A., Ali, M. H., & Zainol, N. R. (2022). Modelling the significance of value-belief-norm theory in predicting workplace energy conservation behaviour. *Frontiers in Energy Research*, 10. <https://www.frontiersin.org/articles/10.3389/fenrg.2022.940595>
- Alänge, S., Clancy, G., & Marmgren, M. (2016). Naturalizing sustainability in product development: A comparative analysis of IKEA and SCA. *Journal of Cleaner Production*, 135, 1009–1022. <https://doi.org/10.1016/j.jclepro.2016.06.148>
- Arthur, D., & Quester, P. (2004). Who's afraid of that ad? Applying segmentation to the protection motivation model. *Psychology & Marketing*, 21(9), 671–696. <https://doi.org/10.1002/mar.20024>
- Baldassare, M., & Katz, C. (1992). The Personal Threat of Environmental Problems as Predictor of Environmental Practices. *Environment and Behavior*, 24(5), 602–616. <https://doi.org/10.1177/0013916592245002>
- Bandalos, D. L. (2014). Relative Performance of Categorical Diagonally Weighted Least Squares and Robust Maximum Likelihood Estimation. *Structural Equation Modeling: A Multidisciplinary Journal*, 21(1), 102–116. <https://doi.org/10.1080/10705511.2014.859510>
- Bar-Anan, Y., Liberman, N., Trope, Y., & Algom, D. (2007). Automatic processing of psychological distance: Evidence from a Stroop task. *Journal of Experimental Psychology: General*, 136, 610–622. <https://doi.org/10.1037/0096-3445.136.4.610>

- Bennett, R., Härtel, C. E. J., & McColl-Kennedy, J. R. (2005). Experience as a moderator of involvement and satisfaction on brand loyalty in a business-to-business setting 02-314R. *Industrial Marketing Management*, 34(1), 97–107.
<https://doi.org/10.1016/j.indmarman.2004.08.003>
- Berry, C., Kees, J., & Burton, S. (2022). Drivers of Data Quality in Advertising Research: Differences across MTurk and Professional Panel Samples. *Journal of Advertising*, 51(4), 515–529. <https://doi.org/10.1080/00913367.2022.2079026>
- Böcker, L., & Meelen, T. (2017). Sharing for people, planet or profit? Analysing motivations for intended sharing economy participation. *Environmental Innovation and Societal Transitions*, 23, 28–39. <https://doi.org/10.1016/j.eist.2016.09.004>
- Bong Ko, S., & Jin, B. (2017). Predictors of purchase intention toward green apparel products: A cross-cultural investigation in the USA and China. *Journal of Fashion Marketing and Management: An International Journal*, 21(1), 70–87. <https://doi.org/10.1108/JFMM-07-2014-0057>
- Borin, N., Lindsey-Mullikin, J., & Krishnan, R. (2013). An analysis of consumer reactions to green strategies. *Journal of Product & Brand Management*, 22(2), 118–128.
<https://doi.org/10.1108/10610421311320997>
- Brakus, J. J., Schmitt, B. H., & Zarantonello, L. (2009). Brand Experience: What is It? How is it Measured? Does it Affect Loyalty? *Journal of Marketing*, 73(3), 52–68.
<https://doi.org/10.1509/jmkg.73.3.052>
- Bray, J., Johns, N., & Kilburn, D. (2011). An Exploratory Study into the Factors Impeding Ethical Consumption. *Journal of Business Ethics*, 98(4), 597–608.
<https://doi.org/10.1007/s10551-010-0640-9>
- Brügger, A., Morton, T. A., & Dessai, S. (2016). “Proximising” climate change reconsidered: A construal level theory perspective. *Journal of Environmental Psychology*, 46, 125–142.
<https://doi.org/10.1016/j.jenvp.2016.04.004>

- Caspers, J., Coroama, V. C., Sadetzky, L., Süßbauer, E., & Finkbeiner, M. (2023). Measuring the climate change impact of household food and beverage packaging—A life cycle assessment of a living lab. *Sustainable Production and Consumption*, 42, 259–267. <https://doi.org/10.1016/j.spc.2023.10.002>
- Chan, R. Y. K. (2001). Determinants of Chinese consumers' green purchase behavior. *Psychology & Marketing*, 18(4), 389–413. <https://doi.org/10.1002/mar.1013>
- Chang, H., Zhang, L., & Xie, G.-X. (2015). Message framing in green advertising: The effect of construal level and consumer environmental concern. *International Journal of Advertising*, 34(1), 158–176. <https://doi.org/10.1080/02650487.2014.994731>
- Chang, W.-J. (2020). Experiential marketing, brand image and brand loyalty: A case study of Starbucks. *British Food Journal*, 123(1), 209–223. <https://doi.org/10.1108/BFJ-01-2020-0014>
- Chaudhuri, A., & Holbrook, M. B. (2001). The Chain of Effects from Brand Trust and Brand Affect to Brand Performance: The Role of Brand Loyalty. *Journal of Marketing*, 65(2), 81–93. <https://doi.org/10.1509/jmkg.65.2.81.18255>
- Cheema, A., & Patrick, V. M. (2008). Anytime versus Only: Mind-Sets Moderate the Effect of Expansive versus Restrictive Frames on Promotion Evaluation. *Journal of Marketing Research*, 45(4), 462–472. <https://doi.org/10.1509/jmkr.45.4.462>
- Chen, F., Chen, W., Hou, J., & Li, W. (2022). Research on the variations in individual waste separation behavior due to different information strategies—Mediating effects of psychological distance. *Journal of Environmental Management*, 304, 114320. <https://doi.org/10.1016/j.jenvman.2021.114320>
- Chen, Y., & Chang, C. (2012). Enhance green purchase intentions: The roles of green perceived value, green perceived risk, and green trust. *Management Decision*, 50(3), 502–520. <https://doi.org/10.1108/00251741211216250>

