



SCHOOL OF
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Everything old is new again:

The importance of sequencing emotional and rational message appeals
to induce willingness to try for new, retro FMCG products

by

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Abstract

Keywords: Retro branding, message framing, message sequencing, nostalgia proneness, consumer innovativeness, willingness to try, Fast-moving consumer goods, new product brands, retail environment.

Purpose: The study addresses the limited understanding of retro branding's effectiveness in retail environments, particularly for new FMCG product brands without established heritage. It explores how different sequences of emotional and rational message framing in retro-themed advertising influence consumers' willingness to try, and how these effects are moderated by nostalgia proneness and consumer innovativeness.

Methodology: A quantitative, deductive approach was employed using a cross-sectional between-subject experimental design. Data was collected via Prolific (N = 250) through two surveys containing different stimulus conditions. Multiple linear regression analyses examined the main and interaction effects of message framing and sequencing, nostalgia proneness, and domain-specific innovativeness on consumers' willingness to try.

Findings: The results show that *without* accounting for individual trait differences, rational-to-emotional message sequencing leads to higher willingness to try a new retro-advertised FMCG product. However, a significant three-way interaction revealed a reversal of effect: for consumers high in both nostalgia proneness and innovativeness, emotional-to-rational sequencing is most effective, highlighting the importance of aligning advertising messages with consumer traits.

Theoretical perspective/ implications: This study contributes to retro branding literature by extending its relevance and applicability to new FMCG products in retail settings. Grounded in message framing, sequencing and brand congruence theory, it clarifies the boundary conditions under which retro-themed messaging is most effective. By examining the underlying internal (personality trait) and external (message) mechanisms behind retro branding, this study advances theoretical frameworks in communications and consumer behavior.

Managerial Implications: The findings provide actionable guidance to strategically employ retro-themed advertising in the FMCG retail environment. By tailoring message sequencing to audience traits, managers can enhance consumers' willingness to try new products. This makes retro-themed, text-based advertising a scalable in-store strategy that enables new brands to gain visibility and competitiveness in a saturated market.

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List of Abbreviations

FMCG	Fast-Moving Consumer Goods
DSI	Domain-specific innovativeness
WTT	Willingness-to-try
E2R	Emotional-to-rational
R2E	Rational-to-emotional
NOST	Evoked Nostalgia Scale
SNS	Southampton Nostalgia Scale

1. Introduction

Imagine a consumer walking down a grocery store aisle, focused on ticking off items from their shopping list. Suddenly, the consumer stops at a soda display and spontaneously adds a can of soda to the shopping cart. What triggered this impulsive product purchase? Was it the bright colours on the packaging? A well designed logo? Or even an attention grabbing slogan? What appears to be a minor, almost automatic decision is a window into the complex mechanisms of consumer behavior in today's saturated FMCG retail environment. Amid fierce competition and scarce consumer attention, brands increasingly acknowledge the need to rely on in-store advertising to introduce new products and drive purchase behavior (Chandon et al., 2009; Garrido-Morgado & Gonzalez-Benito, 2024).

New product and brand launches are notoriously risky, particularly in the FMCG sector where shelf space is limited, consumer attention is fragmented, and product lifecycles are short (Fuller et al., 2023). Despite the importance of new products for business growth and innovation, failure rates remain high (Fuller et al., 2023). Some research indicates that over a third of newly launched products were no longer available one year after introduction (Victory et. al., 2021). While most academic research has examined the success and failure of new product launches through out-of-store factors, little attention has been paid to strategic opportunities presented in store, where many final purchase decisions are made (Gofman et al., 2010; Inman et al., 2009).

One strategy for catching consumer's attention which is increasingly being used in FMCG is retro branding. Retro branding has its roots in the psychological appeal of nostalgia (Cattano & Guerini, 2012), a powerful emotional response which represents a yearning for objects, as well as experiences or memories, that are associated with an earlier time in the past (Holbrook & Schindler, 1991). This feeling is most powerful during times of financial difficulty or societal shifts, making the emotional response even more powerful in today's turbulent economic climate around the world (Spaid, 2013), making it even more relevant to practitioners during the late 20th and early 21st century (Mukhopadhyay, 2024).

However, nostalgia makes up only one part of retro branding, as this emotional response, while powerful, is not enough on its own (Cattano and Guerini, 2012). This relatively new phenomenon can be characterised as the practice of bringing back old design, tastes or products while adapting them by adding a modern twist in its functionality or performance to meet current market needs (Brown et. al, 2003a). This second part of retro is equally important and is focused on the rational appeals, not just the emotional ones. Furthermore, the dual nature of retro branding suggests that consumers who find the strategy attractive aren't just prone to nostalgia, but also have an appreciation for innovation and are interested in trying something that is new and improved.

In the context of growing competitive pressures and the increasing dominance of e-commerce, both marketers and scholars have renewed interest in optimizing the in-store retail environment: a space where spontaneous, emotionally driven decisions backed by reason still play a significant role (Hoch & Loewenstein, 1991). With this in mind, retro branding emerges as a promising in-store marketing strategy to capture attention and induce customers to try a new product, which is crucial to survival in FMCG.

1.1 Research Problem

Our research has identified a number of gaps within marketing, communications and retailing literature that the thesis aims to address. Firstly, while there has been some research into the use of retro branding on FMCG products (Chen, 2022), the focus has been on the product itself and not on the wider retail environment it operates in. Given that FMCG differs from most other industries in that most purchases are still made in-store instead of online, neglecting to focus on the nuances of the retail setting, which is more driven by impulse purchase decisions, is an oversight in retro branding research. This thesis addresses this gap by focusing specifically on using retro strategies as part of in-store advertising, with the stimuli modelled to look like an aisle fin that would stick out from the shelf.

As previously identified, while the definition of nostalgia and its various types are fairly concrete, retro branding is not as clear cut. Although its core essence of uniting the memories of products from the past with the tastes and functionality updates from the present is agreed upon (Brown et. al., 2003a), its applicability is not. Much of the existing retro research focuses on heritage brands, where nostalgia-centric strategies naturally align with a brand's history. Indeed some research goes on to explicitly call out that the aim of retro branding is to “use brand history to enhance the brand’s value (Chen, 2022, p.775), thus implying that it cannot be used on brands without a heritage. However, in the market there are more and more new brands, particularly in the FMCG space, that are adopting retro strategies to market themselves from the moment they launched. While there is some research into alternative terminology that addresses this phenomenon, such as retro marketing (Hallegatte, 2014), this remains under-researched. This raises the question of how effective retro branding truly is for non-heritage FMCG brands. Therefore, to address this gap, our thesis focuses on using retro specifically on a new product brand, where the nostalgia element of retro will be evoked through focusing on common memories from the original past, and not on brand past.

Retro branding research has also predominantly been studied as a holistic approach, combining both visual and messaging elements together (Chen, 2022). This means that it is not known how effective the individual components are in conveying the retro strategy. Additionally, retro as a branding strategy is often thought of and seen in the market as a visual, design-based based approach where colours, fonts and packaging are altered to convey the style - leaving messaging

as an overlooked, but potentially fundamental, element of the strategy. To remedy this oversight, this research will focus on conveying retro through messaging exclusively.

However, it is important to note that messaging is not only about which words are used, but also the feelings they portray and the order in which these feelings appear. As previously mentioned, retro branding is a dual strategy, including both emotional appeals in the form of nostalgia and rational appeals in the form of product attributes and functionality. Therefore, a retro branded message should be framed using both emotional and rational elements. However, while there is considerable research within communications into the effects of emotional framing and rational framing on outcomes such as purchase intention, little has been done to investigate messages that include both of these appeals in the same advertisement. Furthermore, there is no consensus amongst researchers as to whether emotional or rational messages are more effective. Our thesis aims to address this by using both emotional and rational themes in our stimuli, given both of these traits are needed to be classified as a truly retro strategy.

Given that both emotional and rationally- framed text will feature in the message to convey retro, how the message is structured becomes even more important. Message sequencing must then be taken into consideration as a crucial communication technique, which determines that the order of the concepts, in this case emotional to rational (E2R) or rational to emotional (R2E), has an effect on how the message is understood by the consumer and therefore how they subsequently act based on this message (Lim et. al., 2018). However, message sequencing itself has received little attention in research, especially within the context of retro branding and advertising. Therefore, our research will use message sequencing as a backbone of our method, where almost exactly the same words are used between the two stimuli, with only a change in sequence (E2R or R2E), in order to determine if consumers respond differently based on the sequence itself in this new context.

Finally, much of the existing retro branding literature uses nostalgia proneness as a moderating variable to explain the relationship between a retro branded stimulus and subsequent change in consumer behaviour, for example increased purchase intention or brand attitude (Chen, 2022). However, as has already been established, nostalgia isn't the only element of retro (Cattano & Guerini, 2012): a preference for new, innovative products is equally important. Drawing on self-congruence theory, perceived alignment between individual traits and brand attributes is a key driver in influencing consumer behavior. Therefore, a consumer who finds a retro framed advertisement appealing will not just be prone to nostalgia, but also to innovation - a conclusion that appears to be overlooked by current research. To address this crucial gap, we will introduce a second moderator, domain-specific innovativeness (DSI), in an effort to create a proxy for retro proneness within our research methodology, thus making our findings more robust as well as accounting for how message framing and optimal sequencing may strengthen perceived congruence between the retro appeal and the individual personality.

1.2 Research purpose

In short, there is a gap in understanding of the effectiveness of retro branding in retail environments, as well as whether the strategy can be applied to new product brands without a heritage. Digging deeper, as retro branding is still an emergent concept, a deeper level of research is needed to further breakdown the internal and external drivers of the strategy.

Therefore, the purpose of this research is to quantitatively examine the performance of an in-store advertisement for a new product which is leveraging a retro strategy by adopting a between-subjects, cross-sectional experiment approach. The focus is specifically on the advertisement's message and the way it's sequenced, either E2R or R2E, while also assessing how the performance of both messages is moderated not only by nostalgia proneness, but also by consumer innovativeness. In doing so, this research aims to contribute to a more in-depth understanding of retro branding in terms of its applicability, the drivers of its success as well as some insight into the target audience for this strategy.

1.3 Research Question

This thesis will approach the following two research questions:

What is the effect, if any, of different sequences of emotional and rational-framed messages in retro-themed advertising on influencing consumers' willingness to try new FMCG products?

To what extent are these effects moderated by nostalgia proneness and consumer innovativeness?

1.4 Theoretical and Managerial Contributions

From a theoretical point of view, this study contributes by challenging assumptions inherent within retro branding research surrounding its relevance for new product brands, specifically within the retail environment and applied to FMCG products. A second theoretical contribution lies in this study's examination of the conditions under which retro branding strategies are most effective. By investigating message sequencing, E2R and R2E, in combination with personality trait-based moderators such as nostalgia proneness and DSI, this study aims to clarify the optimum sequence that matches 'retro-proneness' behaviour traits to result in a willingness to try (WTT) a new product. Through examining the underlying internal and external mechanisms behind retro branding, this study builds on theoretical frameworks in communications and consumer behaviour.

From a managerial standpoint, these findings aim to inform decisions surrounding employing retro strategically in a retail environment. By using the right message sequence with the right audience, managers can optimize the number of consumers willing to try a new, retro-framed product which is particularly crucial within the cluttered environment of FMCG. Therefore, there is the potential for these findings to better inform decisions regarding the messaging used in-store advertising, as well as achieve a better understanding of its importance, allowing new brands to be more competitive in a saturated market.

2. Literature review:

This chapter outlines the key concepts guiding the study, beginning with an overview of current research on retro branding and situating it within the context of the FMCG and retail environment.

2.1 Nostalgia and retro branding

2.1.1 Nostalgia

It is well acknowledged by many scholars within marketing research that nostalgia is an underlying, consistent theme in retro branding communication (Cattano & Guerini, 2012). However, there are many definitions for the emotional concept. To take a seminal example, Holbrook & Schindler (1991) build on Davis (1979) to define nostalgia as an inclination towards objects that were more prevalent at an earlier time in the past. It is important to note in their definition that this earlier accessibility to the nostalgic object can also be dependent on the individual, and not on whether the object still physically exists in the present - for example an adult can feel nostalgia towards Oreo cookies as it reminds them of when they were younger and more carefree surrounding sugar intake, even though they are still readily available.

