



The Impact of Free Samples on Purchase Intentions: The Moderating Role of Indulgence

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ABSTRACT

Title: The Impact of Free Samples on Purchase Intentions: The Moderating Role of Indulgence

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This dissertation explores how free samples, a common promotional tactic, interact with product type and cultural orientation to shape consumers' purchase intentions. Drawing on Hofstede's indulgence-restraint dimension, the study posits that hedonic products may connect more powerfully in indulgent cultures, whereas utilitarian products might better suit restrained contexts. A cross-sectional quantitative methodology was employed, randomly assigning participants to a hedonic (luxury fragrance) or utilitarian (pain reliever) free sample scenario. This part of the survey was followed by a brief set of questions measuring purchase intention and cultural orientation.

Results reveal that hedonic free samples generally yield higher purchase intentions overall. An interaction effect indicates that indulgent respondents respond especially inclined to hedonic samples, while restrained respondents are more inclined toward utilitarian options. These findings highlight the importance of cultural context in determining the success of free sample promotions. From a managerial perspective, marketers should tailor their sampling strategies to align with local cultural values, emphasizing sensory pleasure and emotional engagement in indulgent segments and functional benefits or practicality in restrained ones. This research contributes to the cross-cultural consumer behavior literature by demonstrating the synergistic effects of product type and cultural orientation, ultimately reinforcing that "one size fits all" approaches may overlook critical cultural nuances.

Keywords: Free samples, purchase intention, consumer behavior, cultural orientation

SUMÁRIO

Título: O Impacto das Amostras Grátis nas Intenções de Compra: O Papel Moderador da Indulgência

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Esta dissertação explora como as amostras grátis—uma tática promocional comum—interagem com o tipo de produto (hedônico vs. utilitário) e a orientação cultural (indulgência vs. restrição) para influenciar as intenções de compra dos consumidores. Baseando-se na dimensão de indulgência–restrição de Hofstede, o estudo postula que produtos hedônicos podem ter maior ressonância em culturas indulgentes, enquanto produtos utilitários se adequam melhor a contextos de restrição. Foi adotada uma metodologia quantitativa de corte transversal, na qual se atribuiu aleatoriamente aos participantes um cenário de amostra grátis hedônica (perfume de luxo) ou utilitária (analgésico), seguido de um breve inquérito para medir a intenção de compra e a orientação cultural.

Os resultados revelam que as amostras grátis hedônicas tendem a suscitar intenções de compra mais elevadas de forma geral. Indispensavelmente, o efeito de interação indica que os participantes indulgentes respondem de forma especialmente favorável às amostras hedônicas, enquanto os participantes restritos manifestam maior preferência por amostras utilitárias. Estes achados salientam a importância do contexto cultural na eficácia das promoções com amostras grátis. Do ponto de vista de gestão, as empresas devem adequar as suas estratégias de distribuição de amostras aos valores culturais locais, realçando o prazer sensorial e o envolvimento emocional em segmentos indulgentes, bem como as vantagens funcionais ou práticas em segmentos restritos. Este estudo contribui para a literatura sobre comportamento do consumidor em contextos interculturais ao demonstrar os efeitos sinérgicos do tipo de produto e da orientação cultural, reforçando que abordagens “tamanho único” podem ignorar nuances culturais cruciais.

Keywords: Amostras gratis, intenção de compra, comportamento do consumidor, orientação cultural

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GLOSSARY

ANOVA (Analysis of Variance)

A statistical method is used to determine whether there are Important differences between the means of two or more independent groups. This study used ANOVA to test the effect of the interaction between free sample type and cultural orientation on purchase intention.

Benefit Congruency Framework

This marketing theory suggests that promotional strategies are most effective when they align with the core benefits consumers seek in a product (Chandon, Wansink, & Laurent, 2000). This framework supports the idea that hedonic promotions should emphasize pleasure while utilitarian promotions should highlight functionality.

Cultural Orientation

A set of values, beliefs, and behaviors shared by individuals within a culture shapes their decision-making and consumer preferences. This dissertation explicitly examines Hofstede's (2011) Indulgence and Restraint dimension.

Free Samples

Free samples are marketing tools in which consumers receive a small quantity of a product at no cost, allowing them to experience it before making a purchase. They aim to reduce perceived risk, encourage brand loyalty, and leverage the reciprocity principle (Cialdini, 2009).

Hedonic Products

Products that primarily provide pleasure, enjoyment, and emotional satisfaction rather than practical functionality. Examples include luxury chocolates, perfumes, and entertainment goods (Babin, Darden, & Griffin, 1994).

Hofstede's Indulgence and Restraint Dimension

A cultural dimension developed by Hofstede (2011) measures the extent to which a society values pleasure, leisure, and gratification (Indulgence) versus self-discipline, control, and pragmatism (Restraint). This dimension serves as the key moderator in this study.

Moderation Effect

A statistical interaction where the strength or direction of the relationship between an independent variable (e.g., free sample type) and a dependent variable (e.g., purchase intention) depends on a third variable (e.g., cultural orientation). In this study, cultural orientation moderates the impact of hedonic and utilitarian free samples on purchase intention.

Purchase Intention

A psychological measure of a consumer's likelihood of purchasing a product after exposure to a marketing stimulus (e.g., a free sample). It is commonly used in consumer behavior research to predict purchase behavior (Ajzen, 1991).

Reciprocity Principle

A social psychology concept states that individuals feel obligated to return a favor when they receive something for free (Cialdini, 2009). In marketing, this principle explains why consumers may feel compelled to purchase a product after receiving a free sample.

Utilitarian Products

Products that serve a practical, functional purpose are evaluated based on efficiency, reliability, and necessity. Examples include household cleaners, pain relievers, and office supplies (Dhar & Wertenbroch, 2000).

Variance Inflation Factor (VIF)

VIF is a statistical measure used to assess multicollinearity in regression analysis. High VIF values indicate that predictor variables are highly correlated, which can distort results. In this study, VIF values were checked to ensure the integrity of the regression model.

CHAPTER 1: INTRODUCTION

1.1 Background and Problem Statement

While free samples remain a widely employed promotional tactic across various industries (Bawa & Shoemaker, 2004), the literature has devoted relatively little attention to the interplay between product type (hedonic and utilitarian) and cultural orientation (indulgence and restraint) in shaping the effectiveness of these promotions (De Mooij, 2019; Hofstede, 2011). As global markets continue to diversify, marketers often apply “one size fits all” approaches to free sampling, potentially overlooking key differences in how consumers from different cultural backgrounds perceive and react to hedonic or utilitarian offerings (Kwok & Uncles, 2005). This gap in current scholarship hampers our ability to design more targeted and effective sampling campaigns, which is critical for academic understanding of consumer behavior and practical marketing strategy.

My overarching goal is to examine whether and how cultural orientation moderates the relationship between free sample type (hedonic and utilitarian) and consumer purchase intention. By focusing on the indulgence–restraint dimension (Hofstede, 2011) and drawing on established theories of hedonic/utilitarian product distinctions (Babin, Darden, & Griffin, 1994), I aim to determine which promotional strategies work best in different cultural contexts and why.

This problem statement substantiates itself in the following research questions:

RQ1: Do hedonic free samples generally lead to higher purchase intentions than utilitarian free samples?

This question seeks to clarify any baseline differences in effectiveness between hedonic and utilitarian samples (Dhar & Wertenbroch, 2000).

RQ2: Does consumers’ cultural orientation (indulgence and restraint) directly influence their purchase intentions for free samples, regardless of product type?

This question investigates the main effect of cultural orientation on how readily consumers adopt products offered through sampling (De Mooij, 2019; Hofstede, 2011).

RQ3: Does cultural orientation moderate the relationship between free sample type and purchase intention?

This question probes whether indulgent and restrained consumers respond differently to hedonic and utilitarian samples—potentially magnifying or diminishing the effects observed in RQ1 (Kwok & Uncles, 2005; Tsai & Men, 2017).