- Chen, Y.-S. (2010). The Drivers of Green Brand Equity: Green Brand Image, Green Satisfaction, and Green Trust. *Journal of Business Ethics*, 93(2), 307–319.
<https://doi.org/10.1007/s10551-009-0223-9>
- Chen, Y.-S., Lin, C.-Y., & Weng, C.-S. (2015). The Influence of Environmental Friendliness on Green Trust: The Mediation Effects of Green Satisfaction and Green Perceived Quality. *Sustainability*, 7(8), Article 8. <https://doi.org/10.3390/su70810135>
- Claudy, M. C., Peterson, M., & O’Driscoll, A. (2013). Understanding the Attitude-Behavior Gap for Renewable Energy Systems Using Behavioral Reasoning Theory. *Journal of Macromarketing*, 33(4), 273–287. <https://doi.org/10.1177/0276146713481605>
- Connors, S., Khamitov, M., Thomson, M., & Perkins, A. (2021). They’re Just Not That into You: How to Leverage Existing Consumer–Brand Relationships Through Social Psychological Distance. *Journal of Marketing*, 85(5), 92–108.
<https://doi.org/10.1177/0022242920984492>
- Cova, B., & Pace, S. (2006). Brand community of convenience products: New forms of customer empowerment – the case “my Nutella The Community.” *European Journal of Marketing*, 40(9/10), 1087–1105. <https://doi.org/10.1108/03090560610681023>
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297–334. <https://doi.org/10.1007/BF02310555>
- Das, G., Agarwal, J., Malhotra, N. K., & Varshneya, G. (2019). Does brand experience translate into brand commitment?: A mediated-moderation model of brand passion and perceived brand ethicality. *Journal of Business Research*, 95, 479–490.
<https://doi.org/10.1016/j.jbusres.2018.05.026>
- De Martino, B., Kumaran, D., Seymour, B., & Dolan, R. J. (2006). Frames, Biases, and Rational Decision-Making in the Human Brain. *Science*, 313(5787), 684–687.
<https://doi.org/10.1126/science.1128356>

- Dessai, S., Adger, W. N., Hulme, M., Turnpenny, J., Köhler, J., & Warren, R. (2004). Defining and Experiencing Dangerous Climate Change. *Climatic Change*, 64(1), 11–25.
<https://doi.org/10.1023/B:CLIM.0000024781.48904.45>
- Detweiler, J. B., Bedell, B. T., Salovey, P., Pronin, E., & Rothman, A. J. (1999). Message framing and sunscreen use: Gain-framed messages motivate beach-goers. *Health Psychology*, 18(2), 189–196. <https://doi.org/10.1037/0278-6133.18.2.189>
- D’Souza, C., Taghian, M., Lamb, P., & Peretiatko, R. (2007). Green decisions: Demographics and consumer understanding of environmental labels. *International Journal of Consumer Studies*, 31(4), 371–376. <https://doi.org/10.1111/j.1470-6431.2006.00567.x>
- Dubois, A., & Gadde, L.-E. (2002). Systematic combining: An abductive approach to case research. *Journal of Business Research*, 55(7), 553–560.
[https://doi.org/10.1016/S0148-2963\(00\)00195-8](https://doi.org/10.1016/S0148-2963(00)00195-8)
- Dunlap, R. E., Van Liere, K. D., Mertig, A. G., & Jones, R. E. (2000). New Trends in Measuring Environmental Attitudes: Measuring Endorsement of the New Ecological Paradigm: A Revised NEP Scale. *Journal of Social Issues*, 56(3), 425–442.
<https://doi.org/10.1111/0022-4537.00176>
- Dyer, W. G., & Wilkins, A. L. (1991). Better Stories, Not Better Constructs, To Generate Better Theory: A Rejoinder to Eisenhardt. *Academy of Management Review*, 16(3), 613–619.
<https://doi.org/10.5465/amr.1991.4279492>
- Eisenhardt, K. M. (1989). Building Theories from Case Study Research. *Academy of Management Review*, 14(4), 532–550. <https://doi.org/10.5465/amr.1989.4308385>
- Elanchelian, P. A., Pang, Z., Pu, Y., & Zulfakar, R. N. Z. B. R. A. (2022). Brand Attitude, Brand Experience, Brand Love and Word of Mouth: Evidence from China and Malaysia’s IKEA. *International Journal of Tourism and Hospitality in Asia Pasific (IJTHAP)*, 5(3), Article 3.
<https://doi.org/10.32535/ijthap.v5i3.1890>

- Farrell, A. M., & Rudd, J. M. (2009). Factor analysis and discriminant validity: Australia and New Zealand Marketing Academy Conference 2009. *ANZMAC 2009 Conference Proceedings*.
- Feinberg, M., & Willer, R. (2011). Apocalypse Soon?: Dire Messages Reduce Belief in Global Warming by Contradicting Just-World Beliefs. *Psychological Science*, 22(1), 34–38.
<https://doi.org/10.1177/0956797610391911>
- Feng, Q., Wang, Y., Chen, C., Dong, Z., & Shi, X. (2021). Effect of Homebuyer Comment on Green Housing Purchase Intention—Mediation Role of Psychological Distance. *Frontiers in Psychology*, 12.
<https://www.frontiersin.org/articles/10.3389/fpsyg.2021.568451>
- Fernández-Manzanal, R., Rodríguez-Barreiro, L., & Carrasquer, J. (2007). Evaluation of environmental attitudes: Analysis and results of a scale applied to university students. *Science Education*, 91(6), 988–1009. <https://doi.org/10.1002/sce.20218>
- Fernández-Ruano, M. L., Frías-Jamilena, D. M., Polo-Peña, A. I., & Peco-Torres, F. (2022). The use of gamification in environmental interpretation and its effect on customer-based destination brand equity: The moderating role of psychological distance. *Journal of Destination Marketing & Management*, 23, 100677.
<https://doi.org/10.1016/j.jdmm.2021.100677>
- Fischer, G. W., Morgan, M. G., Fischhoff, B., Nair, I., & Lave, L. B. (1991). What Risks Are People Concerned About. *Risk Analysis*, 11(2), 303–314. <https://doi.org/10.1111/j.1539-6924.1991.tb00606.x>
- Fransson, N., & Gärling, T. (1999). ENVIRONMENTAL CONCERN: CONCEPTUAL DEFINITIONS, MEASUREMENT METHODS, AND RESEARCH FINDINGS. *Journal of Environmental Psychology*, 19(4), 369–382. <https://doi.org/10.1006/jevp.1999.0141>
- Frow, P., & Payne, A. (2007). Towards the ‘perfect’ customer experience. *Journal of Brand Management*, 15(2), 89–101. <https://doi.org/10.1057/palgrave.bm.2550120>