While this definition was broad, scholars have also broken down nostalgia into various types. Davis (1979) recognises two different types of nostalgia: personal and communal. Personal nostalgia refers to the phenomenon where with age, individuals view their own youth and its corresponding experiences more fondly. Communal nostalgia on the other hand is focused on societal events as a catalyst for nostalgic sentiment, such as war, financial crises or other sizable changes to the greater population. Davis (1979) therefore uses the latter to explain how events such as the social unrest in the late 60s contributed to the rise of nostalgia in the 70s.

Meanwhile, Muehling (2013) proposes an alternative to communal nostalgia: historical nostalgia. While both Davis (1979) and Muehling (2013) agree on personal nostalgia, Muehling defines historical nostalgia as a yearning for a past that the individual has not themselves experienced - typically for a time before they themselves were born. Anecdotally, this can be observed in the boom for film cameras and then subsequently digital compact cameras amongst teenagers who have no memory for when these products were the latest innovation in photography. However, according to Muehling (2013)'s findings, personal nostalgia has a larger impact than historical nostalgia on brand attitudes.

Baker and Kennedy (1994) combine both Davis (1979) and Muehling (2013)'s definitions of nostalgia with three proposed levels: real nostalgia, simulated nostalgia and collective nostalgia. Real nostalgia is most closely related to personal nostalgia, as it represents a time with which there is a lived experience. Simulated nostalgia on the other hand aligns with Muehling (2013)'s

historical nostalgia, as it represents a time the individual has no lived experience with, giving antiques or replica cars as examples. Finally, and most interestingly, collective nostalgia is similar to Davis (1979)'s communal nostalgia, but is more broad, in the sense that it represents a culture or a generation, without the need for a seismic shift in society. It is important to note that collective nostalgia does not have to be tied to brands, but instead the products that the brand represents, such as cream soda and hot dogs on a summer's day.

2.1.2 Retro branding

While nostalgia is certainly powerful, the strategy is limited. By exactly replicating past products in order to only trigger nostalgia, the consequence is that modern day expectations of functionality and performance will not be met (Brown, 2003a). This is where retro branding comes in and distinguishes itself from nostalgia, acting as an "aesthetic bricolage" (Ahlberg et. al, 2021, p. 158) that blends the familiarity and essence of old-fashioned objects from the past with new updates to reflect present consumer expectations (Brown et. al., 2003a; Cervellon and Brown, 2018; Hallegate, 2018).

The benefit of merging the strengths of both the past and present, classic with modern, is an attractive, hybrid product that can and has been marketed with great success (Brown et. al., 2003b). By leveraging consumers' tendency towards nostalgia, consumers feel a sense of safety and comfort in an otherwise unstable, turbulent socioeconomic environment by consuming these nostalgic, retro branded products (Brown et. al., 2003a; Davis, 1979), making it a particularly attractive and important marketing strategy to explore and exploit in today's unprecedented times. Another motivator for consumers to purchase retro branded products is the feeling that it provides "authenticity in an inauthentic world (Brown et. al., 2003b, p. 140). In addition, retro branding is an attractive proposition from the perspective of managers, particularly with the increasing saturation of the market, as relaunching an old product or a version of an old product with a different spin is much more likely to be successful than something completely new (Brown et. al., 2003a).

While the core idea of retro branding is mutually agreed upon, there are many differing perspectives on its implications and finer details. Chen (2022) for example makes a point of stating that nostalgia does not have to be involved in retro branding, while Brown et. al. (2003) states that retro products directly tap into consumer feelings of nostalgia. Chen (2022)'s reasoning for the lack of nostalgia focus is because they emphasise retro branding should be focused on the brand itself and its own history and heritage, and not on triggering consumer emotions. This implies that retro branding can only be used on brands with a heritage, yet there are many examples of new brands, particularly within FMCG, that appear to be leveraging this strategy. Perhaps then retromarketing is a better term for this phenomenon, which Hallegate (2014, p. 12) defines as "when a new product is launched with a new brand that wants to be associated with the past", where retro branding applies to old brands with a heritage that want to

continue trading on its association with the past. Indeed, Dam et. al. (2024)'s recent literature review within the field of nostalgia, retromarketing and heritage suggests future research could be focused on brand meaning invention within retro, instead of traditional brand revival, laying early groundwork to suggest decoupling heritage from retro branding is possible which is what this paper aims to explore.

The fact that retromarketing and retrobranding are often used interchangeably (Brown et. al., 2003a, Brown et. al., 2003b) shows a lack of research into the field. Similarly, retro branding used to be synonymous with brand revival (Brown et. al., 2003a, Cattano and Guerini, 2012), until further research distinguished the two and the term brand revitalisation was coined, defined as bringing an old brand into the present, instead of protecting its connection with the past (Hallegate, 2014; Chen, 2022). By focusing on a new, fictitious brand with no heritage, this thesis aims to further establish the concept of retromarketing within retro branding literature, as well as provide practitioners with a viable marketing strategy that can be applied to their brand, regardless of its history.

2.2 Retail Environment and FMCG industry: Contextualizing Retro Marketing

The retail environment represents a critical battleground for consumer attention and product visibility, especially within the fast-moving consumer goods (FMCG) sector (Fuller et al., 2023). The long-term survival of companies in FMCG depends heavily on successful new product introductions (Beck & Kenning, 2015; Pauwels et al., 2004). However high failure rates of new product introductions make this process very cost-intensive and therefore of high risk for the firms (Beck & Kenning, 2015). Impulse purchases comprise a substantial proportion of retail industry sales. In certain product categories, impulse buying accounts for up to 80% of all purchases, and it has been shown that purchases of new products result more from impulse purchases than from prior planning (Cho et al., 2024; Abrahams, 1997; Smith, 1996). These spontaneous decisions are often made without prior intention and are influenced by environmental cues such as product placement, special displays, and advertising messages (Cobb & Hoyer, 1986; Hoch & Loewenstein, 1991; Beatty & Ferrell, 1998; Garrido-Morgado & Gonzalez-Benito, 2024).

Research by Puri (1996) and Rook and Fisher (1995) affirms this by indicating that many purchases are being made on the premises of stores themselves as consumers give into their impulse with little to no deliberation. A study of grocery shoppers defines impulse buying as an in-store purchase decision made without prior recognition of need (Kollat & Willett, 1967). These decisions are further contextualized as a sudden, compelling and hedonically complex purchase behavior, precluding thoughtful deliberate consideration of all information and choice alternatives (Chang et al., 2011).

In particular, consumers' emotional and affective state play an important influencing role, as they are typically found to be emotionally attracted to the impulse object and hence desire immediate gratification (Hoch & Loewenstein, 1991). Therefore this purchasing behavior is connected to feelings and psychological motivation (Barakat, 2019). To stand out from its environment and create a sense of brand salience as a newly introduced product, companies can trigger impulse purchase through emotionalization and creating an affective state in the mind of the consumer (Strack et al., 2006).

With most purchase decisions made directly in-store, the physical shopping environment continues to wield considerable influence over what ends up in consumers' baskets (Kacen et al., 2012). Prior research has already established that FMCG products in the retail environment require distinct communication strategies, with in-store advertising being the most important communication strategy to stimulate impulse purchases (Kacen et al., 2012; Garrido-Morgado & Gonzalez-Benito, 2024). Recent trends in marketing have demonstrated an increased interest in in-store advertising with the hope of "grabbing consumers" at the point of purchase (Chandon et al., 2009). Therefore marketers are diverting a growing proportion of their budgets from traditional out-of-store media advertising to in-store marketing spending. Thus studies show that in-store displays can boost sales by 77-243 %, underscoring their power to attract attention and trigger emotionally driven, unplanned purchases (Cetin et al., 2017;).

However consumers perceive new purchase decisions for new brands and products to be very risky when they cannot access prior experience and therefore face a higher degree of uncertainty (Erdem and Swait, 1998; Mitchell, 1999). This explains to some extent why product introductions fail in the FMCG context. For instance, Victory et al., (2021) found that 35% of new stock keeping units (SKUs) were no longer available one year after their introduction. In turn brands with established heritage and reputation, such as Coca Cola are perceived as less risky even when introducing new products as they transfer their established familiarity and trust to the new products, as discussed in Keller's (2018) work on brand equity. In line with this argumentation, reducing uncertainty and creating familiarity becomes an important mechanism for new brands to facilitate initial purchase decisions among consumers (Alba and Hutchinson, 1987). New brands, defined as entirely new market entrants, often face issues of visibility in retail settings (Fuller et al., 2023). As Wästlund et al., (2018) put it, they are "practically invisible" on cluttered shelves in store (p.55). Thus, repeated exposure to an advertising stimulus becomes important to enhance a new brand's affective standing within the mind of the consumer (Janiszewski, 1993). This so-called "mere exposure" has been found to elicit affective preference, positive product evaluations and subconsciously leads to feelings of familiarity, which consumers interpret as liking (Janiszewski, 1993).

Retro-themed advertising could activate the mere exposure effect, whereby the simulated familiarity may enable brands to offer consumers a sense of reassurance or emotional resonance in their purchase decision (Pham, 1998; Shiv & Fedorikhin, 1999). This positions retro

marketing not merely as a nostalgic reference, but as a strategic tool to simulate emotional familiarity, potentially compensating for the absence of heritage during product launches . Against the characteristics of the FMCG, low involvement setting where consumers are proven to not devote much cognitive effort to purchases, cues triggering affective responses might help new products overcome invisibility by generating emotional resonance without prior brand knowledge (Kacen et al., 2012). This is consistent with findings by Shiv and Fedorikhin (1999), who illustrate that under certain constrained processing conditions, consumers are more likely to rely on affective responses rather than deliberate cognition. This could give rationale as to how and why retro-themed advertising displays might drive trials for new products by triggering familiarity and emotional resonance (Kacen et al., 2012).

Nowadays, retro branding is gaining popularity, particularly among global and heritage-rich FMCG brands such as Coca-Cola, Chupa Chups, and McDonalds to name a few (Grębosz & Pointet, 2015). Especially within the food and beverage sector, retro branding is seen as a reassuring reference that serves as an authentic differentiator, positively resonating with audiences by evoking familiarity and emotional comfort (Grębosz & Pointet, 2015). Research indicates the effect of retro branding to be robust, signaling that it is an effective means to appeal to a broad consumer base and capable of evoking more favorable brand attitudes and purchase intentions (Marchegiani and Phau, 2010).

As previously indicated, most literature on retro branding assumes a foundation of a heritage that the brand leverages. However, there has been growing evidence that even new FMCG brands without this heritage can leverage retro marketing strategies. These brands often frame their messages in a distinctly retro style while simultaneously updating their products to meet modern consumer needs, whether that be through health-conscious formulations, sustainability or social values. While much of the retro discourse seems to be around visual design and packaging, it is especially the nostalgic tone embedded in their advertising language and messaging that evokes emotional resonance “It’s like a little moment of childhood joy... all grown up” (Drinkolipop, 2025). Ultimately, it is the holistic integration of product design, packaging, advertising channels and message framing that defines these companies’ retro branding strategies.

For instance, Poppi, a soda brand founded in 2020, uses 70s-inspired visuals and typefaces to create a playful and nostalgic brand image on their product packaging and in TV commercials while aiming to revolutionize the beverage industry by adapting the product to modern needs of consumers .



Figure 1 “Soda’s Back, but Better”, Poppi (year)

The eco-conscious toilet paper company Who Gives a Crap leverages vintage-style packaging and humor to add charm to an otherwise functional product. Their advertising style, hippie design and messaging is reminiscent of the 70s activist slogans, but more humorous “Make farts not war” (*Who Gives a Crap AU*, 2025.).



Figure 2 “MAKE FARTS NOT WAR”, Who Gives a Crap (2021)

In reality the direct applicability of current insights into traditional retro branding against the unique characteristics of the FMCG context is questionable, as these new brands lack the foundational element of heritage. Thus most of existing literature is situated within categories characterized by higher brand involvement and established heritage, such as the automotive or fashion industry (Brown et al., 2003; Muehling et al., 2004). These settings allow for the revival of dormant brands and products by leveraging narratives connected to their heritage. However, the FMCG sector is structurally distinct. It is marked by short product life cycles, low consumer involvement, high purchase frequency, and new product launches of brands without established heritage (Bocken et al., 2022; Kuzmina et al., 2018; Muranko et al., 2021).