1.2 Relevance

I find this research academically and managerially compelling because it addresses a real gap in understanding the interplay between free samples—one of the most widely used promotional strategies (Bawa & Shoemaker, 2004)—and cultural orientation (Hofstede, 2011). From an academic standpoint, while there is a rich body of work documenting how free samples can reduce perceived risk (Biswas & Sherrell, 1993) and boost purchase intentions (Heilman et al., 2011), there is comparatively little analysis that considers how the effectiveness of these samples might shift under different cultural dimensions, such as indulgence and restraint. Scholars of cross-cultural marketing have recognized that culture can notably moderate consumer responses to promotional tactics (De Mooij, 2019). Nevertheless, few studies have explored this in the context of free samples. By taking on this research question, I hope to contribute to ongoing conversations about how cultural factors mesh with core marketing strategies, thus filling a key theoretical gap and refining existing models of consumer behavior.

For what concerns the managerial framework, the study's relevance stems from the increasing globalization of markets. Marketing managers often rely on free samples to introduce products and encourage trial, but they may be missing valuable insights into how cultural contexts influence these promotions. Suppose the research finds that consumers in indulgent cultures respond more favorably to hedonic free samples, for instance. On that condition, companies targeting such markets might prioritize experiential or pleasure-oriented product attributes in their sampling campaigns. Contrarily, more functional or utilitarian positioning could be critical to success for restrained cultures. Understanding these nuances helps marketers tailor their strategies more effectively, optimizing ROI and avoiding a one-size-fits-all approach.

This fascinating topic combines a tangible marketing technique (free samples) with more profound psychological and cultural dynamics. People often assume that “free is free.” Nevertheless, the literature suggests that the success of a giveaway can hinge on whether consumers perceive it as meeting an emotional need (Cialdini, 2009) or a practical one (Dhar & Wertenbroch, 2000). I want to see how that basic reciprocity effect aligns—or clashes—with broader cultural values around pleasure and self-control.

I expect to learn how product attributes and cultural orientations jointly shape a consumer's decision-making process by exploring these questions. The contribution I hope to offer is a clearer understanding of which specific product types connect cultural contexts and why. Practically, this means providing actionable guidelines for marketers who plan global sampling campaigns, while theoretically, it means pushing forward our knowledge of cultural moderation in marketing research. Ultimately, I want my findings to show how nuanced consumer behavior can be, especially when we view it through cultural differences and the products' nature.

1.3 Research methods

I intend to collect primary data through an online survey, which is the most direct way to assess how participants respond to different product scenarios and cultural measures. A quantitative approach suits this project because I am testing specific hypotheses about moderation and its main effects, and the statistical methods I plan to use, such as moderated regression, rely on numeric data. One advantage of a quantitative survey is that it has the benefit of allowing for standardized questions, making it easier for the researcher to compare responses across groups and cultures. Nonetheless, the downside is that it may not capture the depth of consumer thought as effectively as qualitative methods like interviews or focus groups.

My sample will include a diverse set of participants recruited online, aiming for broad cultural representation so I can meaningfully examine indulgent versus restrained tendencies at the individual level (Hofstede, 2011). In terms of analysis, I anticipate using descriptive statistics (like means and standard deviations) to summarize the data, followed by moderated regression to investigate how the interaction between free sample type (utilitarian and hedonic) and cultural orientation (indulgence and restraint) affects purchase intention. This approach strikes the best

balance between gathering large-scale insights and offering the statistical rigor required to address my research questions.

1.4 Dissertation outline

In the opening chapter, I will introduce the research topic, outlining its main objectives and hypotheses while highlighting its significance. This section will establish the context, explain why the problem is worth investigating, and provide a preview of the dissertation's structure.

The second chapter will delve into the literature review and the development of hypotheses. Building on theoretical and empirical studies, I will examine the key constructs influencing consumer purchase intentions. I will propose hypotheses from this foundation that emerge from these constructs, demonstrating how they interconnect within a conceptual framework. This section will serve as the academic basis for justifying the research questions.

Next, the methodology chapter will detail the research design, describing the sampling strategy, data collection procedures, and the specific measures or scales used for each construct. I will also explain how the statistical tests will be applied to the data, ensuring the methodology is rigorous and transparent.

The fourth chapter will focus on the results and their analysis. I will present descriptive and inferential statistics derived from the questionnaire and then examine these findings with the proposed hypotheses. This discussion will provide a thorough interpretation of what each result reveals about the relationships among the variables.

Finally, the last chapter will offer conclusions, discuss limitations, and suggest directions for future research. I will summarize the study's key findings and explore their implications for theory and practice. Additionally, I will acknowledge the study's limitations, such as sample constraints or potential measurement issues, and propose areas for future research that could build on the insights gained in this dissertation.

CHAPTER 2: LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

In this chapter, I comprehensively discuss the key themes that support my research. I introduce free samples as a widely employed promotional strategy, drawing on foundational studies such as Bawa and Shoemaker (2004) and Heilman, Nakamoto, and Rao (2000) to illustrate how they can reduce perceived risk and encourage purchase intentions. I then turn to the distinction between utilitarian and hedonic products, relying on the work of Babin, Darden, and Griffin (1994) and Dhar and Wertenbroch (2000) to demonstrate how these product categories elicit different consumer motivations and emotional responses.

Next, I examine the notion of cultural orientation—specifically, indulgence versus restraint—built on Hofstede’s (2011) framework and expanded by De Mooij (2019) to show how variations in cultural values can moderate consumer reactions to marketing efforts. Throughout this review, I reference the guidance of White and Rayner (2014), who argue that a literature review should situate a study within the broader “context of existing knowledge” rather than merely list previous findings. I also draw on Rego’s (2015) structural approach, organizing each topic into a logical sequence that leads me toward my conceptual framework.

By weaving in empirical insights on reciprocity from Cialdini (2009), discussions on brand familiarity from Heilman, Lakishyk, and Radas (2011), and evidence of cultural impacts from Kwok and Uncles (2005), I aim to highlight gaps in current research—particularly the need to examine how free sample type might interact with cultural orientation. In doing so, I set the stage for my hypotheses, showing why it is essential to understand how hedonic or utilitarian product samples, combined with indulgent or restrained cultural tendencies, shape purchase intentions.

I undertake this literature review to situate my research on free sample promotions, product typologies (utilitarian and hedonic), and cultural orientation (indulgence and restraint) within the broader scholarly landscape. Following White and Rayner’s (2014) insistence that a literature review must place a study “in the context of existing knowledge” rather than merely listing prior research, I aim to synthesize findings from multiple work streams. I also adhere to Rego’s (2015)

structural guidance by presenting these themes logically, revealing how each construct—free samples, product type, and cultural orientation—shapes consumer behavior independently and in conjunction with one another.

2.1 Free Samples as a Promotional Tool

Free samples rank among the most common promotional strategies marketers use to reduce the perceived risk of trying new products and stimulate purchase intentions (Bawa & Shoemaker, 2004; Heilman, Nakamoto, & Rao, 2000). By giving consumers a complimentary product experience, firms can overcome initial reluctance, an effect that is particularly valuable when the item's attributes—taste, smell, performance—cannot be easily conveyed through advertising alone (Biswas & Sherrell, 1993). This direct engagement often fosters trust or confidence, as consumers see firsthand whether the product meets their expectations (Chandon, Wansink, & Laurent, 2000).

A critical theoretical underpinning here is reciprocity, which posits that people feel a psychological need to reciprocate when they receive something of value (Cialdini, 2009). By offering a product sample at no cost, companies implicitly encourage consumers to “return the favor” through a subsequent purchase. Although reciprocity can operate in various promotional contexts (Okazaki, Mueller, & Taylor, 2010), free samples are incredibly potent because they provide a tangible experience of the product rather than a mere discount. Reciprocity may thus exert a stronger pull in scenarios that engage the senses (Heilman, Lakishyk, & Radas, 2011).

Numerous studies validate the effectiveness of free samples in increasing short-term sales and seeding long-term loyalty (Bawa & Shoemaker, 2004; Laroche, Kim, & Zhou, 2003). Heilman et al. (2011) show how free samples reduce the risk consumers associate with novel items, leading to higher purchase intentions after the promotional period ends. These advantages appear most pronounced in categories where direct sensory trial is decisive (Doyle & Saunders, 1990). For example, tasting a new snack, smelling a fragrance, or testing a cosmetic can immediately quell doubts about flavor, scent, or feel—factors that a simple advertisement might fail to convey (Desmet & Hekkert, 2007).