- Fujita, K., Eyal, T., Chaiken, S., Trope, Y., & Liberman, N. (2008). Influencing attitudes toward near and distant objects. *Journal of Experimental Social Psychology*, 44(3), 562–572. <https://doi.org/10.1016/j.jesp.2007.10.005>
- Garnier, M., & Poncin, I. (2019). Do enriched digital catalogues offer compelling experiences, beyond websites? A comparative analysis through the IKEA case. *Journal of Retailing and Consumer Services*, 47, 361–369. <https://doi.org/10.1016/j.jretconser.2018.12.011>
- Gheorghe, C. A., & Matefi, R. (2021). Sustainability and Transparency—Necessary Conditions for the Transition from Fast to Slow Fashion: Zara Join Life Collection’s Analysis. *Sustainability*, 13(19), Article 19. <https://doi.org/10.3390/su131911013>
- Gibbert, M., Ruigrok, W., & Wicki, B. (2008). What passes as a rigorous case study? *Strategic Management Journal*, 29(13), 1465–1474. <https://doi.org/10.1002/smj.722>
- Gifford, R., & Comeau, L. A. (2011). Message framing influences perceived climate change competence, engagement, and behavioral intentions. *Global Environmental Change*, 21(4), 1301–1307. <https://doi.org/10.1016/j.gloenvcha.2011.06.004>
- Goldman, D., Assaraf, O. B. Z., & Shaharabani, D. (2013). Influence of a Non-formal Environmental Education Programme on Junior High-School Students’ Environmental Literacy. *International Journal of Science Education*, 35(3), 515–545. <https://doi.org/10.1080/09500693.2012.749545>
- Goodall, C., & Appiah, O. (2008). Adolescents’ Perceptions of Canadian Cigarette Package Warning Labels: Investigating the Effects of Message Framing. *Health Communication*, 23(2), 117–127. <https://doi.org/10.1080/10410230801967825>
- Goodman, J. K., & Paolacci, G. (2017). Crowdsourcing Consumer Research. *Journal of Consumer Research*, 44(1), 196–210. <https://doi.org/10.1093/jcr/ucx047>
- Griskevicius, V., Tybur, J. M., & Van den Bergh, B. (2010). Going green to be seen: Status, reputation, and conspicuous conservation. *Journal of Personality and Social Psychology*, 98(3), 392–404. <https://doi.org/10.1037/a0017346>

- Hagberg, J., & Jonsson, A. (2022). Exploring digitalisation at IKEA. *International Journal of Retail & Distribution Management*, 50(13), 59–76. <https://doi.org/10.1108/IJRDM-12-2020-0510>
- Hasanzade, V., Osburg, V.-S., & Toporowski, W. (2018). Selecting decision-relevant ethical product attributes for grocery shopping. *Management Decision*, 56(3), 584–602. <https://doi.org/10.1108/MD-12-2016-0946>
- Hellström, D., & Nilsson, F. (2011). Logistics-driven packaging innovation: A case study at IKEA. *International Journal of Retail & Distribution Management*, 39(9), 638–657. <https://doi.org/10.1108/09590551111159323>
- Helme Falk, M., & Hultén, B. (2017). Multi-sensory congruent cues in designing retail store atmosphere: Effects on shoppers' emotions and purchase behavior. *Journal of Retailing and Consumer Services*, 38, 1–11. <https://doi.org/10.1016/j.jretconser.2017.04.007>
- Hoch, S. J. (2002). Product Experience Is Seductive. *Journal of Consumer Research*, 29(3), 448–454. <https://doi.org/10.1086/344422>
- Hulme, M. (2009). *Why We Disagree about Climate Change: Understanding Controversy, Inaction and Opportunity*. Cambridge University Press.
- Hultén, B. (2012). Sensory cues and shoppers' touching behaviour: The case of IKEA. *International Journal of Retail & Distribution Management*, 40(4), 273–289. <https://doi.org/10.1108/09590551211211774>
- Hultman, J., Johnsen, T., Johnsen, R., & Hertz, S. (2012). An interaction approach to global sourcing: A case study of IKEA. *Journal of Purchasing and Supply Management*, 18(1), 9–21. <https://doi.org/10.1016/j.pursup.2011.11.001>
- Ibrahim, H., & Al-Ajlouni, M. M. Q. (2018). Sustainable consumption: Insights from the protection motivation (PMT), deontic justice (DJT) and construal level (CLT) theories. *Management Decision*, 56(3), 610–633. <https://doi.org/10.1108/MD-05-2016-0323>

- Iglesias, O., Singh, J. J., & Batista-Foguet, J. M. (2011). The role of brand experience and affective commitment in determining brand loyalty. *Journal of Brand Management*, 18(8), 570–582. <https://doi.org/10.1057/bm.2010.58>
- IKEA. (2020). *The IKEA vision, values and business idea*. <https://www.ikea.com/gb/en/this-is-ikea/about-us/the-ikea-vision-and-values-pub9aa779d0#:~:text=%E2%80%9CTo%20create%20a%20better%20everyday,more%20sustainable%20life%20at%20home>.
- IKEA. (2021a). *People & Planet*. <https://www.ikea.com/au/en/people-and-planet/>
- IKEA. (2021b). *Sustainability Report FY21 and Climate Report*.
<https://about.ikea.comhttps://about.ikea.com/en/newsroom/2022/01/17/sustainability-report-fy21-and-climate-report>
- IKEA. (2022). *IKEA continues to grow*. <https://about.ikea.com/en/about-us/year-in-review>
- Ivanova, D., Stadler, K., Steen-Olsen, K., Wood, R., Vita, G., Tukker, A., & Hertwich, E. G. (2016). Environmental Impact Assessment of Household Consumption. *Journal of Industrial Ecology*, 20(3), 526–536. <https://doi.org/10.1111/jiec.12371>
- Jo, M., & Shin, J. (2017). Market strategy for promoting green consumption: Consumer preference and policy implications for laundry detergent. *International Journal of Consumer Studies*, 41(3), 283–290. <https://doi.org/10.1111/ijcs.12339>
- Jones, C., Hine, D. W., & Marks, A. D. G. (2017). The Future is Now: Reducing Psychological Distance to Increase Public Engagement with Climate Change. *Risk Analysis*, 37(2), 331–341. <https://doi.org/10.1111/risa.12601>
- Jones, P., Comfort, D., Clarke-Hill, C., & Hillier, D. (2010). Retail experience stores: Experiencing the brand at first hand. *Marketing Intelligence & Planning*, 28(3), 241–248.
<https://doi.org/10.1108/02634501011041408>