Against these unique characteristics, one can raise the important question about the direct applicability of current retro branding insights to the FMCG context. In particular, it remains

unclear whether retro cues can evoke affective resonance when employed by brands without heritage, and whether such cues can meaningfully induce initial consumer trial in the retail environment. Given the importance of the retail setting for consumer decision-making, and the rise of retro branding as a marketing strategy, especially among non-heritage brands, this thesis investigates how retro-themed in-store advertisements can strategically support new product launches in saturated FMCG spaces by specifically influencing trial behavior.

3.Theoretical framework

This chapter establishes the theoretical foundation of the study by first presenting the core principles of framing and sequencing theory. To deepen the understanding of how the experimental stimuli interact with individual characteristics, the chapter also integrates brand congruence theory. Together, these frameworks offer complementary perspectives that explain how consumers interpret and respond to message framing within the context of brand/product-consumer fit. The chapter concludes by deriving hypotheses grounded in this integrated theoretical perspective.

3.1 Framing

At its core, our research is focused on the communication strategies of framing and message sequencing and how they can influence consumer behaviour. By virtue of leveraging such a powerful emotion like nostalgia within retro branding, consumers already show signs of favouring products and brands that use this strategy, as the messaging is cognitively easier to process (Cattano and Guerini, 2012). Therefore, to use this strategy competitively, it is important to focus on how to optimally frame and sequence retro branding within advertising.

Starting with message framing, the idea can be traced back to Tversky and Kahneman (1981)'s decision framing theory, which explored how the framing of decisions, either positively (gain) or negatively (loss) impacted the choice that was made by individuals. In this seminal paper, the research revealed that despite wanting to be independent of frame, individuals have different preferences based on differing framings of the same problem.

This paper generated a lot of research interest in the topic, with many scholars applying framing to a variety of scenarios, which resulted in many different types of framing emerging. Levin, Schneider and Gaeth (1998) collated multiple studies from scholars in the field of framing and divided them into three different framing types: risky choice, attribute and goal. While each of the three types are still framed positively or negatively, the framing that individuals most respond to differs. For risky choice and attribute framing, positive frames are more successful than negative ones, but the inverse is true for goal framing, where emphasising a loss creates a bigger outcome, demonstrating there is no universal rule with framing.

Within the context of retailing, framing has played a particularly important role in shaping consumer purchasing decisions. One of the most well-known studies on sales promotions finds that for high-priced products, absolute price reductions (ie. in dollar terms) is seen as more favourable than relative price reductions (ie. in percentage terms) - even though the actual discount is of the same value (Chen, Monroe and Lou, 1998). In terms of the aforementioned popular gain vs loss framing strategy, loss framing induced a higher willingness to buy private

brands than positive framing, despite presenting the same information (Gamliel & Herstein, 2007).

Although gain vs loss motivations are the most popular and well-researched framing strategy, many others have been researched and found to achieve results, including abstract vs concrete (Topcuoglu et. al., 2022) and self vs other (Ekebas-Turedi et. al., 2021). However, the framing this thesis aims to explore is emotional vs rational, as introduced by Chen (2022) in their future research recommendations. Both rational and emotional strategies have proven popular within advertising in various forms, with each strategy embodying its own unique appeal. The rational advertising approach ties more closely to the earlier mentioned decision-making theories such as Levin, Schneider and Gaeth (1998)'s attribute framing. By focusing on the product's positive benefits, consumers are said to act logically and pay attention to the persuasive and practical nature of the arguments about these attributes (Albers-Miller & Stafford, 1999). Meanwhile, emotional appeals rely more on the previously-defined gain vs loss framing (Tversky and Kahneman, 1981), where either positive or negative emotions can be triggered to motivate a purchase, such as by highlighting the joy a consumer experiences by consuming a product, or inversely on the shame or fear they will feel if the product goes unconsumed (Albers-Miller & Stafford, 1999; Leonidou & Leonidou, 2009).

Therefore, while rational messaging aims to trigger higher-order, informational processing as it is logic-driven, emotional messaging, whether the emotion is positive or negative, is evidenced to persuade and attract consumers by inducing their feelings (Lim. et. al., 2018). Furthermore, research shows that there is a reciprocal relationship between an emotional and rational approach. When an emotional ad induces positive feelings, the ad is perceived as more credible, and when an informational, or in other words rational, ad encourages the consumer to evaluate the product's credibility, the consumer experiences more positive feelings (Yoo & MacInnis, 2005). While this study used separate ads to investigate the effects of the emotional and rational approaches, there is a clear pattern of mutual reinforcement which suggests that using both together in the same message will enhance both credibility and positive feelings towards the product, resulting in a willingness to buy.

Applied to the context of retromarketing, the 'emotional' aspect of the messaging we intend to test will aim to trigger feelings of nostalgia around the past to trigger a willingness to try the product - whether that's the consumer's own past or a cultural movement at a previous point in time, potentially before they were born (Leonidou & Leonidou, 2009). Meanwhile the 'rational' aspect of the messaging we intend to test will focus on addressing and highlighting more present consumer needs and modern advancements - such as providing the same classic product but with fewer preservatives or infused vitamins (Leonidou & Leonidou, 2009). By combining the emotional reminders of the past with the rational updates to bring the product into the present

within the same message, this framing strategy represents retro marketing and offers a structured approach to measuring retro brand communication effectiveness.

3.2 Message Sequencing

The backbone of sequencing theory is that individuals understand events, including messages, in a chronological order (Lim et. al., 2018). Applied to messages, the order of the words, and the subsequent ideas they carry, play a crucial role in shaping how the recipient interprets the meaning of the message. For example, 'Message wrapping' is a type of message sequencing, where, in the case of a positive set of reviews, placing a negative message in between two positive ones made the perceived usefulness of the online review higher than sandwiching a positive message in between two negative ones, and vice versa (Purnawiran et. al., 2012). Not only does this study show the impact of message sequencing, but also the role of framing and how the two concepts are intertwined.

There is evidence to show that emotional vs rational framing has an impact on brand attitudes, which are often an indicator of consumer purchase behaviour and intention. However, there are conflicting views within existing studies: regarding not only which sequence is more optimal, emotional-to-rational or rational-to-emotional, but also which state, emotional or rational, is the bigger driver of willingness to try a new product overall.

Lim et.al. (2018) found that sequencing E2R results in more positive brand attitudes than R2E when it comes to product brands. This can be explained by both the start-up effect, where there is increased attention and slower informational processing of the words at the beginning of a message - ideal conditions for emotional messaging to act as a hook - and the wrap-up effect, where information processing is at its fastest and the reader is trying to logically tie up the message - ideal conditions for rational messaging (Kuperman et. al., 2010). However, there are many scholars which suggest that rational framing is actually more successful, whether that is measured in response rate (Marzouk et. al., 2022), positive attitude towards an advertisement (Stafford & Day, 1995), ad content recall or purchase intention (de Pelsmacker et. al., 2002).

Whether an emotional or rational appeal is more effective can largely be determined by the attributes of the audience viewing the advertisement. One reason for a tendency towards either an emotional or a rational approach has been found to be determined by age of the recipient, as well as product type, where consumers aged 65 and above had more of a tendency towards emotional ads, regardless of product type, while consumers aged 18-25 preferred emotional advertisements for hedonic products and rational advertisements for utilitarian products (Drolet, Williams and Lau-Gesk, 2007).

Other scholars have found that those who appreciate logic and like using facts to make purchasing decisions find rational advertising more appealing, while those who are less inclined to listen to facts find an affective, emotional message more appealing (Leonidou & Leonidou, 2009). This inclination towards thinking has been termed need for cognition (Cacioppo & Petty, 1982), which measures how much a person enjoys and engages in effortful cognitive activities. It can therefore be deduced that those who score high in need for cognition would prefer rational messages, with those who score low in need for cognition, and therefore preferring higher emotional involvement settings, would prefer emotional messages.

While it's evident that whether emotional framing is more successful than rational framing, or vice versa, is dependent on various audience attributes, what is certain is that both strategies are successful. As the audience in a retail environment is wide - spanning large age groups, need for cognition and more that cannot be controlled by a brand - it is prudent to include both emotional and rational appeals in an advertising messaging strategy to maximise impact. However, there is little research on messages that combine emotional and rational strategies together outside of Lim. et. al. (2018), with most papers examining the strategies separately which is seen as a limitation of existing research (Habiba et. al., 2021). There is also evidence to suggest that there are many elements to sequencing which determine how the information will be processed beyond the order of the words. For example, Petty et. al. (2001) find that recall of attributes, which plays a role in determining consumption intentions, depends on how a message is 'chunked', or organised clearly into sections, as well as the respondent's need for cognition.

While Chen (2022) employed both emotional and rational messaging framings in their stimuli, there was no focus on sequencing and the two framings were not used together in one message. Furthermore, while the message itself was considered in this paper as part of simulating a retro marketing strategy, it was also combined with multiple other changes - including to packaging and other visual elements such as the logo. Therefore it is not known if in isolation, messaging, particularly how it's framed and the sequence in a retromarketing setting has any effect on consumer purchase behaviour.

Combined, the lack of clarity within existing research and underlying complexity & context dependence makes it difficult to determine the optimum sequence using both emotional and rational appeals, which is what our paper aims to address.

3.3 Brand Congruence Theory and the Self-Congruity Framework

Brand congruence theory suggests that consumers are more likely to form favorable attitudes towards brands that align with their self-concept, traits and characteristics (Abosag et al., 2019; Karampela et al., 2018). This is due to the idea that consumers tend to engage in a “psychological comparison between a brand’s characteristics and their own personality traits” (Malhotra, 1988; Sirgy, 1982 as cited in Chen, 2022, p. 775). The theory is grounded in the idea that consumers evaluate brands in light of their personal traits and characteristics (Levy 1959). When there is congruence between the characteristics of a brand and those of the consumer, more favorable evaluations and behavioral intentions are likely to occur (Chen, 2022).

Early work by Levy (1959) first proposed that brands function as symbolic reflections of one's personality. Aaker (1997, p.347) describes brand personality as “a set of human characteristics associated with a brand.” A considerable amount of studies have since shown that a strong match between brand personality and consumer personality positively influences brand preference, loyalty, and purchase intentions (Sirgy, 1982; Malhotra, 1988; Govers & Schoormans, 2005; Chen, 2022). Thus brands that serve as symbolic or value-expressive functions are especially likely to be chosen when they are consistent with the way consumers see themselves or wish to be seen (Belk, 1988; Keller, 1993; Escalas & Bettman, 2005).

Expanding on this, self-congruity theory offers a more nuanced perspective by distinguishing between two forms of congruence: personality trait congruence and functional congruence (Sirgy et al., 1991; M. Sirgy et al., 2000; Aguirre-Rodriguez et al., 2011; M. J. Sirgy, 2018). Personality trait congruence refers to the perceived similarity between the brand's personality traits “the set of human personality traits that are both applicable to and relevant for brands” and the consumer’s own personality traits, defined as consistent patterns of thought, feeling, and behavior (Azoulay and Kapferer 2003, p.151, as cited in Geuens et al., 2009). The second type, usually termed “functional congruence”, is the degree of congruence between functional attributes that consumers expect, and the functional attributes delivered by the brand (Voorn et al., 2020, p. 49). In other words, consumers evaluate brands both symbolically (Does this brand reflect who I am?) and functionally (Does this product meet my practical needs?). Functional congruence has been found to be predictive of brand attitudes, particularly when consumers perceive that the product will fulfill both utilitarian and expressive needs (Voorn et al., 2020). The greater the alignment, the more likely consumers will positively evaluate the products of the respective brand (Johar & Sirgy, 1991; Aguirre-Rodriguez et al., 2011).

In the case of retro branding, these two congruity mechanisms are of particular importance. Retro strategies are inherently hybrid as they revive nostalgic cues tied to the past while simultaneously offering modernized, innovative elements (Brown et al., 2003). Hallegatte et. al. (2018) points out that the primary goal of retro branding is to reinforce associations with the past, which aligns with the tendencies of consumers high in nostalgia proneness (Juhl et al., 2019). Such consumers

are especially receptive to marketing that evokes nostalgic memories, as retro branding allows them to relive an idealized, yet updated version of the past (Juhl et al., 2019). At the same time, retro branding often involves product innovation, functional updates to past forms which can appeal to consumer tendencies toward openness and novelty-seeking (Chen, 2022). This combination of the old and the new suggests that retro branding strategies do not merely hinge on congruence with nostalgic dispositions but also rely on alignment with more forward-oriented traits and characteristics such as consumer innovativeness (Merlo & Perugini, 2015). In this context, consumers may respond more positively to retro-themed advertising messages when they perceive the brand as simultaneously reflecting the emotional connection to the past and catering to their desire for modern functionality. Thus, brand congruence theory and self-congruity theory provide a valuable framework for understanding how retro branding can effectively appeal to consumers through alignment on both emotional-symbolic and functional-utilitarian dimensions.