Despite these findings, only a limited number of studies have addressed how free sample promotions might operate differently for various types of products, particularly when we move beyond “new and old” product distinctions to focus on whether the item delivers primarily practical benefits (utilitarian) or sensory/emotional enjoyment (hedonic). In addition, few have integrated cultural dimensions into discussions of free sampling, even though globalized markets demand an awareness of how cultural values may mediate or moderate consumer responses (Sivakumar & Nakata, 2001).

2.2 Product Type: Utilitarian and Hedonic

According to Babin, Darden, and Griffin (1994), products generally fall into two broad categories: utilitarian goods, which solve practical, functional problems, and hedonic goods, which cater to pleasure and emotional satisfaction. Utilitarian products, such as cleaning supplies, groceries, or over-the-counter pain relievers, tend to be purchased out of necessity and evaluated based on efficiency, reliability, and cost-effectiveness (Dhar & Wertenbroch, 2000). In contrast, hedonic products—luxury chocolates, premium fragrances, entertainment services—fulfill a consumer’s desire for enjoyment or indulgence, often provoking positive affect and higher emotional arousal (Chitturi, Raghunathan, & Mahajan, 2008).

These distinctions line up with the framework proposed by Voss, Spangenberg, and Grohmann (2003), who developed a scale to measure consumer attitudes’ hedonic and utilitarian dimensions. The hedonic dimension captures experiential and affective responses, while the utilitarian dimension focuses on functionality and task-related benefits. This taxonomy is key to understanding how free samples might succeed: a hedonic free sample can highlight pleasure and evoke strong affective reactions (Pham, 1998), whereas a utilitarian free sample can demonstrate the product's efficiency or usefulness.

Chandon et al. (2000) present the benefit congruency framework, positing that promotional success improves when the benefits emphasized match the core motives of the consumer. For hedonic goods, sampling fosters immediate affective engagement—tasting a gourmet dessert or smelling a luxury cologne can produce excitement or delight (Zhang & Khare, 2009). Such heightened emotional arousal may convert into quicker purchase intentions (Voss et al., 2003). For

utilitarian goods, by contrast, demonstrating functional efficacy is paramount. If a free sample of a household cleaner visibly removes stains or a pain reliever alleviates discomfort, consumers feel reassured and are more likely to buy (Dhar & Wertenbroch, 2000).

The situational context can also shape whether hedonic or utilitarian appeals connect. Okazaki et al. (2010) suggest that “soft-sell” messages emphasizing personal enjoyment might align better with hedonic products, whereas “hard-sell” appeals highlighting performance and practicality could benefit utilitarian products. Nevertheless, there are currently no integrated models that account for the ways in which cultural backgrounds—such as indulgent or restrained orientations—may affect how effective free samples are for each product category. I anticipate that we will be able to gain a more sophisticated knowledge of how free sample marketing influences customer choices by bridging the gap between product type and cultural environment.

2.3 Cultural Orientation: Indulgence and Restraint

In cross-cultural consumer research, Hofstede’s (2011) work is seminal. While his earlier dimensions (e.g., individualism and power distance) often receive the most attention, the indulgence–restraint (IVR) dimension has sparked a growing interest in recent studies (De Mooij, 2019; Minkov & Hofstede, 2012). Indulgent cultures encourage people to seek happiness, leisure, and enjoyment, showing tolerance for fulfilling human desires. On the other hand, restrained cultures impose more normative control over gratification, leading individuals to value self-discipline, practicality, and frugality (Steenkamp, Hofstede, & Wedel, 1999).

These traits can manifest in everyday consumption. In an indulgent society, it is commonplace to satisfy a sweet tooth on a whim or to invest in leisure activities without extensive deliberation (Gentina, Shrum, & Lowrey, 2016). Conversely, people in restrained societies often weigh purchases carefully, prioritizing fundamental needs over short-lived pleasures (Kwok & Uncles, 2005). This orientation can influence their receptivity to marketing messages emphasizing fun, excitement, or utility.

The marketing literature provides evidence that culturally rooted values shape how consumers respond to advertising, branding, and promotions. Sivakumar and Nakata (2001, 2003) argue that

marketing strategies often require careful local adaptation in culturally diverse markets. For instance, a consumer in an indulgent culture may be more drawn to whimsical or indulgent imagery in marketing campaigns, whereas a restrained consumer might find it excessive or irrelevant (Nguyen & Simkin, 2013). When it comes to free samples, it stands to reason that if the product itself aligns with the cultural ethos—pleasure-seeking in indulgent cultures or practicality in restrained cultures—consumers may be more likely to try it and follow through with a purchase.

De Mooij (2019) also notes that people in indulgent cultures respond strongly to immediate, sensory-based rewards, making them prime candidates for hedonic sampling strategies. In contrast, people in restrained cultures may be less tempted by purely sensory or pleasure-based appeals unless they can see a functional benefit or a justifiable purpose. This phenomenon suggests that product type (hedonic and utilitarian) may interact powerfully with cultural orientation (indulgent and restrained), creating distinct consumer response patterns.

2.4 Interaction of Product Type and Cultural Orientation

Building on the psychological foundations laid out by Cialdini (2009) and the cross-cultural work of Hofstede (2011), I hypothesize that hedonic products gain the most from indulgent contexts if presented as free samples. Consumers in indulgent cultures, driven by a desire for pleasure, might be particularly susceptible to potent emotional triggers like decadent chocolate or a premium perfume (Chitturi et al., 2008). They also may be more sensitive to reciprocity when the sample experience is decidedly enjoyable (Gentina et al., 2016). Purchase intentions may be increased by this emotional resonance (Tsai & Men, 2017). From a management perspective, these results show that it is beneficial to promote the enjoyable features of the free sample in markets with higher indulgence ratings.

Meanwhile, in cultures marked by restraint, consumers could show a higher appreciation for utilitarian products that solve problems or fulfill practical needs. Free samples of items like household cleaners, healthy staple foods, or pain medications might connect more because the offer aligns with the cultural emphasis on discipline and necessity (Kwok & Uncles, 2005). If individuals in these societies remain cautious in their spending, a free sample that proves the product's utility can reduce purchase risk and subtly encourage reciprocation (Heilman et al.,

2011). This dynamic suggests that managers marketing utilitarian goods in restrained cultures should highlight functional benefits when designing free sample promotions.

Although reciprocity is universal, it may play out differently across cultures. Cialdini (2009) posits that reciprocation is grounded in social norms, but these norms can vary in strength and scope depending on the cultural environment (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). In indulgent contexts, where impulses toward pleasure are less restricted, the emotional “thank you” for a pleasurable sample might convert readily into purchase behavior. In restrained contexts, the reciprocity effect may only be triggered if the consumer perceives the sample as practically applicable, adding genuine value to their daily life (Zhang & Khare, 2009). Rather than being swayed by emotions, restrained individuals could feel a sense of duty to repay the brand only if the brand genuinely helps them meet utilitarian goals.

2.5 Extending Beyond Purchase: Brand Familiarity, Trust, and Loyalty

While purchase intention is the focal dependent variable in much of this literature, free samples can influence broader constructs like brand familiarity, trust, and loyalty (Laroche et al., 2003; Bawa & Shoemaker, 2004). Repeated exposure to free samples pushes a single purchase and can embed a sense of reliability or affection toward the brand. If the brand consistently delivers enjoyable experiences in indulgent societies, consumers might develop affective loyalty, returning for more emotional satisfaction (Chitturi et al., 2008). In restrained societies, brand loyalty might stem from repeated demonstrations of utility—consumers might consistently turn to a trusted brand that meets their functional needs (Heilman et al., 2011).

Additionally, avoiding possible pitfalls like customer weariness or mistrust is crucial to the effectiveness of these initiatives. Numerous free samples or badly run sampling programs might backfire and cause customers to undervalue the brand, according to certain research (Sivakumar & Nakata, 2003). This result is more likely to occur if the free sample itself falls short of either hedonic or utilitarian expectations, undermining rather than building confidence. Therefore, marketers may refine their sample distribution approach by having a solid awareness of both product kind and cultural orientation.