- Jones, R. P., & Runyan, R. C. (2013). Brand experience and brand implications in a multi-channel setting. *The International Review of Retail, Distribution and Consumer Research*, 23(3), 265–290. <https://doi.org/10.1080/09593969.2013.781531>
- Jonsson, A. (2008). A transnational perspective on knowledge sharing: Lessons learned from IKEA's entry into Russia, China and Japan. *The International Review of Retail, Distribution and Consumer Research*, 18(1), 17–44. <https://doi.org/10.1080/09593960701778044>
- Kalafatis, S. P., Pollard, M., East, R., & Tsogas, M. H. (1999). Green marketing and Ajzen's theory of planned behaviour: A cross-market examination. *Journal of Consumer Marketing*, 16(5), 441–460. <https://doi.org/10.1108/07363769910289550>
- Keller, K. L., & Lehmann, D. R. (2006). Brands and Branding: Research Findings and Future Priorities. *Marketing Science*, 25(6), 740–759. <https://doi.org/10.1287/mksc.1050.0153>
- Khan, I., & Fatma, M. (2019). Connecting the dots between CSR and brand loyalty: The mediating role of brand experience and brand trust. *International Journal of Business Excellence*, 17, 439. <https://doi.org/10.1504/IJBEX.2019.10020542>
- Kim, D. H., & Song, D. (2019). Can brand experience shorten consumers' psychological distance toward the brand? The effect of brand experience on consumers' construal level. *Journal of Brand Management*, 26(3), 255–267. <https://doi.org/10.1057/s41262-018-0134-0>
- Kivetz, Y., & Tyler, T. R. (2007). Tomorrow I'll be me: The effect of time perspective on the activation of idealistic versus pragmatic selves. *Organizational Behavior and Human Decision Processes*, 102(2), 193–211. <https://doi.org/10.1016/j.obhdp.2006.07.002>
- Klaus, P., & Maklan, S. (2007). The role of brands in a service-dominated world. *Journal of Brand Management*, 15(2), 115–122. <https://doi.org/10.1057/palgrave.bm.2550121>

- Komassi, E., & Pal, R. (2013). *Investigating short term strategies in product sustainability index implementation, a case study at IKEA*. <https://depositonce.tu-berlin.de/items/urn:nbn:de:kobv:83-opus4-70330>
- Labroo, A. A., & Patrick, V. M. (2009). Psychological Distancing: Why Happiness Helps You See the Big Picture. *Journal of Consumer Research*, 35(5), 800–809. <https://doi.org/10.1086/593683>
- Latimer, A. E., Salovey, P., & Rothman, A. J. (2007). The Effectiveness of Gain-Framed Messages for Encouraging Disease Prevention Behavior: Is All Hope Lost? *Journal of Health Communication*, 12(7), 645–649. <https://doi.org/10.1080/10810730701619695>
- Laurin, F., & Fantazy, K. (2017). Sustainable supply chain management: A case study at IKEA. *Transnational Corporations Review*, 9(4), 309–318. <https://doi.org/10.1080/19186444.2017.1401208>
- Lee, S. (2011). Consumers' Value, Environmental Consciousness, and Willingness to Pay more toward Green-Apparel Products. *Journal of Global Fashion Marketing*, 2(3), 161–169. <https://doi.org/10.1080/20932685.2011.10593094>
- Leiserowitz, A., Maibach, E., & Roser-Renouf, C. (2010). *Climate Change in the American Mind: Americans' Global Warming Beliefs and Attitudes in January 2010*.
- León, B., Boycoff, M.-T., & Rodrigo-Jordán, C. (2021). *Climate change perception among Spanish undergraduates. A reception study on the combination of the local, global, gain and loss frames*. https://repositorio.consejodecomunicacion.gob.ec//handle/CONSEJO_REP/2417
- Levin, I. P., Schneider, S. L., & Gaeth, G. J. (1998). All Frames Are Not Created Equal: A Typology and Critical Analysis of Framing Effects. *Organizational Behavior and Human Decision Processes*, 76(2), 149–188. <https://doi.org/10.1006/obhd.1998.2804>
- Liberman, N., & Trope, Y. (2008). The Psychology of Transcending the Here and Now. *Science*, 322(5905), 1201–1205. <https://doi.org/10.1126/science.1161958>

- Liberman, N., Trope, Y., & Stephan, E. (2007). Psychological distance. In *Social psychology: Handbook of basic principles, 2nd ed* (pp. 353–381). The Guilford Press.
- Lin, Y.-C., & Chang, C. A. (2012). Double Standard: The Role of Environmental Consciousness in Green Product Usage. *Journal of Marketing, 76*(5), 125–134.
<https://doi.org/10.1509/jm.11.0264>
- Lindgreen, A., Xu, Y., Maon, F., & Wilcock, J. (2012). Corporate social responsibility brand leadership: A multiple case study. *European Journal of Marketing, 46*(7/8), 965–993.
<https://doi.org/10.1108/03090561211230142>
- Liu, P., Teng, M., & Han, C. (2020). How does environmental knowledge translate into pro-environmental behaviors?: The mediating role of environmental attitudes and behavioral intentions. *Science of The Total Environment, 728*, 138126.
<https://doi.org/10.1016/j.scitotenv.2020.138126>
- Locke, R. M. (2013). *The Promise and Limits of Private Power: Promoting Labor Standards in a Global Economy*. Cambridge University Press.
- Loy, L. S., & Spence, A. (2020). Reducing, and bridging, the psychological distance of climate change. *Journal of Environmental Psychology, 67*, 101388.
<https://doi.org/10.1016/j.jenvp.2020.101388>
- Mann, T., Sherman, D., & Updegraff, J. (2004). Dispositional Motivations and Message Framing: A Test of the Congruency Hypothesis in College Students. *Health Psychology, 23*(3), 330–334. <https://doi.org/10.1037/0278-6133.23.3.330>
- Masson, T., & Otto, S. (2021). Explaining the difference between the predictive power of value orientations and self-determined motivation for proenvironmental behavior. *Journal of Environmental Psychology, 73*, 101555.
<https://doi.org/10.1016/j.jenvp.2021.101555>