3.3.1 Nostalgia Proneness as Personality Trait Congruence

Nostalgia evokes predominantly positive emotions and a sense of social connectedness by drawing on personal or collective memories from the past (Hallegatte et al., 2018; Kelley et al., 2022). In retro branding contexts, these emotionally rich cues serve as a strategic tool to connect with consumers on a symbolic and affective level (Chen, 2022). Nostalgia proneness, a stable psychological trait, captures individuals' natural tendency to frequently recall and emotionally respond to nostalgic memories, and therefore plays a crucial role in determining how consumers respond to such messaging (Holbrook, 1993).

Research on nostalgia owes a great deal to Holbrook, who was among the first to propose that certain individuals are more prone to nostalgic feelings than others (Holbrook, 1993). Within his line of research, he introduced the psychological variable “nostalgia proneness” and developed the widely cited “Nostalgia index” to measure this trait (Holbrook, 1993, 1994). His conceptualization has been especially influential and referred to in consumer research, particularly in explaining preferences for products from the past, retro branding and advertising. However, despite its widespread use, Holbrook’s framing of nostalgia proneness as a general preference for the past has drawn increasing criticism and diverges from more nuanced definitions of nostalgia (Hallegatte & Francois, 2014). This approach draws on Davis’s (1979) early conceptualization of nostalgia as not only linked to an attraction to the past but also to negative feelings for the present and concerns about the future.

Yet, this conceptualization is increasingly at odds with the hybrid logic of retro, especially in the FMCG sector, where nostalgic cues are deliberately blended with innovation and modernity. Thus, to understand consumer response to retro, this thesis conceptualizes nostalgia proneness as an personality disposition towards nostalgic reflection, not a fixed preference for the past or a rejection of the present (Hallegatte & Francois, 2014). This perspective aligns with the

Southampton Nostalgia Scale (SNS), which offers a more theoretically consistent and conceptually valid way to assess how nostalgia proneness influences consumer responses to retro advertising in modern retail environments (Sedikides et al., 2008). In this line of reasoning, the frequency of nostalgic experiences rather than specific evaluative attitudes toward time periods become central to the thesis, allowing for the coexistence of nostalgic sentiment and future orientation. Its use in this study supports the view of nostalgia proneness as a trait-level moderator that may enhance consumer receptiveness to retro themed advertising, particularly fostering willingness to try new, unfamiliar brands when nostalgic cues are perceived as congruent.

This relationship between individual disposition and message effectiveness has been observed across retro branding studies (Chen, 2022). The proposed relationship finds support in studies that demonstrate how the trait nostalgia influences consumer response to retro branding. Prior research has shown that nostalgia-prone consumers are especially receptive to retro branding strategies, as these revive or update idealized past experiences that resonate with consumers' emotional preferences for products related to the past (Dion & Mazzalovo, 2016; Chen, 2022). Thus, retro marketing and advertising strategies depend on nostalgia proneness and moreover function as a form of symbolic self-expression and emotional activation. They allow consumers to express distinctiveness and reinforce their sense of identity through consumption (Escalas & Bettman, 2005). This is particularly relevant for individuals high in nostalgia proneness, who seek emotional continuity with the past and respond positively to cues that evoke cherished memories or specific periods of time.

In line with brand congruence theory, this alignment between consumer disposition and brand messaging can be referred to as personality trait congruence - a form of self-congruence that occurs when consumer's traits (e.g., nostalgia proneness) match the symbolic or emotional meanings conveyed by a brand (Sirgy, 2018). Building on that, the study by Chen (2022) demonstrated that both nostalgia proneness and self-construal moderate the effect of retro branding strategies on consumer outcomes, underscoring the relevance of personality trait congruence. Moreover, the findings suggest that retro branding can enhance brand attitudes and purchase intentions among high nostalgia-prone consumers due to this perceived alignment. On the basis of self-congruence theory, these positive effects can be explained by the perceived congruence between the evoked brand characteristic through emotional brand messaging and individual consumer characteristics (Voorn et al., 2020). This perspective is further supported by research indicating that this self-congruence can also be evoked through carefully framed textual elements in advertising that emphasize for example nostalgic themes (Gardner et al., 1999; Kühnen et al., 2001 as cited in Chen, 2022).

3.3.2 Consumer Innovativeness as Functional and Personality Trait Congruence

While nostalgia proneness captures consumers' emotional receptivity to retro cues and past-oriented appeals, it does not fully account for how consumers approach new product adoption in a retro marketing context (Cattaneo & Guerini, 2012). This is particularly relevant in the FMCG context where retro advertising often merges nostalgic stimuli with novel product offerings (Grębosz & Pointet, 2015). To complement nostalgia proneness, this study integrates Domain-Specific Innovativeness (DSI) as a moderator and key personality trait (Goldsmith et al., 1998). Goldsmith and Hofacker (1991) first introduced the concept of DSI, distinguishing it from innate innovativeness which reflects a general trait across categories. DSI however captures a consumer's tendency to adopt innovations within a specific product category (Goldsmith & Hofacker, 1991). Whereas nostalgia-prone individuals may be drawn to the emotional and symbolic aspects of retro marketing, consumers high in DSI are likely to resonate with the product's new and innovativeness (Goldsmith & Hofacker, 1991; Huotilainen et al., 2005).

There is considerable empirical evidence that stable personality traits, such as consumer innovativeness affect consumer responses to novel products and influence behavioral intentions like willingness to try (Goldsmith et al., 1998; Huotilainen et al., 2005; De Barcellos et al., 2009). Consumer innovativeness has been conceptualized as "... a generalized consumer trait that exerts a positive effect on the trial probability of new offerings across the broad spectrum of goods and services" (Steenkamp & Giles, 2003, p.369). The Domain-Specific Innovativeness (DSI) scale captures this trait within a particular product category, assessing both the motivational and behavioral tendencies to engage with new product experiences (Goldsmith & Hofacker, 1991). Therefore it plays a crucial role in legitimizing innovation, as highly innovative consumers are often early adopters whose acceptance accelerates broader market diffusion (Huotilainen et al., 2005). Particularly in retail categories like food and beverages, where product launches by new brands are frequent, personality characteristics such as consumers high in DSI play a critical role in predicting consumer openness to unfamiliar offerings (Huotilainen et al., 2005).

Therefore this study positions consumer innovativeness as a psychological trait that may enhance responsiveness to retro-themed advertising when paired with congruent message framing of brand characteristics.

From a self-congruence theory perspective, consumer innovativeness offers a dual conceptual value: it represents both a personality trait and a functional orientation. First, as a personality trait, it reflects an individual's disposition toward novelty and innovation (Goldsmith & Hofacker, 1991, 1998). Second, it reflects functional congruence, defined as the perceived fit between the functional attributes of a brand and the utilitarian goals or problem-solving tendencies of the consumer (Voorn et al., 2020; Aguirre-Rodriguez et al., 2012). This means that innovative consumers are more likely to respond positively when a brand communicates technological advancement or innovative features, especially if such features align with their

self-image as someone who values novelty and change. Importantly, DSI becomes especially relevant when retro marketing emphasizes improved functionality through innovation (Goldsmith et al., 1998). In such cases, the text-based messaging may frame the product not just as nostalgic, but as enhanced by modern technologies. If this message is congruent with the consumer's level of DSI, positive responses such as greater willingness to try are likely to follow (Steenkamp & Giles, 2003, p.369).

3.3.3 Dual Alignment: Why Retro Marketing Requires Both

The concept of retro marketing inherently involves a strategic duality. On the one hand, it draws on emotional and symbolic associations with the past by evoking familiarity. On the other hand, it incorporates improvements by means of advanced technology and innovation (Brown et al., 2003a). This hybrid nature makes retro marketing particularly complex as it must simultaneously satisfy consumers' longing for the familiar and their desire for novelty. However this combined approach also offers a nuanced understanding of how personality traits shape consumer responses to retro-themed advertising for new FMCG brands and their product offering.

This duality suggests that the effectiveness of retro advertising may depend on its ability to generate congruence on two aspects:

1. Personality trait congruence, as seen in the alignment between a consumer's nostalgia proneness and the characteristics or symbolic attributes communicated through the emotional content of the brand; and
2. Functional and trait-based congruence, as observed in the fit between a consumer's domain-specific innovativeness and the product's modernized features or advanced innovative framing (Goldsmith & Hofacker, 1991, 1998; Azoulay and Kapferer 2003, p.151; Voorn et al., 2020).

Drawing from self-congruence theory, which posits that consumers prefer brands whose characteristics align with their self-concept, this study investigates how both types of congruence function in a hybrid duality. Prior studies have confirmed that both symbolic (trait-based) and functional (goal-based) congruence influence consumer brand preferences and behavioral outcomes (Aguirre-Rodriguez et al., 2012; Sirgy, 2018). Therefore self-congruence theory proposes that consumers choose brands based on perceived functional congruence as well as personality traits congruence (Johar & Sirgy, 1991; Aguirre-Rodriguez et al., 2011).

In this sense, the moderators applied to in this thesis, reflect complementary psychological dispositions that capture the duality of retro marketing. Just as the brand blends past with present and future, consumers who are both nostalgic and innovative may experience a deeper dispositional fit, leading to enhanced behavioral intention. This dual congruence logic provides the theoretical foundation for testing both moderators simultaneously and interpreting their individual and joint effects on consumer outcomes in the FMCG retail space.

4. Synthesis and hypothesis development

This section consolidates the conceptual foundations laid out in the preceding theoretical framework and articulates the hypotheses guiding this study. The proposed model integrates insights from message framing and sequencing theory, nostalgic advertising literature, and consumer innovativeness research to explore how retro-themed in-store advertising influences consumer behavior in the FMCG context. Specifically, it examines how emotional-to-rational versus rational-to-emotional messages affect the key outcome variable willingness to try a new, fictitious soda brand. As previously noted, scholars have found that the emotional-to-rational sequence produces more positive consumer attitudes compared to the inverse, due to the typical human processing order of positive, emotional statements followed by reassuring, rational validations being found to be more familiar and comprehensive (Lim, 2018). Therefore, the emotional-to-rational sequence type is being used as the treatment group within this thesis, with the rational-to-emotional sequence as the control. Moreover, the model incorporates nostalgia proneness and consumer innovativeness as moderators, acknowledging that personal predispositions can shape how consumers perceive and respond to retro-themed messages (Johar & Sirgy, 1991; Aguirre-Rodriguez et al., 2011). Drawing from this integrated perspective, four hypotheses have been developed to test both direct and interaction effects on consumer behavior.

As outlined in message sequencing theory, changing the order of the words in a sentence has been shown to significantly affect consumer behavior (Purnawirawan et al., 2012). Lim (2016) offers a compelling rationale for differences in consumer behavior based on the advertised message, demonstrating that the order in which emotional and rational appeals are presented can meaningfully influence consumer perceptions and attitudes. Specifically, E2R sequences tend to be more effective in fostering favorable responses than R2E sequences (Lim, Teh and Ahmed, 2016). Initial emotional appeals create an immediate affective attitude, drawing attention and evoking nostalgia, while subsequent rational arguments help reinforce and legitimize the emotional response, leading to increased persuasion and consumer confidence. In contrast, R2E message structures may interrupt this processing flow, potentially weakening the overall message impact, particularly in contexts where emotional resonance is central, such as retro-themed advertising. This sequencing effect becomes especially relevant in the FMCG category, where consumer decisions are often impulsively made and emotionally guided (Hoch & Loewenstein, 1991; Abrahams, 1997; Cho et al., 2024). In this context, willingness to try (WTT) serves as a key behavioral outcome, indicating consumers' intention to engage with a novel product (Goldsmith & Hofacker, 1991). These theoretical insights form the foundation for the first hypothesis:

Model 1 - H1: There is a difference in consumers' willingness to try (WTT) between brands that use emotional-to-rational and rational-to-emotional message framing within retro marketing.