2.6 Filling the Gaps: Toward a Unified Model

I see a strong foundation from past research when I scan the broader literature. Studies like Bawa and Shoemaker (2004) and Heilman et al. (2011) affirm the effectiveness of free samples; Babin et al. (1994) and Dhar and Wertenbroch (2000) delineate utilitarian and hedonic products; Hofstede (2011) and Minkov and Hofstede (2012) specify how indulgence and restraint influences consumer behavior. Nonetheless, an explicit analysis of how these threads interact—especially regarding free samples—is less common (Nguyen & Simkin, 2013). We thus lack a fully integrated model showing whether hedonic free samples are more compelling for indulgent consumers and whether utilitarian samples connect more strongly with restrained consumers under the same investigative umbrella.

At a theoretical level, a unified model could address the “who, what, and why” of free sample success: who (indulgent and restrained consumers) responds to what type of product sample (hedonic and utilitarian), and why (through emotional triggers, functional reinforcement, or a different reciprocity mechanism). Steenkamp, Hofstede, and Wedel (1999) highlight how cultural variations can account for different levels of consumer innovativeness, which might also shape willingness to try a new product sample. Gentina et al. (2016) highlight the contribution made by both materialistic and psychological aspects to amplify or attenuate the impact of such offers. A new innovative empirical research based on these models has the capability to take the theory further and to ascertain if the relationship between product class and cultural orientation remains consistent under differing types of personalities or demographic profiles.

2.7 Conclusion and Theoretical Foundations

In sum, this literature review establishes that free samples are an influential promotional tool (Bawa & Shoemaker, 2004; Heilman et al., 2011) and that product type (utilitarian and hedonic) critically determines how consumers evaluate sampling benefits (Babin et al., 1994; Dhar & Wertenbroch, 2000). It also underscores the importance of cultural orientation, particularly Hofstede’s (2011) indulgence–restraint dimension, in shaping receptivity to different promotional appeals (De Mooij, 2019; Nguyen & Simkin, 2013; Kwok & Uncles, 2005). I argue that integrating these components is essential: a hedonic free sample may have universal appeal, but it should connect most strongly in indulgent cultures. In contrast, a utilitarian free sample may prove

especially compelling in restrained ones. This proposition fits neatly with reciprocity theory (Cialdini, 2009), which can manifest through emotional or functional channels depending on cultural context (Zhang & Khare, 2009).

The following hypotheses naturally arise from these insights. First, I expect that hedonic free samples yield higher purchase intentions overall, given their capacity to elicit strong affective responses (Voss et al., 2003). Second, I hypothesize that individuals in indulgent cultures will display higher purchase intentions across product types but that the effect of a hedonic sample will be particularly important in those cultures (Chitturi et al., 2008; Tsai & Men, 2017). On the other hand, utilitarian free samples will appeal to restrained consumers because they are reflective of the practicality and restraint that they favor (Kwok & Uncles, 2005). I will test these hypotheses within the framework of moderated regression to ascertain if cultural orientation moderates the free sample type and purchasing intention relationship (Aiken & West, 1991). The objective is to explain how these factors interact to generate greater cross-cultural marketing understanding and to advise successful global promotional strategies.

This research has the potential to fill an essential gap within the literature through the comparative analysis of free samples under the product-type and cultural orientation framework. Each of these has been touched upon within the literature to date but has infrequently been synthesized within a holistic analysis. With the emergence of global businesses, however, the necessity to employ culturally adapted and product-centered sampling strategies becomes increasingly vital. This chapter thus sets the foundation for the following empirical analysis, demonstrating why it is valuable to discern whether free samples work and how and for whom they have the most significant impact.

2.8 Hypotheses Formulation

2.8.1 Effect of Free Sample Type on Purchase Intention (H1)

H1: Hedonic free samples will have a higher impact on purchase intentions than utilitarian free samples.

Voss, Spangenberg, & Grohmann (2003) found that consumers are more likely to experience emotional responses to hedonic products, leading to stronger purchase intentions, compared to utilitarian products, which evoke more cognitive evaluations. This aligns with the idea that hedonic products create a pleasurable experience that can be amplified through free sampling. Pham (1998) suggested that affective responses are stronger drivers of purchase intention for hedonic products, especially in low-cost, low-risk contexts such as free sampling, where consumers can experience the pleasure without committing financially.

2.8.2 Effect of Cultural Orientation on Purchase Intention (H2)

H2: In indulgent cultures, consumers will exhibit higher purchase intentions overall than in restrained cultures, regardless of free sample type.

Gentina, Shrum, & Lowrey (2016) found that indulgent cultures are more responsive to promotional activities that emphasize enjoyment and personal gratification, which can directly translate into higher purchase intentions. Indulgent consumers are more open to experiential marketing, which includes free sampling. Steenkamp, Hofstede, & Wedel (1999) examined how cultural dimensions influence consumer attitudes and behaviors, noting that indulgent societies are generally more receptive to marketing that provides immediate gratification, leading to stronger purchase intentions.

2.8.3 Interaction Between Free Sample Type and Cultural Orientation (H3)

H3: Cultural orientation (indulgence vs. restraint) will moderate the effect of free sample type on purchase intention.

Aaker & Maheswaran (1997) highlighted the importance of cultural orientation in shaping consumer response to promotional cues, demonstrating that individualistic cultures respond differently to product messaging than collectivist ones. Though indulgence vs. restraint is distinct,

the study supports the idea that cultural values moderate consumer perceptions of product types. Desmet & Hekkert (2007) explored how emotional responses to product experiences vary across cultural orientations, noting that hedonic products, which elicit pleasure, tend to resonate more with consumers in cultures that value sensory enjoyment—such as indulgent cultures.

H3a: For consumers in indulgent cultures, hedonic free samples will result in higher purchase intentions than utilitarian free samples.

Tsai & Men (2017) found that indulgent consumers respond more positively to experiential and sensory-based marketing efforts, suggesting that hedonic free samples, which provide a direct sensory experience, align with the values of indulgent consumers. This bolsters the hypothesis that hedonic samples will be more effective in indulgent cultures. Okazaki, Mueller, & Taylor (2010) studied the effect of culture on advertising effectiveness and found that indulgent societies are more receptive to promotional tactics that emphasize personal enjoyment and fulfillment, supporting the hypothesis that hedonic samples are more effective in indulgent cultures.

H3b: For consumers in restrained cultures, utilitarian free samples will lead to higher purchase intentions than hedonic free samples.

Zhang & Khare (2009) found that consumers with a higher focus on self-control and pragmatism are more likely to respond to products that highlight functional benefits rather than pleasure. This aligns with the values of restrained cultures, suggesting that utilitarian products would be more effective in driving purchase intention in these cultures. Sivakumar & Nakata (2001) explored cultural impacts on marketing strategies, finding that pragmatic, restrained consumers are more influenced by product attributes related to necessity and efficiency, reinforcing the idea that utilitarian free samples align better with restrained cultural values.