- McDonald, R. I., Chai, H. Y., & Newell, B. R. (2015). Personal experience and the 'psychological distance' of climate change: An integrative review. *Journal of Environmental Psychology, 44*, 109–118. <https://doi.org/10.1016/j.jenvp.2015.10.003>
- Meyers-Levy, J., & Maheswaran, D. (2004). Exploring Message Framing Outcomes When Systematic, Heuristic, or Both Types of Processing Occur. *Journal of Consumer Psychology, 14*(1), 159–167. https://doi.org/10.1207/s15327663jcp1401&2_18
- Milfont, T. L., Wilson, J., & Diniz, P. (2012). Time perspective and environmental engagement: A meta-analysis. *International Journal of Psychology, 47*(5), 325–334. <https://doi.org/10.1080/00207594.2011.647029>
- Molina-Besch, K., Wikström, F., & Williams, H. (2019). The environmental impact of packaging in food supply chains—Does life cycle assessment of food provide the full picture? *The International Journal of Life Cycle Assessment, 24*(1), 37–50. <https://doi.org/10.1007/s11367-018-1500-6>
- Morsing, M., & Roepstorff, A. (2015). CSR as Corporate Political Activity: Observations on IKEA's CSR Identity–Image Dynamics. *Journal of Business Ethics, 128*(2), 395–409. <https://doi.org/10.1007/s10551-014-2091-1>
- Moser, S. C., & Dilling, L. (2004). Making Climate HOT. *Environment: Science and Policy for Sustainable Development, 46*(10), 32–46. <https://doi.org/10.1080/00139150409605820>
- Negev, M., Sagy, G., Garb, Y., Salzberg, A., & Tal, A. (2008). Evaluating the Environmental Literacy of Israeli Elementary and High School Students. *The Journal of Environmental Education, 39*(2), 3–20. <https://doi.org/10.3200/JOEE.39.2.3-20>
- O'Keefe, D. J., & Jensen, J. D. (2007). The Relative Persuasiveness of Gain-Framed Loss-Framed Messages for Encouraging Disease Prevention Behaviors: A Meta-Analytic Review. *Journal of Health Communication, 12*(7), 623–644. <https://doi.org/10.1080/10810730701615198>

- Oliver, R. L., Rust, R. T., & Varki, S. (1997). Customer delight: Foundations, findings, and managerial insight. *Journal of Retailing*, 73(3), 311–336.
[https://doi.org/10.1016/S0022-4359\(97\)90021-X](https://doi.org/10.1016/S0022-4359(97)90021-X)
- O’Neill, S., & Nicholson-Cole, S. (2009). “Fear Won’t Do It”: Promoting Positive Engagement With Climate Change Through Visual and Iconic Representations. *Science Communication*, 30(3), 355–379. <https://doi.org/10.1177/1075547008329201>
- Pancer, E., McShane, L., & Noseworthy, T. J. (2017). Isolated Environmental Cues and Product Efficacy Penalties: The Color Green and Eco-labels. *Journal of Business Ethics*, 143(1), 159–177. <https://doi.org/10.1007/s10551-015-2764-4>
- Park, H. J., & Lin, L. M. (2020). Exploring attitude–behavior gap in sustainable consumption: Comparison of recycled and upcycled fashion products. *Journal of Business Research*, 117, 623–628. <https://doi.org/10.1016/j.jbusres.2018.08.025>
- Park, J., & Stoel, L. (2005). Effect of brand familiarity, experience and information on online apparel purchase. *International Journal of Retail & Distribution Management*, 33(2), 148–160. <https://doi.org/10.1108/09590550510581476>
- Patagonia. (2021). *Environmental & Social Footprint—Patagonia*.
<https://www.patagonia.com/our-footprint/>
- Paul, J., Modi, A., & Patel, J. (2016). Predicting green product consumption using theory of planned behavior and reasoned action. *Journal of Retailing and Consumer Services*, 29, 123–134. <https://doi.org/10.1016/j.jretconser.2015.11.006>
- Payne, A., Storbacka, K., Frow, P., & Knox, S. (2009). Co-creating brands: Diagnosing and designing the relationship experience. *Journal of Business Research*, 62(3), 379–389.
<https://doi.org/10.1016/j.jbusres.2008.05.013>
- Peloza, J., White, K., & Shang, J. (2013). Good and Guilt-Free: The Role of Self-Accountability in Influencing Preferences for Products with Ethical Attributes. *Journal of Marketing*, 77(1), 104–119. <https://doi.org/10.1509/jm.11.0454>

- Pérez-Pérez, L., Berlanga, I., & Victoria, J. S. (2022). Internal communication and employer branding within a humanistic model – a case study of IKEA (Spain, 2019–2021). *Corporate Communications: An International Journal*, ahead-of-print(ahead-of-print).
<https://doi.org/10.1108/CCIJ-03-2022-0027>
- Pick-Alony, R., Liberman, N., & Trope, Y. (2014). High Level of Construal and Psychological Distance Reduce Melioration. *Journal of Behavioral Decision Making*, 27(4), 291–300.
<https://doi.org/10.1002/bdm.1814>
- Pickett-Baker, J., & Ozaki, R. (2008). Pro-environmental products: Marketing influence on consumer purchase decision. *Journal of Consumer Marketing*, 25(5), 281–293.
<https://doi.org/10.1108/07363760810890516>
- Pothitou, M., Hanna, R. F., & Chalvatzis, K. J. (2016). Environmental knowledge, pro-environmental behaviour and energy savings in households: An empirical study. *Applied Energy*, 184, 1217–1229. <https://doi.org/10.1016/j.apenergy.2016.06.017>
- Prahalad, C. K., & Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. *Journal of Interactive Marketing*, 18(3), 5–14.
<https://doi.org/10.1002/dir.20015>
- Punyatoya, P. (2014). Linking Environmental Awareness and Perceived Brand Eco-friendliness to Brand Trust and Purchase Intention. *Global Business Review*, 15(2), 279–289.
<https://doi.org/10.1177/0972150914523572>
- Quintero Johnson, J. M., Harrison, K., & Quick, B. L. (2013). Understanding the Effectiveness of the Entertainment-Education Strategy: An Investigation of How Audience Involvement, Message Processing, and Message Design Influence Health Information Recall. *Journal of Health Communication*, 18(2), 160–178.
<https://doi.org/10.1080/10810730.2012.688244>
- Rabinovich, A., Morton, T. A., Postmes, T., & Verplanken, B. (2009). Think global, act local: The effect of goal and mindset specificity on willingness to donate to an environmental