As outlined in brand congruence and self-congruity theory, consumers tend to respond more favorably to brand communications that align with their personality traits and identity-relevant characteristics (Sirgy, 1982; Malhotra, 1988; Govers & Schoormans, 2005). Retro marketing symbolically evokes nostalgic cues that can mirror the emotional disposition of consumers high in nostalgia proneness (Chen, 2022). This alignment fosters personality trait congruence, wherein the emotionally resonant characteristics of the brand, communicated through nostalgic textual framing, reflect the consumer's inherent tendency to seek emotional connection with the past (Chen, 2022). Consumers with high nostalgia proneness are not only more likely to perceive this symbolic alignment, but are also more emotionally receptive to retro marketing strategies, which increases message effectiveness. Prior studies have shown that such perceived congruence between a brand's nostalgic appeal and the consumer's own identity can enhance brand attitudes, purchase intentions, and behavioral outcomes (e.g., Kühnen et al., 2001; Gardner et al., 1999). Furthermore, E2R message sequences may amplify this effect by emphasizing the nostalgic cues early on, thereby deepening the personal relevance of the message and encouraging willingness to try. These theoretical insights form the foundation for the second hypothesis:

H2: Consumers with a higher level of nostalgia proneness will exhibit greater willingness to try (WTT) a new retro-branded product.

H2a: The effect of emotional -to- rational (vs. rational-to-emotional) message framing within retro marketing on WTT will be stronger for consumers with a high level of nostalgia proneness.

As outlined in brand congruence and self-congruity theory, consumer responses to brand messages are influenced by the perceived alignment between brand characteristics and individual personality traits (Govers & Schoormans, 2005). Domain-specific innovativeness (DSI) reflects a consumer's trait-level tendency to seek out and adopt innovations within a particular product category (Goldsmith & Hofacker, 1991). Thus, it captures both motivational and behavioral predispositions toward engaging with new and unfamiliar products. Prior research shows that consumers high in innovativeness exhibit stronger behavioral intentions towards novel offerings and respond with an increased intention towards new products (Huotilainen et al., 2005). This can be explained through the lens of personality trait congruence, as innovative consumers are more likely to respond positively when the characteristics communicated in an advertisement message like technological advancement or functional updates match their self-image as novelty-seeking.

Furthermore, functional congruence plays an additional role, as consumers evaluate whether the claims of the brand align with their expectations for innovation and functional performance (Voorn et al., 2020). In this way, the rational sequence of an emotional-to-rational framing may serve to legitimize the brand's offering and provide decision confidence. Thus, consumers high in DSI are expected to experience a stronger fit with retro-themed messages that highlight

innovative and updated product aspects. This perceived congruence is likely to enhance message effectiveness, leading to increased WTT.

H3: Consumers with a higher level of consumer innovativeness will exhibit greater willingness to try (WTT) a new retro-branded product.

H3a: The effect of emotional to rational (vs. rational-to-emotional) message framing within retro marketing on willingness to try will be stronger for consumers with a high level of consumer innovativeness.

While previous hypotheses note that the emotional-to-rational message sequence on its own leads to higher WTT, it is important to recognise that there are some individual characteristics that consumers have which may moderate the strength of this interaction. As addressed by section 4.2 on personality and trait congruence, there is no existing scale for measuring a consumer's proneness to retro, in the same way that there is a nostalgia scale. However, based on retro's configuration as the combination of "old-fashioned forms with cutting-edge functions... thereby harmoniz[ing] the past with the present" (Brown et. al., 2003), such a scale can be fashioned out of two existing scales: nostalgia proneness and domain-specific innovativeness.

Where those who are more nostalgia-prone are more likely to be positively responsive to retro marketing strategies due to their associations with the past (Dion and Mazzalovo, 2016), scoring high in DSI indicates whether the respondent would actually make the leap to purchase behaviour for a new product, especially one that has functional updates to the 'old' version'. In this line of argumentation nostalgia functions as the defining theme of retro marketing, while innovativeness acts as the behavioral enabler that aligns with the rational, modernized component of retro advertising. This dual-trait approach suggests that retro marketing is best captured through the combination of both dispositions.

As outlined in the conceptualisation on retro (Brown et al., 2003a) and congruence theory, consumer responses to brand communications are strongest when there is alignment between the consumer's traits and the symbolic or functional characteristics of the brand (Johar & Sirgy, 1991; Aguirre-Rodriguez et al., 2011). Retro marketing is fundamentally hybrid in nature, combining nostalgic cues with functional innovations, this study suggests that this also reflects on consumers' personality traits. Similarly, consumers are not one-dimensional; they embody multiple, coexisting personality traits (Voorn et al., 2020). In this line of reasoning, behavioral responses to retro-themed in-store advertising may be influenced not only by congruence with consumers' proneness to nostalgia, but also with their disposition to innovation.

This extends congruence theory beyond the influence of one isolated trait to the hybrid nature of the consumer. Therefore, consumers high in nostalgia proneness and innovativeness may

experience a stronger sense of personality and functional trait congruence with the advertised brand. Based on the idea of congruence theory, triggering two complementary aspects of the consumer's personality simultaneously through retro-themed advertising may have a stronger impact on behavioral intentions rather than activating each trait individually. Therefore, scoring high in both measures is needed to be 'prone' to retro and consequently enhance behavioral outcomes such as willingness to try. This leads to the central fourth hypothesis of this study:

H4: The effects of emotional to rational (vs. rational - emotional) message framing within retro marketing on WTT will be stronger for consumers with a high level of nostalgia proneness and a high level of domain-specific consumer innovativeness.

4.1 Research Model

Drawing upon the theoretical framework and the hypotheses formulated, a comprehensive research model was constructed to guide the investigation. This model serves as the conceptual foundation of the study, delineating the relationships between the independent and dependent as well as moderating variables and providing a structured framework for analysis and interpretation.

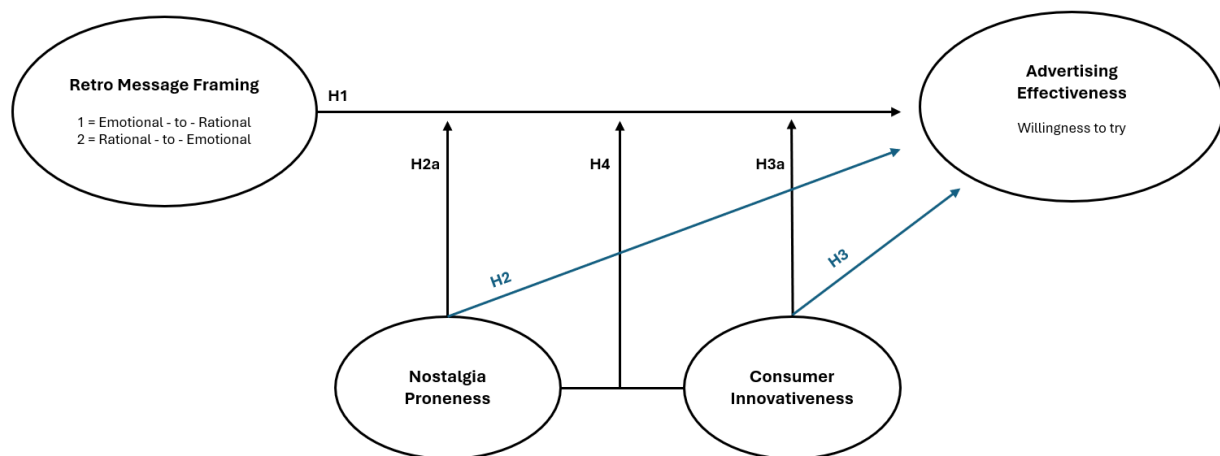


Figure 3 Research Model

5. Methodology

To empirically validate the formulated hypotheses, the following subchapters elucidate the methodological approach of the study. Beginning with the research philosophy, the chapter proceeds to examine the research approach and design, encompassing quantitative methodology and a cross-sectional design. It further addresses the chosen sampling techniques, the data collection methods, operationalization strategies, and the design of the questionnaire

5.1 Research Philosophy

The research philosophy adopted in this thesis subscribes to an internal realist ontological perspective, assuming that reality exists causally independent of human perception and operates according to causal principles. However, it also recognizes that this reality cannot be accessed directly (Easterby-Smith et al., 2021, p.74). Instead, our understanding of it must be inferred indirectly through observable patterns and phenomena. In line with this view, truth exists, and facts are concrete, though they remain partially hidden and must be uncovered through systematic investigation (Easterby-Smith et al., 2021, p.74). This ontological stance aligns with a positivist epistemology, which emphasizes the acquisition of objective knowledge through empirical observation and measurement (Easterby-Smith et al., 2021, p.71). Positivism furthermore posits that reality and truth exist independently of any observer's perceptions and can be accessed through the collection and analysis of empirical data. This enables the identification of regularities in behavior, the testing of theoretical propositions, and the development of new insights based on verifiable findings.

In line with these philosophical foundations, this study employs a survey as the principal research technique. Specifically, surveys facilitate the systematic collection of quantifiable data, enabling the objective measurement and analysis of constructs and the statistical testing of hypotheses derived from theory (Easterby-Smith et al., 2021, p.103). The integration of internal realism with positivist epistemology underlines this study's commitment to uncovering objective truths through structured methodological approaches. The chosen research design reflects this alignment, ensuring coherence, robustness, and the generation of scientifically valid and credible insights.

5.2 Research Approach

Within the realm of research methodology and data collection, two primary paradigms are typically employed: quantitative and qualitative research. Quantitative methods find themselves suited to studies that aim to test hypotheses through measurable outcomes, grounded in an objective perception of reality, allowing for statistical analysis and result generalization (Easterby-Smith et al., 2021, p.80). In contrast, qualitative methods seek to explore complex

social phenomena in depth, mainly through interpretive analysis of subjective data. Thus recognizing that reality varies based on individual perception (Easterby-Smith et al., 2021, p.81). Considering that this study aims to yield measurable outcomes and statistically analyze various hypotheses rooted in established theory, a deliberate decision was made to adopt a quantitative, deductive approach. This approach supports the aim of assessing the effects of retro message framing and sequencing on consumer willingness to try (WTT), and how these relationships may be moderated by individual personality trait differences. The adoption of a survey as the principal data collection technique allowed for the systematic gathering of quantifiable data, enabling objective measurement and hypothesis testing. Therefore it ensures alignment between the philosophical foundations of internal realism and positivism and the methodological choices made in this study.

5.3 Research Method

To examine potential causal relationships between variables, the study employed a between-subjects, cross-sectional experimental design (Easterby-Smith et al., 2021, p.110). Participants were randomly assigned to one of two experimental conditions: emotional-to-rational message framing (serving as the control group) or rational-to-emotional message framing. This structure was essential to isolate the impact of message sequencing while avoiding carryover effects that could occur in within-subjects designs.

The experiment was embedded in an online survey, in which participants were exposed to a fictitious FMCG soda brand and accompanying retro-themed in-store advertisements. This design enabled systematic comparisons of willingness to try (WTT) across conditions while minimizing confounding influences through random assignment. The intentional use of a fictional brand ensured to eliminate potential biases stemming from pre-existing brand knowledge and associations, ensuring that observed effects could be attributed to the message framing and retro cues (Muehling & Pascal, 2011).

To contextualize the experiment and simulate a hypothetical but realistic shopping experience, participants were first introduced to a brief retail scenario through a short written vignette. This text described a situation in which they encountered a product from a new FMCG brand at an advertising display in a physical store. Immediately after, participants were shown an in-store advertisement mock-up in which the stimuli (R2E vs. E2R) was embedded. Similar to previous studies, the textual elements were manipulated in order to appeal to nostalgia through emotional and innovativeness through rational cues (Burnkrant & Unnava, 1995; Muehling et al. 2013).

5.4 Reliability and Validity

By measuring reliability, it is possible to assess the consistency of our results and whether the same scores would be achieved if the test was repeated (Easterby-Smith et. al., 2021). To

maximise reliability for our quantitative research, a 7 point Likert scale has been chosen over, for example, a 5 point scale as the increased number of options appeals more to the respondent's logical way of thinking and has been shown to increase the likelihood of respondents being able to choose an option that more closely resembles their true response (Joshi et. al., 2015).