2.9 Conceptual Framework

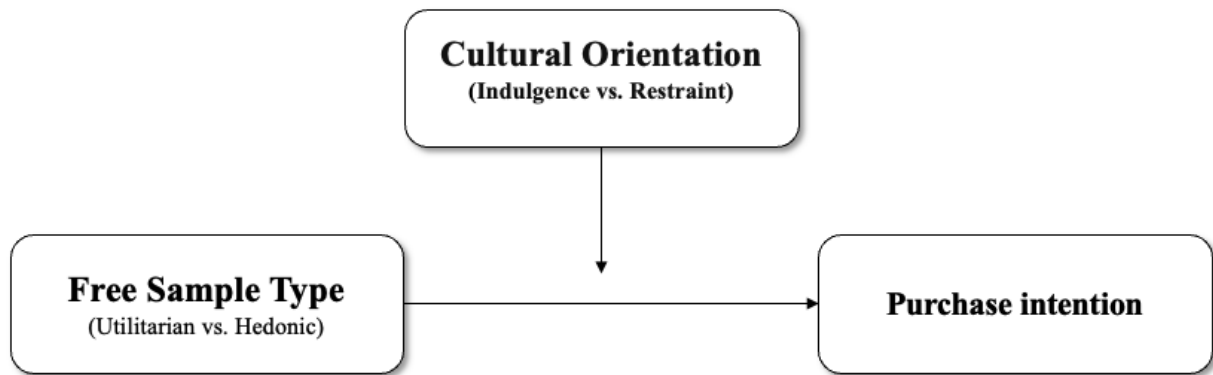


Figure 1. Conceptual Model

CHAPTER 3: METHODOLOGY

In this chapter, I outline the methodological approach I used to investigate how free sample type and cultural orientation influence consumers' purchase intentions. I begin by explaining the research design and why a cross-sectional, quantitative strategy was chosen to address the specific hypotheses. I then detail the sampling procedures, including how participants were recruited and assigned to either a hedonic or utilitarian scenario. Subsequently, the measures employed, that is, the cultural orientation scale and the measure of purchasing intention, are presented along with how each measure was operationalized based on standard scales. The analysis framework is then presented using t-tests, ANOVA, and moderated regression to test the main and the interaction effects. The method section then presents the reasoning behind each research stage to ensure that the research process was done accurately and precisely.

3.1 Research Approach

I have designed my research approach to translate the conceptual hypothesis into an operational one through a clear plan for data collection, tailored analytical techniques, and a well-defined sequence of procedures. I will use a cross-sectional, quantitative design to capture participants' responses at a single point in time. Relying on an online survey, I will first create two scenario-based stimuli—one emphasizing a utilitarian product and the other a hedonic product—and then randomly assign participants to one scenario. This random assignment ensures an unbiased comparison of the two free sample types. In the questionnaire, I will use a validated cultural orientation scale to determine where respondents fall on the indulgence–restraint continuum, followed by questions measuring their purchase intentions toward the product they encountered. Once the data are collected, I will conduct descriptive analyses to understand the sample characteristics and verify that respondents perceived each scenario as intended. A simple manipulation check (where participants indicate whether the product is primarily functional or pleasure-oriented) will confirm that the distinction between utilitarian and hedonic stimuli was clear. I will then proceed with a moderated regression analysis to examine whether cultural orientation influences the relationship between free sample type and purchase intention. If the results show an Important interaction, If the analysis produces a strong interaction, then a simple slopes analysis will be conducted, and the moderation effect will be graphed to indicate how the

intention to buy differs between individuals based on the degree of indulgence or restraint. The coefficients, the p-values, and the effect sizes will then be examined to ascertain if the hypotheses are supported. At each stage, methodological transparency will be upheld, and research best practices will be adhered to to ensure that the procedures are adequately outlined to meet the core purposes of the study.

3.2 Primary Data

This chapter presents an overview of how descriptive and explanatory research approaches were implemented to answer the research questions formulated in the first chapter.

3.2.1 Data Collection

This research will recruit a minimum of 200 participants from various cultural groups, as recommended by guidelines provided by Cohen (1988), to determine medium-to-large effect sizes via moderated regression analyses. Convenience sampling will be employed via the web using channels like Qualtrics to gain the maximum possible participant reach—a method that has gained strong support in cross-cultural consumer research (Goodman et al., 2013). The 200-participant cutoff also adheres to the conventions employed in consumer behavior research to gain enough statistical power and strong findings (Hair et al., 2019).

Because indulgence and restraint have rarely been measured at the individual level in earlier studies, this research will employ the scale proposed by Hofstede's individual-level indulgence dimension: Scale development and validation (e.g., Minkov & Hofstede, 2012). This instrument was specifically developed to capture indulgence and restraint at the personal (rather than national) level. Each participant will respond to six items measuring tendencies toward leisure, personal gratification, and self-control. The results will indicate whether they lean toward indulgence or restraint, enabling a more precise individual-level analysis.

Participants will then be randomly assigned to one of two product-sample scenarios:

Utilitarian product (practical, function-focused)

Hedonic Product (pleasure-oriented, sensory-focused)

A control question will follow the scenario presentation to verify that participants understood the product description correctly.

Immediately after reviewing the assigned product-sample scenario, participants will indicate their likelihood of purchasing the product on a 5-point Likert scale. This approach follows established measurement practices in consumer behavior research (Spears & Singh, 2004).

All participants will then be asked to report their current nationality. If it differs from their nationality at birth, they will provide additional information to clarify their cultural background. This step helps ensure the accurate interpretation of cultural orientation data.

3.2.2 Stimuli Development

When developing the stimuli for this study, I relied on well-established distinctions in the consumer behavior literature that differentiate utilitarian from hedonic products (Babin, Darden, & Griffin, 1994; Holbrook & Hirschman, 1982). In line with these definitions, I created one scenario describing pain relievers—a utilitarian product emphasizing functionality and reliability—by highlighting their practical benefits and consistent performance (Baltas & Kokkinaki, 2017). I designed a luxury cologne for the hedonic scenario, drawing on research that underscores hedonic goods' sensory pleasure and emotional appeal (Lu, Liu, & Fang, 2016; Ren & Nickerson, 2019). Each description was refined to ensure it captured the core attributes of its respective product category: necessity and efficiency for the pain relievers and indulgence and experiential enjoyment of the cologne. This approach enabled me to develop two distinct sets of stimuli firmly grounded in hedonic and utilitarian consumption theoretical frameworks.

Utilitarian Sample Product Stimuli:

"You have received a free sample of a pack of fast-acting, over-the-counter pain relievers designed for quick and effective relief. These tablets are crafted for reliable and consistent performance, working to ease discomfort and help you get back to your daily routine. Packaged in a simple, easy-to-open blister pack, these pain relievers focus on function and practicality, offering relief you can count on without any added frills. Ideal for anyone seeking efficient pain management, this product offers relief you can count on when you need it most."

Hedonic Sample Product Stimuli:

"You have received a free sample of a luxury cologne with an enchanting blend of rich, exotic spices, subtle floral notes, and a warm, lingering amber finish. This fragrance is designed to

captivate the senses, leaving a memorable impression. Packaged in a sleek bottle, it represents elegance and style. This cologne offers a pleasurable experience each time you wear it, inviting you and those around you into a world of sensory enjoyment and indulgence."

3.2.3 Measurement

When I discuss the critical measurements and indicators in my questionnaire, I am referring to how I operationalize the constructs emerging from my literature review. In my study, the three primary constructs are free sample type, cultural orientation, and purchase intention.

First, I measure cultural orientation, specifically indulgence versus restraint, using an adapted version of the scale developed by Minkov and Hofstede (2012). Their research highlights how indulgence-oriented individuals emphasize leisure, gratification, and enjoyment, whereas restrained individuals value self-control and moderation. By asking participants to respond to items from that scale, I can categorize each respondent as leaning more indulgent or more restrained at the individual level (Minkov & Hofstede, 2012).

Next, I handle free sample type by setting up two product scenarios—one that's utilitarian, like a pain reliever, and one that's hedonic, such as a luxury cologne. Since this is an experimental manipulation, I do not measure free sample type with a scale; instead, I rely on participants reading a scenario. Nonetheless, I do include a short manipulation check. For instance, I ask them whether they see the product as functional or pleasurable on a Likert scale. This approach is grounded in the work of Holbrook and Hirschman (1982) and Babin, Darden, and Griffin (1994), both of which differentiate utilitarian from hedonic product attributes.

Finally, the primary outcome I care about is purchase intention, meaning how likely participants will buy the product after reviewing the free sample scenario. Here, I rely on Spears and Singh's (2004) validated measures for assessing purchase intentions. In practical terms, that often asks questions like "How likely would you be to purchase this product?" on a five- or seven-point scale. Spears and Singh (2004) found that this direct approach tends to be both reliable and valid for gauging consumers' likelihood of buying a product.