- organization. *Journal of Environmental Psychology*, 29(4), 391–399.
<https://doi.org/10.1016/j.jenvp.2009.09.004>
- Radu, V.-M., Chiriac, M., Deak, G., Pipirigeanu, M., & Izhar, T. N. T. (2020). Strategic Actions for Packaging Waste Management and Reduction. *IOP Conference Series: Earth and Environmental Science*, 616(1), 012019. <https://doi.org/10.1088/1755-1315/616/1/012019>
- Reber, R., Schwarz, N., & Winkielman, P. (2004). Processing Fluency and Aesthetic Pleasure: Is Beauty in the Perceiver's Processing Experience? *Personality and Social Psychology Review*, 8(4), 364–382. https://doi.org/10.1207/s15327957pspr0804_3
- Rex, E., & Baumann, H. (2007). Beyond ecolabels: What green marketing can learn from conventional marketing. *Journal of Cleaner Production*, 15(6), 567–576.
<https://doi.org/10.1016/j.jclepro.2006.05.013>
- Rodrigues, C., & Brandão, A. (2021). Measuring the effects of retail brand experiences and brand love on word of mouth: A cross-country study of IKEA brand. *The International Review of Retail, Distribution and Consumer Research*, 31(1), 78–105.
<https://doi.org/10.1080/09593969.2020.1768577>
- Rodrigues, C., Skinner, H., Dennis, C., & Melewar, T. C. (2020). Towards a theoretical framework on sensorial place brand identity. *Journal of Place Management and Development*, 13(3), 273–295. <https://doi.org/10.1108/JPMMD-11-2018-0087>
- Rodríguez-Barreiro, L. M., Fernández-Manzanal, R., Serra, L. M., Carrasquer, J., Murillo, M. B., Morales, M. J., Calvo, J. M., & Valle, J. del. (2013). Approach to a causal model between attitudes and environmental behaviour. A graduate case study. *Journal of Cleaner Production*, 48, 116–125. <https://doi.org/10.1016/j.jclepro.2012.09.029>
- Roe, B., Teisl, M. F., Levy, A., & Russell, M. (2001). US consumers' willingness to pay for green electricity. *Energy Policy*, 29(11), 917–925. [https://doi.org/10.1016/S0301-4215\(01\)00006-4](https://doi.org/10.1016/S0301-4215(01)00006-4)

- Roth, C. E. (1992). *Environmental Literacy: Its Roots, Evolution and Directions in the 1990s*.
ERIC/CSMEE Publications, The Ohio State University, 1200 Chambers Road, Room 310,
Columbus, OH 43212 (\$8. <https://eric.ed.gov/?id=ED348235>)
- Rothman, A. J., Bartels, R. D., Wlaschin, J., & Salovey, P. (2006). The Strategic Use of Gain- and
Loss-Framed Messages to Promote Healthy Behavior: How Theory Can Inform Practice.
Journal of Communication, 56(suppl_1), S202–S220. <https://doi.org/10.1111/j.1460-2466.2006.00290.x>
- Royne, M. B., Levy, M., & Martinez, J. (2011). The Public Health Implications of Consumers’
Environmental Concern and Their Willingness to Pay for an Eco-Friendly Product.
Journal of Consumer Affairs, 45(2), 329–343. <https://doi.org/10.1111/j.1745-6606.2011.01205.x>
- Ruiz, S., & Sicilia, M. (2004). The impact of cognitive and/or affective processing styles on
consumer response to advertising appeals. *Journal of Business Research*, 57(6), 657–
664. [https://doi.org/10.1016/S0148-2963\(02\)00309-0](https://doi.org/10.1016/S0148-2963(02)00309-0)
- Saari, U. A., Baumgartner, R. J., & Mäkinen, S. J. (2017). Eco-Friendly Brands to Drive
Sustainable Development: Replication and Extension of the Brand Experience Scale in a
Cross-National Context. *Sustainability*, 9(7), Article 7.
<https://doi.org/10.3390/su9071286>
- Saeidi, S. P., Sofian, S., Saeidi, P., Saeidi, S. P., & Saeidi, S. A. (2015). How does corporate social
responsibility contribute to firm financial performance? The mediating role of
competitive advantage, reputation, and customer satisfaction. *Journal of Business
Research*, 68(2), 341–350. <https://doi.org/10.1016/j.jbusres.2014.06.024>
- Sahin, A., Zehir, C., & Kitapçı, H. (2011). The Effects of Brand Experiences, Trust and
Satisfaction on Building Brand Loyalty; An Empirical Research On Global Brands.
Procedia - Social and Behavioral Sciences, 24, 1288–1301.
<https://doi.org/10.1016/j.sbspro.2011.09.143>

- Schill, M., & Shaw, D. (2016). Recycling today, sustainability tomorrow: Effects of psychological distance on behavioural practice. *European Management Journal*, 34(4), 349–362.
<https://doi.org/10.1016/j.emj.2016.05.004>
- Schmitt, B. (1999). Experiential Marketing. *Journal of Marketing Management*, 15(1–3), 53–67.
<https://doi.org/10.1362/026725799784870496>
- Schneider, T. R., Salovey, P., Apanovitch, A. M., Pizarro, J., McCarthy, D., Zullo, J., & Rothman, A. J. (2001). The effects of message framing and ethnic targeting on mammography use among low-income women. *Health Psychology*, 20(4), 256–266.
<https://doi.org/10.1037/0278-6133.20.4.256>
- Septianto, F., & Pratiwi, L. (2016). The moderating role of construal level on the evaluation of emotional appeal vs. Cognitive appeal advertisements. *Marketing Letters*, 27(1), 171–181. <https://doi.org/10.1007/s11002-014-9324-z>
- Serdar, C. C., Cihan, M., Yücel, D., & Serdar, M. A. (2021). Sample size, power and effect size revisited: Simplified and practical approaches in pre-clinical, clinical and laboratory studies. *Biochemia Medica*, 31(1), 27–53. <https://doi.org/10.11613/BM.2021.010502>
- Sharma, N., & Dayal, R. (2016). Drivers of Green Purchase Intentions: Green Self-Efficacy and Perceived Consumer Effectiveness. *Global Journal of Enterprise Information System*, 8(3), Article 3.
- Shuwaler, A. A., Quttainah, M. A., Kee, D. M. H., Kei, C. M., Qi, E. J., Wen, E. C., Qu, G., Saxena, M., & Pandey, R. (2020). IKEA's Corporate Social Responsibility. *International Journal of Tourism and Hospitality in Asia Pasific (IJTHAP)*, 3(2), Article 2.
<https://doi.org/10.32535/ijthap.v3i2.824>
- Sin, L., Pandey, S., Pandey, R., Venkata, S., Harsha, S., Massand, A., Dessy, A., Safitri, I., Ng, P., Mui, D., Kee, D., Yue, W., Zhin, P., Hui, Y., & Utama, A. A. G. S. (2021). A Case Study of the Factors that Affect Consumer Behavior in IKEA. *Asia Pacific Journal of Management and Education*, 4. <https://doi.org/10.32535/apjme.v4i2.1068>