To measure reliability, Cronbach's alpha is a common measure particularly within social sciences (Bonett & Wright, 2014). This research will use a minimum Cronbach's alpha value of 0.7 (where the range is between 0 and 1) to determine reliability within the dataset (Christmann & Van Aelst, 2006). Achieving a Cronbach's alpha of 0.7 or higher suggests that each item within the dataset works together to measure the same concept.

While there are many different types of validity, at its core validity measures whether the results can be trusted (Navarro & Foxcroft, 2025). The two main types of validity that will be focused on are internal and external validity. To maximise internal validity, an important aim for experimental research designs, there is both an experimental group (E2R sequence) and a control group (R2E sequence) (Easterby-Smith et. al., 2021). As well as this, respondents are randomly assigned to each group where only the sequence is changed and all other elements of the survey, from the question wording, to the order of the questions, is kept the same.

Having a high level of external validity implies that our results can be generalized and applied to the wider population (Easterby-Smith et. al., 2021). The survey being sent out solely through a paid research platform does have an impact on validity due to the risk of volunteer bias, where those who voluntarily sign up and participate in surveys on research platforms such as Prolific are more likely to be open to new experiences in a way that may not be representative of the general population (Dollinger & Leong, 1993). However, significant efforts have been made to uphold external validity through other means, such as keeping the introductory details about the survey as general as possible while still being informative, so results are not significantly skewed by a disproportionate number of people taking the survey who have strong opinions about nostalgia or retro strategies (Keusch, 2013).

5.5 Research Design

This study adopts a cross-sectional, experimental between-subjects design to investigate the effects of message sequencing, specifically, E2R vs. R2E framing on consumers willingness to try a fictional retro soda brand. This design allows for the controlled manipulation of key variables and the measurement of immediate responses, aligning well with the study's goal of testing causal mechanisms within a specific consumer context (Easterby-Smith et al., 2021, p.110).

The choice of the design was also informed by practical considerations, including limited time and resource constraints common in student-led research. However, it still enabled efficient data collection and analysis within the required academic timeframe, while allowing for meaningful experimental control and hypothesis testing. Therefore the survey method allowed the collection of standardized data from a relatively large and diverse sample in a cost-effective and time-efficient manner. In order to make valid research contributions, our research design was similar to many previous studies and utilized many of the same methods for measurements, forming the questionnaire and experimental design. Thus we can ensure that our results are comparable and relevant in relation to previous studies findings.

Moreover the cross-sectional nature of the study limits its ability to capture changes in behavior over time, restricting the scope of interpretation. A longitudinal design might provide richer insights into the enduring effects of message framing on consumers actual behavior (Easterby-Smith et al., 2021, p.142). While potentially valuable, such design was not possible within the logistical scope of this study, but it represents a fruitful direction for future research. However, the cross-sectional experimental study design allowed us to examine the causal relationship between the dependent and independent variables (Burns & Burns, 2008). The research was conducted as a cross-sectional in between subject experimental study, consisting of 2 sperperate tests. Thus allowing us to examine the causal relationship between the independent and dependent variables (Burns & Burns, 2008). As our hypothesis stated, we believed nostalgia proneness and consumer innovativeness to have an interaction effect with retro- themed advertising and the dependent variable WTT.

The chosen design allowed for an experimental manipulation of the retro themed message variable, while measuring the psychological traits of consumers. The independent variable, retro themed advertising message, was manipulated through the order of the emotional (nostalgic) and rational (innovative) elements, which on the one hand were intended to elicit nostalgia and on the other hand stress novelty and innovation. Both conditions were matched in length, tone and content, ensuring that the key distinction was the order of the emotional and rational element. This allowed for examining whether differences in WTT are attributable to the experimental conditions, focusing tests of sequencing effects .

The data analysis was conducted using Jamovi, an open-source statistical platform well suited for linear modeling and interaction analysis. The platform was selected due to its user-friendly interface, robust statistical capabilities, and transparent workflow, which made it particularly suitable for conducting the diverse set of analyses required for this study.

As part of the preliminary analysis:

- Descriptive statistics were computed to observe distributions, means and standard deviations across variables.

- Reliability of all multi-item scales was assessed using Cronbach's alpha to confirm internal consistency (Easterby-Smith et al., 2021, p.446).
- A manipulation check was conducted using independent samples t-tests to assess whether the stimuli elicited the intended nostalgic response. This check confirmed that the retro-styled advertisements triggered nostalgic feelings, validating the theoretical mechanism under investigation.
- Lastly a Pearson's correlation matrix was constructed to explore initial relationships among variables (Easterby-Smith et al., 2021, p.368).

Based on these assumption checks, an independent sample t-test was used to examine whether the IV had a significant effect on the DV. The main results were then derived through Multiple Linear Regression Models, which enabled us to test for:

- The main effect of message sequencing on WTT
- The moderating roles of nostalgia proneness and consumer innovativeness
- The three-way interaction between message framing, nostalgia proneness, and consumer innovativeness.

A follow up, GAMLj General Linear Model was used to explore interaction effects more in depth. Regression analysis as a method allowed to analyse the effects of retro themed advertising on initial trial behavior and examine the potential moderating effects of consumer characteristics on that relationship. Ultimately, this method of analysis allowed us to either accept or reject our hypotheses.

5.6 Data Collection Method and Sampling

The sampling methodology employed in this study adopts a non-probability sampling approach, necessitated by constraints in time and resources. Within this framework, quota sampling strategy was chosen to ensure balanced representation across key groups, relevance to the product category under investigation, offering greater control and diversity compared to convenience sampling. Recognizing the diverse linguistic backgrounds of potential participants, the questionnaire is provided only in English. This decision ensures inclusiveness and facilitates ease of participation for the majority of respondents. In contrast to secondary data, which typically rely on pre-existing datasets not tailored experimental manipulations, this study collected primary data to directly test the hypothesis under controlled conditions. While secondary data offers advantages such as lower resource requirements and feasibility for longitudinal analysis, they provide limited control over data quality and often lack alignment with specific experimental goals. By collecting primary data through an online survey, this research was able to measure key trait characteristics and ensure high internal validity through customized stimuli.

In this thesis, data collection is facilitated through the utilization of the online survey platform Prolific, an established online platform for academic research. Participants were recruited via Prolific, known for its high data quality, transparent participant profiles, and suitability for quota-based sampling. Prolific's infrastructure supports precise targeting based on e.g., demographic filters, allowing researchers to easily apply age quotas and behavioral criteria such as product usage.

To ensure sample relevance, pre-screening criteria were applied:

- Age 18-55+
- Regular to occasional soda drink consumers
- Balanced age distribution
- Prior participation in the first survey led to exclusion from the second

These screening conditions helped to ensure that participants were both representative of general soda consumers who had not previously been exposed to any of the experimental conditions, ensuring unbiased responses and preserving the integrity of the between-subjects design. In total, (250) participants completed the study across both surveys, exceeding the recommended threshold of ten participants per condition per independent variable (Burns & Burns). This sample size supports robust statistical analysis, enables the experiment to have a greater possible effect size and allows for an increased possibility of generalized results. Data collection was conducted through Google Forms, embedded directly into the Prolific interface.

The survey was administered online in two waves:

- **First survey:** Thursday, May 1st at 2:00 PM (emotional -to- rational)
- **Second survey:** Monday, May 5th at 2:00 PM (rational -to- emotional)

Participants were randomly assigned by the Prolific system to one of two experimental conditions: *emotional-to-rational* or *rational-to-emotional* message sequencing. This randomization procedure helped ensure internal validity by eliminating selection bias and balancing individual differences across conditions. To avoid carryover effects, individuals who completed the first survey were excluded from participating in the second. This measure prevented exposure to both message frames, preserving the between-subjects experimental design.

To ensure that the visual stimuli conveyed the intended emotional and rational framing, and to assess whether they effectively elicited feelings of nostalgia or perceptions of innovativeness, we conducted a stimulus validation procedure with an independent group of respondents prior to the

main data collection (Aydinoğlu and Cian, 2014). This approach further improved the understandability, user experience, and accessibility of the survey materials, while also allowing for the identification of potential ambiguities in comprehension, ensuring that participants could provide accurate and meaningful responses.

5.7 Procedure

The platform Prolific has been used as the sole tool to gather respondents and results. One limitation of this approach is that the pool of respondents is restricted to those who are aware of and use the paid survey platform Prolific. Therefore, the selection of respondents is through a non-probability sampling approach as those who are unaware of Prolific as a platform cannot take the survey which means that some population members will be excluded. While the sampling approach can also be said to be of the voluntary type, as Prolific members choose themselves to be active on the survey platform and to fill out surveys, they will not be able to choose to take our survey specifically. Instead, survey respondents were randomly selected, and whether they receive the emotional-to-rational or rational-to-emotional sequencing stimuli is also random. This allows for a more representative sample to be created, avoiding the possibility of respondents self selecting the survey due to interest in the corresponding subject matter (Keusch, 2013).

Even so, the effect of this limitation is minimal and still constitutes a better, more randomised approach to sampling that will allow for inferences to be made on behalf of the whole population. The platform has also been previously used and recommended for research within the social science field (Palan & Schitter, 2018).

As remuneration for completing the survey, respondents were paid an amount of money that equivalates to 6.60 GBP an hour. The survey was kept open until the maximum number of respondents had been reached.

5.8 Stimuli

Two experimental advertisements have been developed to test our hypotheses. Each advertisement consists of two sentences: one emotional and one rational, along with an image of the product at the bottom of the advertisement. It is important to note that respondents will only be shown one of the two stimuli, as noted in the research design approach. The emotional-to-rational statement, our treatment group, is as follows:

*“It’s the soda that was in your best friend’s fridge every summer, only better.
Now packed with vitamins, enriched with 10g protein and infused with botanicals”*

The rational-to-emotional statement, our control group, is as follows:

*“Packed with vitamins, enriched with 10g protein and infused with botanicals
It’s the soda that was in your best friend’s fridge every summer, only better.”*

Note that the two texts are almost identical outside of their order, with the exception of the word ‘now’ at the beginning of the rational statement being removed in the rational-to-emotional version for fluency. The text that has been developed was inspired by both previous literature into retro marketing messaging (Chen, 2022) and real messaging strategies currently employed by retro brands.

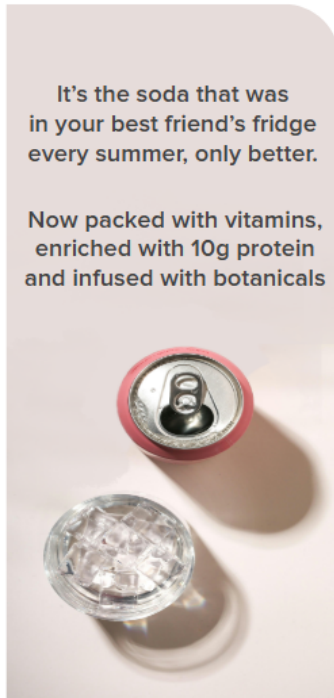


Figure 4.1 Emotional to rational ad

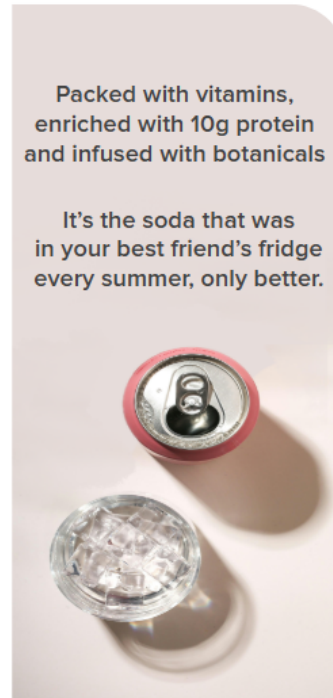


Figure 4.2 Rational to emotional ad

The shape of the ad is rectangular and oriented vertically, with a rounded corner on the top right hand side. This is intended to represent that the ad would function as an ‘aisle fin’ - a type of shelf signage that, in the context of supermarkets and FMCG, has been shown to attract customer attention (Garrido-Morgado & Gonzalez-Benito, 2024). The image at the bottom of the ad can be found on unsplash.com, a site that allows free use of its photos. This image has been chosen to make it clear that the product being advertised is a soda drink, but it intentionally does not show the main body of the can so that external factors such as packaging, logo or other visual elements do not influence the respondent’s answers. Similarly, a real brand name has also not been used to prevent existing biases or opinions of specific soda brands from impacting a participant’s answers (Chen, 2022). By using almost the same text for each condition, as well as the same image at the bottom, a stronger argument can be made that any significant results are being caused by the message framing and sequencing of the stimuli.