If you imagine these pieces coming together, free sample type is my independent variable, cultural orientation (indulgence and restraint) serves as a moderator, and purchase intention is my dependent variable. In my appendix, I list the actual survey questions linked to each construct, referencing the original sources in parentheses (Holbrook & Hirschman, 1982; Babin et al., 1994; Minkov & Hofstede, 2012; Spears & Singh, 2004) so readers can trace where each measure came from and how it aligns with the theory. This level of transparency helps me show that the constructs are rooted in prior research rather than invented for the sake of convenience.

Framework	Measure	Items	Scale	Reference	Cronbach α
IV	Stimuli	(Cologne, Pain relievers)	<i>Dummy (0,1)</i>	Williams, P., Drolet, A., & Lau-Gesk, L. (2007).	<i>N/a</i>
Moderator	Indulgence	2	5-point Likert Scale	Heydari, A. (2021).	$\alpha > 0.838$
DV	Purchase intention	1	5-point Likert Scale	Spears, N., & Singh, S. N. (2004).	<i>N/a</i>

Figure 2. Operating Model

3.3 Data Analysis

The following are brief descriptions of the reasoning and method used to analyze my data, providing the basis for further explanation in the next chapter. First, I screened the dataset carefully to rid the data of missing responses and outliers that would disproportionately distort the findings. Second, I generated descriptive statistics to gain an understanding of the participant sample and to ascertain that the experimental manipulations were perceived as intended. Using this basis, I used inferential analyses such as robust statistical validation and moderated regression to test the predicted relationships. This systematic progression—from cleansing the data and conducting diagnostic tests to precise hypothesis testing—ensures that the findings are an honest reflection of the underlying phenomena and free from distortion through anomalies within the data. The next chapter provides an exhaustive explanation of each step, describing how the findings were generated and ultimately interpreted.

For H1, I will conduct a two-sample t-test to compare mean purchase intentions between participants assigned to each sample type. For H2, I will again use a two-sample t-test and an ANOVA main-effect check to see if mean purchase intentions differ according to cultural orientation. Finally, for H3, I will employ a moderated regression (Aiken & West, 1991) and a two-way ANOVA to detect an Important interaction term (sample_type)*(cultural_orientation). A statistically Important interaction would confirm that the effect of free sample type on purchase intention varies across levels of cultural orientation.

CHAPTER 4: RESULTS AND DISCUSSION

This chapter offers a comprehensive step-by-step explanation of the analysis and processing of the dataset done using R Studio. The analysis adheres to a systematic framework that includes data cleansing, descriptive statistics, inferential statistics, and additional robustness tests. The findings obtained through these analyses are provided throughout the chapter to ensure that the analysis is both transparent and replicable.

4.1 Data Cleaning

4.1.1 Data Preparation

The information was imported to the R Studio first, where the organization was inspected to ascertain the required preprocessing. Some of the columns were removed since they were irrelevant to the analysis or contained metadata that was irrelevant to the research. The first two rows were also removed since they contained unnecessary information that was irrelevant to the research.

Duplicate responses were identified using IP addresses, and duplicate records were removed to ensure each observation represented a unique participant. In addition, responses marked as "False" in the completion status column were filtered out to include only fully completed surveys. As a result, the number of certified respondents decreased to 144. Which still ensures that the Central Limit Theorem applies.

4.1.2 Variable Renaming and Recoding

To facilitate interpretation, several variables were renamed, and labels such as "Q19...24" or "Q1" were not intuitive and made the data harder to interpret during analysis. By assigning straightforward and sequential names, I could refer to each variable clearly in the statistical software and present the results more coherently. In practice, "Q19...24" became "Q2_1," "Q19...25" became "Q2_2," "Q23" was changed to "Q3_1," "Q18" became "Q3_2," "Q1" turned into "Q4_1," and "Q15" was renamed "Q4_2." This process maintained the logical ordering of questions while ensuring each variable name was easier to track throughout the analysis.

Categorical variables representing Likert-scale responses (e.g., "Strongly Disagree" to "Strongly Agree") were converted into numerical values ranging from 1 to 5. This transformation allowed for statistical comparisons and computation of means. Additionally, the key experimental condition, which classified free samples as either hedonic or utilitarian, was recoded into a binary format (0 = utilitarian, 1 = hedonic).

4.1.3 Scale Reliability Assessment

Cronbach's Alpha reliability test was used to assess the internal consistency of the Indulgence and Restraint scale. This analysis showed a Cronbach's Alpha of 0.98, which highlights a high level of internal consistency. Example of a one-dimensional scale This means that a scale comprised of six items is highly correlated and measures a single underlying factor. Cronbach's Alpha confidence interval also ranged from 0.97 to 0.98, confirming the stability of the scale.

Item deletion analyses were conducted to determine if deleting any individual item would yield better reliability for the scale. The findings indicated that the reliability remained consistently high (≥ 0.97) across all variables, implying a meaningful contribution to the overall construct for each item. Moreover, the inter-item correlation coefficient (0.87) and the corrected item-total correlations (0.89–0.94) further suggest that all items strongly correspond to the overall scale.

The response distribution across the Likert scale (1 = Strongly Disagree to 5 = Strongly Agree) was relatively balanced, with no Significant skewness or missing responses. This reinforces the scale's validity and ensures it captures meaningful variance in respondents' cultural orientation. Given these findings, no modifications to the scale were necessary, and it was deemed appropriate for use in subsequent regression and moderation analyses.

4.2 Descriptive Statistics

Descriptive statistics were computed to understand the distribution of responses across key variables. The mean, median, and standard deviation were examined to determine overall trends in participant responses. The frequency analysis reveals that 34% of participants identified as French, followed by Italian (around 17%), German, and American (close to 17%), and smaller groups from Australia, India, the Netherlands, Singapore, and the United Kingdom. Very few

respondents came from Albania, Fiji, Greece, Ireland, Saint Kitts and Nevis, or Uruguay, each representing less than 1% of the total sample.

Likert-scale variables had a median response of 3, with means between 3.1 and 3.2, suggesting a general tendency toward neutrality or mild agreement.

Purchase intention measures varied between conditions: Q2_1 had a mean of 2.91, while Q3_1 had a mean of 3.58, indicating slightly higher purchase intention in the latter condition.

The experimental manipulation of the free sample type was balanced, with 49% of participants receiving a hedonic sample and 51% a utilitarian sample.

Based on aggregated Likert-scale scores, cultural orientation was also balanced between indulgent and restraint categories.

4.3 Inference Statistics

4.3.1 Centering and Regression Model Specification

Predictors were mean-centered to prepare for interaction analyses. This step was indispensable for reducing multicollinearity when testing the moderating effect of cultural orientation.

A regression model was constructed to examine the effect of free sample type, cultural orientation, and their interaction on purchase intention. The model was structured as follows:

$$\begin{aligned} PurchaseIntent &= \beta_0 + \beta_1(HedonicUtilitarian) + \beta_2(Culture) \\ &+ \beta_3(HedonicUtilitarian \times Culture) + e_{PurchaseIntent} \\ &= \beta_0 + \beta_1(HedonicUtilitarian) + \beta_2(Culture) \\ &+ \beta_3(HedonicUtilitarian \times Culture) + e \end{aligned}$$

4.3.2 Multicollinearity Assessment

Variance Inflation Factor (VIF) scores were computed to detect multicollinearity between predictors. The results showed that all VIF values were close to **1.01**, indicating that multicollinearity was not a concern.

4.3.3 Hypothesis Testing

A series of statistical tests were conducted to evaluate the research hypotheses.

Effect of Free Sample Type on Purchase Intention (H1)

A t-test comparing purchase intention between the hedonic and utilitarian sample groups revealed a statistically Important difference ($t = 3.12$, $p = 0.0022$), supporting the hypothesis that hedonic samples generate higher purchase intentions.

Effect of Cultural Orientation on Purchase Intention (H2)

A t-test comparing purchase intention between indulgent and restraint cultural groups resulted in a non-significant effect ($t = 1.44$, $p = 0.1519$), indicating that cultural orientation alone does not directly affect purchase intention.

Interaction Between Free Sample Type and Cultural Orientation (H3)

An ANOVA test revealed a highly Important interaction effect ($F = 111.98$, $p < 0.0001$), suggesting that cultural orientation moderates the relationship between free sample type and purchase intention.