- Singh, P., Rao, K. S. S., Xuan, L., Kee, D. M. H., Min, F. J., Xuan, T. Y., Ing, T. S., Malhotra, K., & Pandey, R. (2021). Key Determinants of International Retail Success: A Case of IKEA Retail. *International Journal of Tourism and Hospitality in Asia Pasific*, 4(1), 18–33.
<https://doi.org/10.32535/ijthap.v4i1.1018>
- Soule, S. A. (2012). Social Movements and Markets, Industries, and Firms. *Organization Studies*, 33(12), 1715–1733. <https://doi.org/10.1177/0170840612464610>
- Spence, A., & Pidgeon, N. (2010). Framing and communicating climate change: The effects of distance and outcome frame manipulations. *Global Environmental Change*, 20(4), 656–667. <https://doi.org/10.1016/j.gloenvcha.2010.07.002>
- Spence, A., Poortinga, W., Butler, C., & Pidgeon, N. F. (2011). Perceptions of climate change and willingness to save energy related to flood experience. *Nature Climate Change*, 1(1), Article 1. <https://doi.org/10.1038/nclimate1059>
- Spence, A., Poortinga, W., & Pidgeon, N. (2012). The Psychological Distance of Climate Change. *Risk Analysis*, 32(6), 957–972. <https://doi.org/10.1111/j.1539-6924.2011.01695.x>
- Spence, C., Puccinelli, N. M., Grewal, D., & Roggeveen, A. L. (2014). Store Atmospherics: A Multisensory Perspective. *Psychology & Marketing*, 31(7), 472–488.
<https://doi.org/10.1002/mar.20709>
- Straughan, R. D., & Roberts, J. A. (1999). Environmental segmentation alternatives: A look at green consumer behavior in the new millennium. *Journal of Consumer Marketing*, 16(6), 558–575. <https://doi.org/10.1108/07363769910297506>
- Tarnovskaya, V. V., & de Chernatony, L. (2011). Internalising a brand across cultures: The case of IKEA. *International Journal of Retail & Distribution Management*, 39(8), 598–618.
<https://doi.org/10.1108/09590551111148677>
- Tencati, A., Pogutz, S., Moda, B., Brambilla, M., & Cacia, C. (2016). Prevention policies addressing packaging and packaging waste: Some emerging trends. *Waste Management*, 56, 35–45. <https://doi.org/10.1016/j.wasman.2016.06.025>

- Tezer, A., Philp, M., & Suri, A. (2023). The greenguard effect: When and why consumers react less negatively following green product failures. *Journal of the Academy of Marketing Science*. <https://doi.org/10.1007/s11747-023-00991-x>
- Theodorakis, I. G., & Painesis, G. (2022). Ad eroticism from a psychological distance perspective: Investigating its effects in light of consumers' sex, ethical judgments, and moral attentiveness. *Journal of Business Research*, 142, 524–539. <https://doi.org/10.1016/j.jbusres.2022.01.001>
- Thøgersen, J., & Crompton, T. (2009). Simple and Painless? The Limitations of Spillover in Environmental Campaigning. *Journal of Consumer Policy*, 32(2), 141–163. <https://doi.org/10.1007/s10603-009-9101-1>
- Thomas, K. A., & Clifford, S. (2017). Validity and Mechanical Turk: An assessment of exclusion methods and interactive experiments. *Computers in Human Behavior*, 77, 184–197. <https://doi.org/10.1016/j.chb.2017.08.038>
- Toll, B. A., Salovey, P., O'Malley, S. S., Mazure, C. M., Latimer, A., & McKee, S. A. (2008). Message Framing for Smoking Cessation: The Interaction of Risk Perceptions and Gender. *Nicotine & Tobacco Research*, 10(1), 195–200. <https://doi.org/10.1080/14622200701767803>
- Tong, Z., Liu, D., Ma, F., & Xu, X. (2021). Good News or Bad News? How Message Framing Influences Consumers' Willingness to Buy Green Products. *Frontiers in Psychology*, 11. <https://www.frontiersin.org/articles/10.3389/fpsyg.2020.568586>
- Trope, Y., & Liberman, N. (2010). Construal-level theory of psychological distance. *Psychological Review*, 117, 440–463. <https://doi.org/10.1037/a0018963>
- Tversky, A., & Kahneman, D. (1981). The Framing of Decisions and the Psychology of Choice. *Science*, 211(4481), 453–458. <https://doi.org/10.1126/science.7455683>
- Updegraff, J. A., Sherman, D. K., Luyster, F. S., & Mann, T. L. (2007). The effects of message quality and congruency on perceptions of tailored health communications. *Journal of*

- Experimental Social Psychology*, 43(2), 249–257.
<https://doi.org/10.1016/j.jesp.2006.01.007>
- Vallacher, R. R., & Wegner, D. M. (1989). Levels of personal agency: Individual variation in action identification. *Journal of Personality and Social Psychology*, 57(4), 660–671.
<https://doi.org/10.1037/0022-3514.57.4.660>
- Van Boven, L., Kane, J., McGraw, A. P., & Dale, J. (2010). Feeling close: Emotional intensity reduces perceived psychological distance. *Journal of Personality and Social Psychology*, 98, 872–885. <https://doi.org/10.1037/a0019262>
- van Dam, Y. K., & van Trijp, H. C. M. (2013). Relevant or determinant: Importance in certified sustainable food consumption. *Food Quality and Preference*, 30(2), 93–101.
<https://doi.org/10.1016/j.foodqual.2013.05.001>
- van der Linden, S. (2015). The social-psychological determinants of climate change risk perceptions: Towards a comprehensive model. *Journal of Environmental Psychology*, 41, 112–124. <https://doi.org/10.1016/j.jenvp.2014.11.012>
- Van Loo, E. J., Caputo, V., Nayga, R. M., Seo, H.-S., Zhang, B., & Verbeke, W. (2015). Sustainability labels on coffee: Consumer preferences, willingness-to-pay and visual attention to attributes. *Ecological Economics*, 118, 215–225.
<https://doi.org/10.1016/j.ecolecon.2015.07.011>
- Van Vugt, M. (2009). Averting the Tragedy of the Commons: Using Social Psychological Science to Protect the Environment. *Current Directions in Psychological Science*, 18(3), 169–173. <https://doi.org/10.1111/j.1467-8721.2009.01630.x>
- Veisten, K. (2007). Willingness to pay for eco-labelled wood furniture: Choice-based conjoint analysis versus open-ended contingent valuation. *Journal of Forest Economics*, 13(1), 29–48. <https://doi.org/10.1016/j.jfe.2006.10.002>
- Wessells, C. R., Johnston, R. J., & Donath, H. (1999). Assessing Consumer Preferences for Ecolabeled Seafood: The Influence of Species, Certifier, and Household Attributes.