Soda has been chosen as the product for the stimuli as there are many examples of new brands using a retro marketing strategy within this product type such as Olipop, Poppi and Feisty. Furthermore, soda is a fairly universal and accessible product, meaning it is reasonable to expect that respondents have both purchased and will continue to purchase soda in the future - allowing us to have as broad of a target group as possible.

5.9 Operationalization

The primary outcome of the experiment was to evaluate the participants' responses to different advertising stimuli, specifically to retro-themed message framing sequences. The study investigated the dependent variable - Willingness to Try (WTT) - in relation to the independent variable retro message framing and the moderating variables Nostalgia Proneness (SNS) and Domain Specific Innovativeness (DSI). The constructs were measured using previously validated scales, adapted to fit the context of retro in-store advertising for a fictional soda drink. Furthermore, all items have been measured on a 7-point Likert scale ranging from “strongly disagree” to “strongly agree”.

To confirm the effectiveness of the retro-themed advertising stimuli, ad-evoked nostalgia (NOST) was included as a manipulation check, to verify whether the stimulus successfully elicited nostalgic feelings as intended. Participants responded to three items adapted from an established ad-evoked nostalgia scale (Pascal et al., 2002). In addition, two single-item indicators were included to assess baseline product category familiarity and preference (Somavarapu & Mubeena, 2018).

Retro marketing offers a unique opportunity to trigger consumer interest to try a new product by combining familiarity with novelty—leveraging nostalgic cues to create emotional appeal, even for newly introduced brands (Brown et. al., 2003a; Cervellon and Brown, 2018; Hallegate, 2018). Therefore the effectiveness of the message communicated through a functional in-store advertisement was assessed using four items, reflecting effective interest, exploratory intention, and realistic trial that complement each other to reflect Willingness to try (WTT). As such, measuring WTT enables the assessment of retro advertising's ability to generate trial behavior in the absence of prior brand experience. Moreover, WTT is strongly associated with consumer innovativeness, making it a valuable indicator when examining individual responses to marketing stimuli for new product introductions (Goldsmith et al., 1998). In light of the above, this study adopts willingness to try (WTT) as the primary outcome variable. This approach captures consumers' intention to engage with a product for the first time which is critical in the context of new brand introductions in saturated FMCG markets (Chen, 2022).

Holbrook was among the first to introduce the psychological variable “nostalgia proneness” to capture individuals who are more prone to experiencing nostalgia feelings than others (Holbrook,

1993). In his line of work, he developed the widely cited “Nostalgia Index” to measure this personality trait (Holbrook, 1993). Despite being referred to as a standard measure in studies related to retro branding, this Nostalgia Index has several notable limitations (Chen, 2022). The scale tends to conflate “the cause (nostalgia) with the consequences (product preferences)”, and frames nostalgia in oppositional terms, comparing the past favorably against the present and future (Hallegatte & Francois, 2014, p.85). As a result, Holbrook’s (1993, p. 249) items, such as “Things used to be better in the good old days” or reverse-coded statements like “Technological change will ensure a brighter future,” emphasize a belief in decline and force a comparison between the past and present (Hallegatte & Francois, 2014).

Scholars such as Zimbardo and Boyd (1999) have since challenged this view, arguing that individuals can be oriented towards both the past and the future simultaneously. Spears and Amos (2012) also criticize this dichotomy, suggesting that nostalgia is not inherently incompatible with forward-looking attitudes, deeming Holbrook’s Index outdated. Consequently, we follow the argumentation that the Nostalgia Index does not purely measure nostalgia proneness, but rather reflects a belief in decline, as subsequently implicitly acknowledged in more recent research by Hallegatte and Francois (2014, p.85).

In light of these issues, and retro marketing as hybrid in nature, combining nostalgia and innovativeness, the thesis adopts the Southampton Nostalgia Scale (SNS), which offers a more theoretically consistent and conceptually sound way to assess nostalgia proneness in this research context (Sedikides et al., 2008). The SNS consists of five items that measure the frequency at which individuals experience nostalgia, making it a direct measure of nostalgia proneness (Wildschut et al., 2023). It has demonstrated strong internal consistency across multiple studies, with Cronbach’s alpha ranging from 0.84 to 0.93 (Hallegatte & Francois, 2014). It is worth noting here, that unlike the Nostalgia Index, the SNS explicitly uses the term “nostalgia” in its items. However, it has been shown by Hepper et al. (2011) that people’s conceptions of nostalgia are broadly consistent with academic definitions and conceptualizations.

Given these considerations, the SNS is a more valid and contextually appropriate tool for this study’s objective: to explore how trait-level nostalgia moderates consumer responses to retro-themed advertising in the FMCG industry. At the same time, there is a broader need for a more domain-specific nostalgia scale tailored to marketing contexts—similar to the Domain-Specific Innovativeness (DSI) scale by Goldsmith and Hofacker (1991).

Consumer Innovativeness for the specific product category of beverages was assessed through a domain-specific version of Goldsmith and Hofacker’s (1991) six-item innovativeness scale (DSI), including three reversed items to balance response tendencies. The six-item Domain-specific Innovativeness scale has proven to be unidimensional, highly reliable and presents itself with a high predictive validity. It has proven effective in identifying consumers

more likely to adopt novel products within a specific domain of interest, making it a suitable construct for this thesis Goldsmith and Hofacker's, 1991). As a self-report measure, this scale is deemed particularly suitable for FMCG products like beverages, as consumers purchase them frequently and can easily report on their actual or anticipated behavior (Flynn & Goldsmith, 1993). A complete overview of all measures, including sources and item formats, is presented in Table 1.

Table 1 Summary of Operationalizations

Measures	Items	Scale	Source
(Ad) Evoked Nostalgia (NOST)	The advertisement message... 1. Reminds me of the past. 2. Helps me recall pleasant memories. 3. Makes me feel nostalgic. 4. Makes me reminisce about a previous time. 5. Makes me think about when i was younger.	Seven-point Likert scale (1= strongly disagree to 7= strongly agree).	Items adapted from Pascal et al. (2002).
Baseline Soda Consumption	1. I like drinking soda. 2. Soda is a beverage I regularly consume.	Seven-point Likert scale (1=strongly disagree to 7=strongly agree)	Items adapted from Somavarapu and Mubeena (2018).
Willingness to Try (WTT)	1. If I had the opportunity, I would try this soda drink. 2. I would be curious to taste this soda drink. 3. I can imagine trying this product at least once.	Seven-point Likert scale (1=strongly disagree to 7=strongly agree)	Items adapted from Bryant et al. (2019); Jacobs et al. (2024); Kowalska et al., (2024).
Nostalgia Proneness Southampton Nostalgia Scale (SNS)	1. How valuable is nostalgia for you. 2. How important is it for you to bring to mind nostalgic experiences? 3. How significant is it for you to feel nostalgic? 4. How prone are you to feeling nostalgic? 5. Specifically, how often do you bring to mind nostalgic experiences?	Items 1-4: Seven-point Likert scale (1= not at all to 7= Very much) Item 5: - At least once a day - 3-4 times a week - ~ twice a week - ~ once a week - Once or twice a month - Once every couple of month - Once or twice a year	Items adapted from (Sedikides et al. (2008).

Consumer Innovativeness Domain Specific Innovativeness Scale (DSI)	1. In general, I am among the last in my circle of friends to purchase a new beverage when it appears. ® 2. If I heard that a new beverage was available through a local store, I would be interested enough to buy it. 3. Compared to my friends, I do little shopping for new beverages. ® 4. I would consider buying a new beverage, even if I hadn't heard of it yet. 5. In general, I am the last in my circle of friends to know the latest beverages and their names. ® 6. I know more about new beverages than other people do.	Seven-point Likert scale (1= strongly disagree to 7= strongly agree) Items 1,3, and 5 are reverse scored.	Adapted from Goldsmith and Hofacker (1991).
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6. Results

This chapter presents the findings of the empirical analyses conducted to test the study's hypotheses regarding the influence of message framing and sequencing, nostalgia proneness, and domain-specific innovativeness on consumer's willingness to try a new retro marketed product. The results are organized to first present descriptive statistics, followed by inferential analysis that directly address the proposed hypotheses.

6.1 Descriptive Statistics

In total, we had 254 respondents across both surveys. However, 14 submissions were removed from consideration due to inconsistencies across their responses. More specifically, respondents were excluded for having the same scoring for both the original statement and its inverse within the consumer innovativeness section of the survey as it demonstrates inattentiveness which would affect the validity of our results. Therefore, the final number of respondents in the dataset is 240. Lastly, the dataset was restructured into a wide format suitable for statistical analysis, where each row represented a unique participant. At this stage, dummy variables were created for the experimental conditions, with $E2R = 1$ and $R2E = 2$.

All respondents received either the treatment group condition survey (emotional-to-rational sequencing, $n=125$) or the control group condition survey (rational-to-emotional sequencing, $n = 115$). As the treatment group survey was sent first, parameters were set up within Prolific to ensure that those who completed the treatment group survey would not be able to be allocated the control group condition survey.

While a large portion of the respondents belong to the 18-25 age group ($n=65$), accounting for 46.4%, there remains a significant representation of ages across the remaining age groups up to 55+, with a minimum of 10 respondents for a given age group. In terms of gender, the survey was set up to ensure an even split across the two test groups. In terms of country of residence, the majority of the respondents were from South Africa across both test groups, with a mix of predominantly European and North American countries also represented.

Upon carrying out initial checks and examination of descriptives, the skewness in histogram plots as well as lower levels of fit on Q-Q plots indicated that there would likely be problems with passing normality and homoscedasticity checks in our analysis. Therefore, the dependent variable (WTT) was transformed by squaring all the values. Furthermore, to avoid multicollinearity problems between our moderators and stimuli, nostalgia proneness and DSI were transformed through mean-centering. Both of these transformations were done to improve statistical validity and interpretability. The original values and transformed values for each of the three variables can be found in the table below.

Table 2 Descriptive statistics - Experiment

Descriptives								
	WTT score	Transformed WTT	Nostalgia - raw	Nostalgia - mean-centred	DSI - raw	DSI - mean-centred	Ad-evoked nostalgia score	Product involvement score
N	240	240	240	240	240	240	240	240
Missing	0	0	0	0	0	0	0	0
Mean	5.92	36.6	5.10	-0.00208	4.67	0.00222	4.57	5.52
Median	6.17	38.1	5.25	0.150	4.83	0.163	5.00	6.00
Standard deviation	1.25	12.5	1.45	1.45	1.26	1.26	1.78	1.59
Minimum	1.00	1.00	1.00	-4.10	1.00	-3.67	1.00	1.00
Maximum	7.00	49.0	7.00	1.90	7.00	2.33	7.00	7.00

Table 3 Frequencies of Gender by stimuli type type (E2R = emotional-to-rational,R2E = rational-to-emotional)

			Gender	Stimuli Type	N
Gender		N	Female	E2R	61
WTT score	Female	116		R2E	55
	Male	124	Male	E2R	64
				R2E	60

Table 4 Frequencies of Age groups

Age Group	N
18-25	65
26-30	49
31-35	42
36-44	36
45-54	25
55+	23

Table 5 Frequencies of Age groups split by stimuli type

Age Group	Stimuli Type	N
18-25	E2R	34
	R2E	31
26-30	E2R	25
	R2E	24
31-35	E2R	20
	R2E	22
36-44	E2R	22
	R2E	14
45-54	E2R	11
	R2E	14
55+	E2R	13
	R2E	10

Table 6 Frequencies of Country of Residence, then split by stimuli type

Descriptives

	Country of residence	N
WTT score	Australia	1
	Canada	2
	China	1
	Czech Republic	1
	Finland	1
	France	1
	Germany	4
	Greece	4
	Hungary	1
	Israel	1
	Italy	5
	Kenya	8
	Latvia	1
	Mexico	2
	Netherlands	1
	Norway	1
	Poland	9
	Portugal	4
	South Africa	123
	Spain	4
	United Kingdom	37
	United States	28

	Country of residence	Stimuli Type	N
WTT score	Australia	E2R	0
		R2E	1
	Canada	E2R	2
		R2E	0
	China	E2R	0
		R2E	1
	Czech Republic	E2R	0
		R2E	1
	Finland	E2R	1
		R2E	0
	France	E2R	1
		R2E	0
	Germany	E2R	2
		R2E	2
	Greece	E2R	2
		R2E	2
	Hungary	E2R	0
		R2E	1
	Israel	E2R	0
		R2E	1
WTT score	Italy	E2R	3
		R2E	2
	Kenya	E2R	5
		R2E	3
	Latvia	E2R	1
		R2E	0
	Mexico	E2R	1
		R2E	1
	Netherlands	E2R	1
		R2E	0
	Norway	E2R	1
		R2E	0
	Poland	E2R	4
		R2E	5
	Portugal	E2R	2
		R2E	2
	South Africa	E2R	52
		R2E	71
	Spain	E2R	3
		R2E	1
WTT score	United Kingdom	E2R	28
		R2E	9
WTT score	United States	E2R	16
		R2E	12

6.1.1 Reliability Analyses

Each variable has been measured using multiple seven-point Likert-scale items. In order to confirm that each item was an internally consistent representation of the variable being measured, reliability analyses were conducted. For all variables, the Cronbach alpha was reported at 0.7 or more, with many variables achieving 0.9 or more showing a high level of reliability. Therefore, all items will be kept to make up the variables. Now that internal consistency has been confirmed, each of the scale items can be combined and averaged in order to make up the final score for each variable. The next step is examining correlations within a correlation matrix.