4.3.4 Additional Robustness Checks

Outlier Detection and Initial Re-Estimation

Cook's Distance was first employed to detect overly influential observations. Any cases surpassing the high-leverage threshold were removed, and the regression model was re-estimated with these outliers excluded. To further validate the reliability of the findings, I ran an alternative regression using MM estimation, a robust method designed to minimize outlier impact—the results aligned with the original model, reinforcing the soundness of the conclusions.

Heteroskedasticity Testing and Model Optimization

A Breusch-Pagan test then confirmed that heteroskedasticity was not present ($BP = 2.64$, $p = 0.4497$), indicating that the variance of the residuals did not undermine the regression's consistency. Next, I applied stepwise regression to refine the model, achieving a final adjusted R^2

of 0.473—demonstrating that the selected predictors explained nearly half of the variance in purchase intention.

Re-analysis of the Cleaned Dataset

After identifying and removing 12 high-leverage outliers through Cook's Distance, I replicated all statistical procedures on the cleaned dataset (dataset_cleaned). This approach markedly improved the multiple R-squared from 0.484 to 0.7364, reflecting a more potent overall model fit. Indispensable, the interaction term (sample type $\times$ cultural orientation) remained highly Important ($p < 2e-16$), reaffirming that cultural orientation moderates the relationship between free sample type and purchase intention. Additionally, the main effect of cultural orientation, which had been non-significant earlier, reached significance ($p = 0.0318$) in the cleaned model. Throughout these steps, Variance Inflation Factor (VIF) values (~ 1.01) consistently indicated an absence of problematic multicollinearity, bolstering the stability of the re-estimated results.

Hypothesis Testing

H1 (Effect of Free Sample Type): An Important difference ($p = 0.0003$) in purchase intention was found between hedonic and utilitarian samples.

H2 (Effect of Cultural Orientation): The t-test remained non-important ($p = 0.1402$), but regression analysis indicated a small but Important direct effect ($p = 0.0318$).

H3 (Interaction Effect): The ANOVA test confirmed a strong and highly Important interaction effect ($F = 306.76$, $p < 2e-16$).

Robustness Checks

After recalculating Cook's Distance, I identified and removed twelve highly influential observations, which led to a more stable regression model overall. A robust regression approach (MM estimation) further confirmed that the core results were not simply a product of outliers. Nonetheless, the Breusch-Pagan test ($p = 0.0007$) revealed evidence of heteroskedasticity, indicating the necessity of adjusting standard errors to maintain the accuracy of the model's inferences.

Model Optimization (Stepwise Regression)

After confirming that the final model retained the same predictors, we verified that the interaction between sample type and cultural orientation remained essential to predicting purchase intention. Nonetheless, evidence of heteroskedasticity prompted using heteroskedasticity-consistent standard errors (HC3) to ensure more accurate inferences. The corrected regression output reaffirmed that the main effect of sample type (HedonicUtilitarian_c) stayed Important ($p < 0.0001$), indicating that hedonic samples yield lower purchase intentions than utilitarian ones. Meanwhile, cultural orientation (Culture_c) became statistically Important ($p = 0.036$), underscoring that indulgent cultures exhibit higher purchase intention than restrained cultures—a slightly stronger result than the prior p-value ($p = 0.0318$) had suggested. Finally, the interaction term (HedonicUtilitarian_c $\times$ Culture_c) remained highly Important ($p < 2.2e-16$), reinforcing the role of cultural orientation in moderating the effect of sample type on purchase intention.

Comparison to OLS Results

Although the coefficient estimates remained unchanged—indicating that heteroskedasticity does not alter regression coefficients—the standard errors increased moderately, suggesting that previous significance levels were somewhat optimistic. Even with this adjustment, the primary findings held firm, corroborating the theoretical soundness of the conclusions.

4.4 Discussion of Key Findings

In this section, I integrate and interpret the results in the context of my original research aims, exploring how these findings relate to established theories and published studies. I also evaluate the methodological choices made throughout the project, considering their impact on the outcomes.

4.4.1 Relationship to the Research Questions

RQ1 (Hedonic and Utilitarian Samples)

A two-sample t-test confirmed that hedonic free samples yield higher purchase intentions than utilitarian ones. This result aligns with theories suggesting that sensory and emotional appeal drives stronger affective responses (Pham, 1998; Chitturi, Raghunathan, & Mahajan, 2008). It also

builds upon prior research indicating that free samples can effectively boost purchase likelihood (Bawa & Shoemaker, 2004), specifying that hedonic samples are particularly potent.

RQ2 (Cultural Orientation as a Main Effect)

Contrary to my expectations, cultural orientation on its own did not reach statistical significance for direct effects in the initial analysis. Although indulgent consumers had numerically higher means, the difference was not important. These findings suggest that cultural orientation alone may not uniformly influence purchase intentions in free-sample scenarios—particularly with this dataset and product context.

RQ3 (Moderating Role of Culture)

The moderation analysis (ANOVA and regression) revealed a strong, highly Important interaction between cultural orientation and product type. Hedonic samples dramatically boosted purchase intention among indulgent participants but less so for restrained participants, who preferred utilitarian goods. This underscores how culture shapes perceptions of a promotional offer, amplifying or muting the product's primary benefit.

4.4.2 Connection to the Published Literature

These findings point to several dimensions of free sample promotions, beginning with how the reciprocity principle (Cialdini, 2009) explains why hedonic samples can spark a consumer's desire to "repay" a satisfying experience. Reflecting earlier work by Babin, Darden, and Griffin (1994) and Dhar and Wertenbroch (2000), the results confirm a substantive difference between affective (hedonic) and functional (utilitarian) evaluations: hedonic products quickly generate higher purchase intentions after sampling while utilitarian products need a clear demonstration of efficacy. Additionally, examining Hofstede's (2011) indulgence–restraint dimension, which has rarely been applied in free sampling studies (De Mooij, 2019), shows that cultural orientation exerts a strong influence on how consumers respond to hedonic versus utilitarian promotions. This extends Kwok and Uncles' (2005) assertion that aligning the product's primary appeal—pleasure or functionality—with the consumer's cultural disposition can substantially enhance promotional effectiveness.

4.4.3 Methodological Reflections

While a cross-sectional, quantitative approach provided an efficient means of gauging how scenario-based manipulations influenced purchase intentions, a longitudinal or field experiment could capture more nuanced patterns, such as loyalty effects and repeated interactions with free samples (Bawa & Shoemaker, 2004). At the same time, the scenario-based design successfully distinguished hedonic (fragrance) from utilitarian (pain reliever) product categories—an outcome validated by manipulation checks—. However, it should be noted that the line between purely hedonic and utilitarian offerings often blurs in modern marketplaces (Chitturi et al., 2008). Regarding sampling, although respondents were drawn from diverse cultural backgrounds online (Goodman et al., 2013), a more stratified or carefully targeted approach might have offered a richer view of specific national or ethnic subgroups. Additionally, reliance on participant self-selection could introduce biases that limit the broader applicability of the results.

CHAPTER 5: CONCLUSIONS AND LIMITATIONS

In this concluding chapter, I summarize the principal contributions of my study, reflect on limitations, and propose areas for further inquiry. I also discuss the practical utility and personal learning derived from carrying out this research.

5.1 Main Findings and Conclusions

My principal aim in this study was to examine how free sample type and cultural orientation jointly influence purchase intentions. Drawing on theories of reciprocity (Cialdini, 2009), hedonic versus utilitarian consumption (Babin et al., 1994), and the indulgence–restraint paradigm (Hofstede, 2011), I hypothesized that hedonic free samples would generally be more effective, particularly in culturally indulgent contexts. The findings validated these propositions by showcasing the synergy between product enjoyment and cultural openness to pleasure. By demonstrating a moderation effect of cultural orientation, this research enriches cross-cultural marketing theories, highlighting that although culture alone may not universally predict purchase intentions, it becomes pivotal when it aligns (or misaligns) with the product’s core benefits. From a practical standpoint, the outcomes suggest that hedonic free samples ought to emphasize sensory and emotional appeal in indulgent markets. Conversely, utilitarian samples need to focus on their motivational or pragmatic benefits in minimalistic settings. Moreover, the scenario-based experimental design, complemented by a stringent statistical procedure that involved outlier removal, robust regression, and statistical narrower, reflects methodological effort toward reliability and validity, which could provide a feasible approach for future cross-cultural studies on promotional strategies.