American Journal of Agricultural Economics, 81(5), 1084–1089.

<https://doi.org/10.2307/1244088>

White, K., Macdonnell, R., & Dahl, D. W. (2011). It's the Mind-Set that Matters: The Role of Construal Level and Message Framing in Influencing Consumer Efficacy and Conservation Behaviors. *Journal of Marketing Research*, 48(3), 472–485.

<https://doi.org/10.1509/jmkr.48.3.472>

Witte, K. (1992). Putting the fear back into fear appeals: The extended parallel process model. *Communication Monographs*, 59(4), 329–349.

<https://doi.org/10.1080/03637759209376276>

Yang, D., Lu, Y., Zhu, W., & Su, C. (2015). Going green: How different advertising appeals impact green consumption behavior. *Journal of Business Research*, 68(12), 2663–2675.

<https://doi.org/10.1016/j.jbusres.2015.04.004>

Yin, R. K. (2018). *Case study research and applications: Design and methods* (Sixth edition). SAGE.

Yoganathan, V., Osburg, V.-S., & Akhtar, P. (2019). Sensory stimulation for sensible consumption: Multisensory marketing for e-tailing of ethical brands. *Journal of Business Research*, 96, 386–396. <https://doi.org/10.1016/j.jbusres.2018.06.005>

Yoo, C., Park, J., & MacInnis, D. J. (1998). Effects of Store Characteristics and In-Store Emotional Experiences on Store Attitude. *Journal of Business Research*, 42(3), 253–263.

[https://doi.org/10.1016/S0148-2963\(97\)00122-7](https://doi.org/10.1016/S0148-2963(97)00122-7)

Young, W., Hwang, K., McDonald, S., & Oates, C. J. (2010). Sustainable consumption: Green consumer behaviour when purchasing products. *Sustainable Development*, 18(1), 20–31. <https://doi.org/10.1002/sd.394>

Yu, T.-Y., Yu, T.-K., & Chao, C.-M. (2017). Understanding Taiwanese undergraduate students' pro-environmental behavioral intention towards green products in the fight against

- climate change. *Journal of Cleaner Production*, 161, 390–402.
<https://doi.org/10.1016/j.jclepro.2017.05.115>
- Yurt, C., & Deniz, D. (2021). Product-based and knowledge-based sustainable living practices: The case of IKEA. *Sustinere: Journal of Environment and Sustainability*, 5(2), Article 2.
<https://doi.org/10.22515/sustinere.jes.v5i2.173>
- Zaman, U., Aktan, M., Anjam, M., Agrusa, J., Khwaja, M. G., & Farías, P. (2021). Can Post-Vaccine ‘Vaxication’ Rejuvenate Global Tourism? Nexus between COVID-19 Branded Destination Safety, Travel Shaming, Incentives and the Rise of Vaxication Travel. *Sustainability*, 13(24), Article 24. <https://doi.org/10.3390/su132414043>
- Zarantonello, L., & Schmitt, B. H. (2013). The impact of event marketing on brand equity. *International Journal of Advertising*, 32(2), 255–280. <https://doi.org/10.2501/IJA-32-2-255-280>
- Zheng, C., Ling, S., & Cho, D. (2023). How Social Identity Affects Green Food Purchase Intention: The Serial Mediation Effect of Green Perceived Value and Psychological Distance. *Behavioral Sciences*, 13(8), Article 8. <https://doi.org/10.3390/bs13080664>
- Zhu, L., He, Y., Chen, Q., & Hu, M. (2017). It’s the thought that counts: The effects of construal level priming and donation proximity on consumer response to donation framing. *Journal of Business Research*, 76, 44–51. <https://doi.org/10.1016/j.jbusres.2017.03.007>
- Zhuang, W., Luo, X., & Riaz, M. U. (2021). On the Factors Influencing Green Purchase Intention: A Meta-Analysis Approach. *Frontiers in Psychology*, 12.
<https://www.frontiersin.org/articles/10.3389/fpsyg.2021.644020>

Appendix

Interview Questions to IKEA Employees

Basic question:

- What is your experience with IKEA? Where did you work? And for how long? What were your impressions with the company as a whole?

Question about IKEA's marketing actions:

- What is IKEA's main identity?
- Who are the customer targets of IKEA, and which are their needs?
- What do you think customers think about when they see IKEA?
- Does IKEA try to create emotional bonds with its customers? How?
- Does IKEA try to appeal to the five senses of its customers? (Through color, smell, sound, textures...)
- Does IKEA promote certain behaviors in customers?
- Does IKEA teach customers anything?
- Is IKEA's marketing consistent with its brand identity? Do they do as they say?

Question about IKEA's CSR (corporate social responsibility)/ SDGs actions:

- Does IKEA present sustainable issues in its marketing? How?
 - Does IKEA present solutions for sustainable issues? Which?
 - Is sustainability a priority of IKEA as a business?
 - Is IKEA's environmental impact explained in detail or presented generally?
 - Does IKEA present sustainable issues in a positive or negative manner (i.e.: there is hope for the future if we start working now to solve them VS how the world is running out of resources, and we need to do something immediately)
 - How does IKEA communicate sustainable living practices to its customers?
 - Does IKEA as a brand promote thinking about the environment?
 - Does IKEA as a brand promote frugality?
 - How does IKEA justify investing in sustainable products?
 - Does IKEA promote sustainable products in a different way from regular products?
 - How is IKEA considered by customers as a place to consume sustainably?
 - Are customers satisfied with IKEA's growth in sustainability?
 - Does IKEA promote sustainable consumption of other products? (not furniture)
 - Has IKEA been accused of greenwashing? (promoting sustainable production but engaging in unregulated harm to the environment)
 - Does IKEA believe that customers are motivated to purchase more sustainably by environmental issues and urgency?
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- Is there something you would like to add?