5.2 Managerial and Academic Implications

These findings contribute to cross-cultural marketing research by illustrating that indulgence versus restraint strongly moderates how hedonic and utilitarian product appeals connect with consumers. In doing so, they also extend the benefit congruency framework proposed by Chandon et al. (2000), highlighting how cultural orientation influences the interplay between consumers’ hedonic or utilitarian motives. From a managerial standpoint, marketers launching free sample initiatives in indulgent markets (Tsai & Men, 2017) would do well to emphasize sensory pleasure

and emotional impact. In contrast, those targeting more restrained audiences should underscore functionality and practical value.

Convenience sampling poses a limitation because it may not fully represent real-world markets in terms of participants' income, education, or nationality, which, as a result, reduces the external validity of the findings (Goodman et al., 2013). Additionally, the study's cross-sectional nature restricts it from capturing participants' immediate responses to free samples, overlooking any loyalty or repeated-trial effects that could emerge over time (Bawa & Shoemaker, 2004). Another issue arises from the binary classification of products as either hedonic (fragrance) or utilitarian (pain reliever). While this approach clarifies theoretical distinctions, it ignores the substantial number of “hybrid” products that embody both pleasure and practicality (Chitturi et al., 2008). Finally, although Minkov and Hofstede's (2012) cultural orientation scale is validated, it still represents only one segment of a multifaceted construct, meaning that a brief measure of indulgence and restraint may not fully capture all subtleties of cultural orientation (Nguyen & Simkin, 2013).

5.3 Directions for Future Research

Exploring additional Hofstede dimensions, such as uncertainty avoidance, may reveal further moderating variables that shape the effectiveness of promotional efforts, allowing researchers to build a more nuanced picture of cultural impact. In the same vein, longitudinal or field-based designs that track repeated sampling or compile accurate sales data over time could illuminate how consumer perceptions shift through novelty, satisfaction, or habit formation. In a marketplace where many contemporary products and services combine elements of both pleasure and practicality, think of healthy snacks or sophisticated cleaning devices. Exploring the potential applicability of theoretical models in how cultural orientation mediates these mixed blessings would deepen understanding of other commonly applied theoretical constructs. This coupling could potentially lead to the use of sophisticated analytical techniques by researchers, like multi-level modeling or structural equation modeling, to disentangle the intricate relationship between national culture, individual characteristics, and product features, thus giving way to an even more nuanced understanding of the overarching mechanisms driving the success of promotional efforts.

5.4 Personal and Professional Takeaways

Interacting with this research has refined my understanding of cultural value systems and their pivotal role in making marketing more effective. As a practitioner, I know "free samples" are not a one-size-fits-all promotional tool but must be configured for the cultural and motivational context of the consumer. From an academic standpoint, this dissertation highlights the necessity of theoretical rigor combined with methodological robustness in order to elicit an interlocking of product characteristics, cultural nuance, and consumer psychology.

5.5 Concluding Remarks

By examining the interaction of hedonic and utilitarian free samples, as well as indulgent and restrained cultural orientations, this study extends both theoretical and practical knowledge in cross-cultural consumer behavior. Hedonic-free samples generally raise purchase intentions, but cultural orientation significantly amplifies or tempers this effect. As a result, marketers who understand the local or segment-level cultural values can more precisely tailor their sampling strategies. Although further research using more extensive, more diverse, or longitudinal designs would broaden understanding, the present findings serve as a compelling demonstration that product type and culture jointly drive consumer responses to promotional campaigns.

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APPENDICES

Appendix 1 – Online Survey

General Introduction

The following survey has the goal of collecting data for the development of a Master's Degree dissertation.

Completing the survey will take about 2 minutes. All collected information will remain anonymous and will be used solely for scientific purposes. There are no right or wrong answers.

If you have any questions or feedback about the survey, please do not hesitate to contact me via email at s-rmarchetti@ucp.pt

Thank you for your participation!

Hofstede Indulgence versus Restraint Index (IVR)

Rate the degree to which you agree with each of the six items on a scale ranging from **1 = Strongly Disagree** to **5 = Strongly Agree**.

- There should not be any limits on individuals' enjoyment.
- Societies should value relatively free gratification of desires and feelings.
- Desires, especially with respect to sensual pleasures, should not be suppressed.
- The gratification of desires should not be delayed.
- One should enjoy complete sexual freedom without restriction.
- Feelings and desires related to casual sex should be gratified freely.

Utilitarian Sample Type

Imagine that you have just received a free sample of the following product. Please read the description carefully and then answer the questions regarding your likelihood of purchasing the product.

"You have received a free sample of a pack of fast-acting, over-the-counter pain relievers designed for quick and effective relief. These tablets are crafted for reliable and consistent performance, working to ease discomfort and help you get back to your daily routine. Packaged in a simple, easy-to-open blister pack, these pain relievers focus on function and practicality, offering relief you can count on without any added frills. Ideal for anyone seeking efficient pain management, this product offers relief you can count on when you need it most."

How likely are you to purchase this product after receiving the free sample?

- ☐ Very Likely
- ☐ Likely
- ☐ Neutral
- ☐ Unlikely
- ☐ Very Unlikely

Would you say that this product:

- ☐ Solves specific problems or fulfills specific needs
- ☐ Provides sensory enjoyment and pleasure

Hedonic Sample Type

Imagine that you have just received a free sample of the following product. Please read the description carefully and then answer the questions regarding your likelihood of purchasing the product.

"You have received a free sample of a luxury cologne with an enchanting blend of rich, exotic spices, subtle floral notes, and a warm, lingering amber finish. This fragrance is designed to captivate the senses, leaving a memorable impression. Packaged in a sleek bottle, it represents elegance and style. This cologne offers a pleasurable experience each time you wear it, inviting you and those around into a world of sensory enjoyment and indulgence."

How likely are you to purchase this product after receiving the free sample?

- Very Likely
- Likely
- Neutral
- Unlikely
- Very Unlikely

Would you say that this product:

- Solves specific problems or fulfills specific needs
- Provides sensory enjoyment and pleasure

Demographic Questions

- What is your nationality?
- If different, what was your nationality at birth?

Appendix 2 – Hypothesis testing R Output

H1: Hedonic vs. Utilitarian

Welch Two Sample t-test

- $t = 2.7864$, $df = 138.65$, $p\text{-value} = 0.006078$
- 95% confidence interval: [0.1731, 1.0189]
- Mean (Hedonic, group 0) = 3.5811
- Mean (Utilitarian, group 1) = 2.9851

H2: Indulgent vs. Restraint

Welch Two Sample t-test

- $t = 1.8329$, $df = 137.45$, $p\text{-value} = 0.06897$
- 95% confidence interval: [-0.0313, 0.8251]
- Mean (Indulgent) = 3.4865
- Mean (Restraint) = 3.0896

H3: Two-way ANOVA (Culture $\times$ Sample Type)

- Culture: Df = 1, F = 5.974, p = 0.01579
- HedonicUtilitarian: Df = 1, F = 11.205, p = 0.00105
- Culture:HedonicUtilitarian: Df = 1, F = 104.064, p < 2e-16
- Residuals: Df = 137, Mean Sq = 0.93

H3a: Indulgent Consumers Only

Welch Two Sample t-test

- t = 10.348, df = 71.55, p-value = 7.34e-16
- 95% confidence interval: [1.7468, 2.5805]
- Mean (Hedonic, group 0) = 4.3636
- Mean (Utilitarian, group 1) = 2.2000

H3b: Restraint Consumers Only

Welch Two Sample t-test

- t = -4.9591, df = 64.877, p-value = 5.382e-06
- 95% confidence interval: [-1.6669, -0.7097]
- Mean (Hedonic, group 0) = 2.4333
- Mean (Utilitarian, group 1) = 3.6216