6.1.2 Manipulation Check

In accordance with the included manipulation check of Ad-evoked Nostalgia, the experiment shows that respondents exposed to either the emotional-to-rational or rational-to-emotional stimuli elicited an elevated level of ad-evoked nostalgia without any difference between groups.

To assess whether both advertising stimuli successfully elicited ad-evoked nostalgia, an independent samples t-test with a 95% confidence interval was conducted. The test allowed to compare participants' nostalgia scores between the emotional-torational (E2R) and rational-to-emotional (R2E) message sequences. The analysis revealed no significant difference between the E2R ($M = 4.60$, $SD = 1.82$) and R2E ($M = 4.54$, $SD = 1.75$) groups, $t(238) = 0.273$, $p = 0.785$, $d = 0.035$, indicating that both stimuli evoked similar levels of nostalgia.

Table 7 Independent Samples T-Test on Ad-evoked nostalgia

Independent Samples T-Test								
						95% Confidence Interval		
		Statistic	df	p	Effect Size	Lower	Upper	
Ad-evoked nostalgia score	Student's t	0.272	238	0.786	Cohen's d	0.0352	-0.218	0.288
	Welch's t	0.273	238	0.785	Cohen's d	0.0352		
	Mann-Whitney U	7011		0.743	Rank biserial correlation	-0.0246		

Note. $H_0: \mu_{E2R} = \mu_{R2E}$

Table 8 Ad-evoked nostalgia score split by stimuli

	Group	N	Mean	Median	SD	SE
Ad-evoked nostalgia score	E2R	125	4.60	5.00	1.82	0.163
	R2E	115	4.54	5.00	1.75	0.163

Given that the test of normality indicates violations of the normality assumption ($p < 0.001$), a non-parametric Mann-Whitney U test was also performed.

Table 9 Assumption checks

Homogeneity of Variances Tests					
		F	df	df2	p
Ad-evoked nostalgia score	Levene's	0.124	1	238	0.725
	Variance ratio	1.08	124	114	0.665

Note. Additional results provided by *moretests*

Tests of Normality			
		statistic	p
Ad-evoked nostalgia score	Shapiro-Wilk	0.935	< .001
	Kolmogorov-Smirnov	0.113	0.004
	Anderson-Darling	4.16	< .001

Note. Additional results provided by *moretests*

Ad-evoked nostalgia score

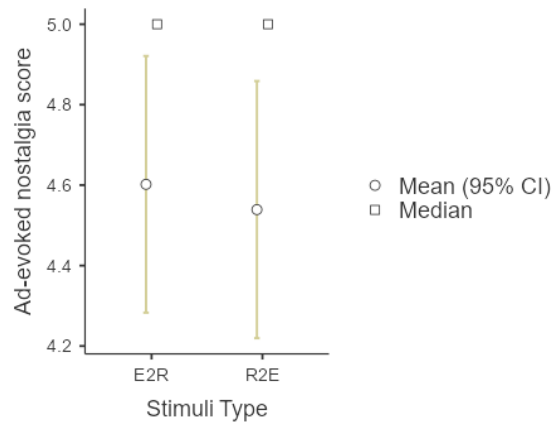


Figure 5 Ad-evoked nostalgia score mean and median

The results similarly showed no significant differences between conditions, $U = 7011$, $p = 0.743$, with an effect size of ($r = -0.025$). As such, the findings suggest that the manipulation of stimuli was satisfactory in regards to the purpose, as both conditions elicited comparable levels of ad-evoked nostalgia.

To test whether each stimulus individually evoked a nostalgic response one-sample t-tests were conducted. One-sample t-tests against the neutral midpoint of 4 on the ad-evoked nostalgia scale revealed that both groups experienced a significantly elevated level of nostalgia based on the advertised message.

Table 10 OneSample T-Test for R2E

One Sample T-Test						
		Statistic	df	p	Mean difference	Effect Size
Ad-evoked nostalgia score	Student's t	3.31	114	0.001	0.539	Cohen's d 0.308
Note: $H_0: \mu = 4$						
Tests of Normality						
		statistic	p			
Ad-evoked nostalgia score	Shapiro-Wilk	0.934	< .001			
	Kolmogorov-Smirnov	0.126	0.053			
	Anderson-Darling	2.24	< .001			
Note. Additional results provided by moretests						
Descriptives						
	N	Mean	Median	SD	SE	
Ad-evoked nostalgia score	115	4.54	5.00	1.75	0.163	

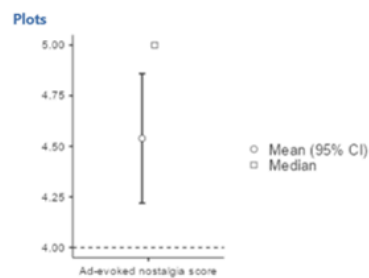


Figure 6 Plot for R2E

Table 11 One Sample T-Test for E2R

One Sample T-Test						
		Statistic	df	p	Mean difference	Effect Size
Ad-evoked nostalgia score	Student's t	3.70	124	< .001	0.602	Cohen's d 0.331
Note: $H_0: \mu \neq 4$						
Tests of Normality						
		statistic	p			
Ad-evoked nostalgia score	Shapiro-Wilk	0.929	< .001			
	Kolmogorov-Smirnov	0.119	0.058			
	Anderson-Darling	2.25	< .001			
Note: Additional results provided by moretests						
Descriptives						
	N	Mean	Median	SD	SE	
Ad-evoked nostalgia score	125	4.60	5.00	1.82	0.163	

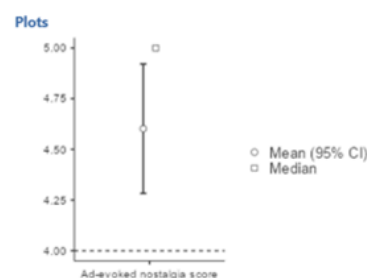


Figure 7 Plot for E2R

Participants exposed to the E2R stimulus reported significantly higher nostalgia than the midpoint, $t(124) = 3.70$, $p < 0.001$, $M = 4.60$, $MDiff = 0.60$, $d = 0.33$. Similarly, participants in the R2E condition also reported elevated nostalgia, $t(115) = 3.31$, $p = 0.001$, $M = 4.54$, $MDiff = 0.539$, $d = 0.308$. These results confirm that both stimuli effectively elicited ad-evoked nostalgia in the emotional text sequence.

6.1.3 Correlation Matrix

To determine potential relationships between the tested variables, a set of Pearson's correlation coefficients was computed (Hair et al. 2020). By examining these correlations, we can gain a deeper understanding of how the constructs relate to each other and identify any noteworthy trends or dependencies that may influence our subsequent regression analysis.

Table 11 Correlation Matrix

		Ad-evoked nostalgia score	Product involvement score	WTT_score_squared	C_nostalgia	C_Innovativeness
Ad-evoked nostalgia score	Pearson's r	—				
	df	—				
	p-value	—				
Product involvement score	Pearson's r	0.398***	—			
	df	238	—			
	p-value	< .001	—			
WTT_score_squared	Pearson's r	0.384***	0.606***	—		
	df	238	238	—		
	p-value	< .001	< .001	—		
C_nostalgia	Pearson's r	0.601***	0.289***	0.295***	—	
	df	238	238	238	—	
	p-value	< .001	< .001	< .001	—	
C_Innovativeness	Pearson's r	0.334***	0.614***	0.573***	0.272***	—
	df	238	238	238	238	—
	p-value	< .001	< .001	< .001	< .001	—

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

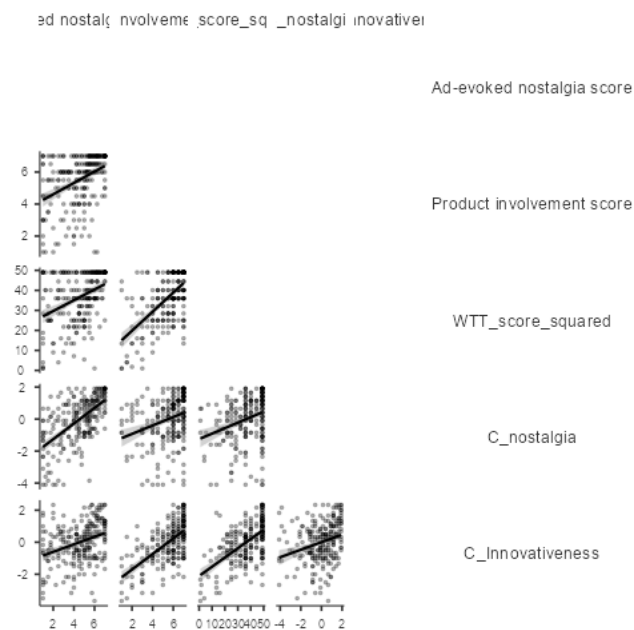


Figure 8 Correlation Matrix plots

Based on the correlation matrix results, a weak but significant positive correlation was observed between the ad-evoked nostalgia and c_innovativeness ($r = 0.33$, $p < 0.001$), indicating that higher nostalgia evoked by advertisement is associated with higher levels of innovativeness. The two variables shared approximately 11% of shared variance ($R^2 \approx 0.11$). A significant moderate positive correlation emerged between ad-evoked nostalgia and c_nostalgia ($r = 0.60$, $p < 0.001$), accounting for 36% of shared variance. c_nostalgia was also significant but weakly positively

correlated with WTT ($r = 0.30, p < 0.001$) and product involvement ($r = 0.29, p < 0.001$), each accounting approximately for 8% of shared variance. Furthermore, a significant moderate positive correlation was found between WTT and product involvement ($r = 0.61, p < 0.001$), suggesting 39% of shared variance, and between WTT and c_innovativeness ($r = 0.57, p < 0.001$), indicating about 33% of shared variance. A similar significant moderate positive correlation was observed between c_innovativeness and product involvement ($r = 0.61, p < 0.001$), with a shared variance of 38%. Lastly, a weak positive correlation was found between c_innovativeness and c_nostalgia ($r = 0.27, p < .001$), accounting for approximately 7% of the shared variance. Overall, the observed correlations ranged from significant weak to moderate in strength, supporting further analysis using regression techniques.

6.2 Inferential statistics

To test the research hypotheses, both an independent samples t-test and multiple linear regression analysis were conducted. The t-test (Model 1) was used to examine the direct effect of message framing sequence on WTT. Subsequently, multiple linear regression analyses (Model 2) were employed to assess the influence of individual difference variables, nostalgia proneness and domain-specific innovativeness as well as their interaction effects with message framing and sequencing on WTT.

6.2.1 Model 1

To test our initial hypothesis, an independent samples t-test was conducted with a 95% confidence interval. This t-test examined the averages for WTT between our treatment and control group, as well as if there was a statistically significant difference between the two groups. In order to determine the type of t-test to conduct, assumption checks on homogeneity of variance and normality must be completed. The results show that the null hypothesis for equal variances can be accepted (Levene's $F = 2.38, p = 0.124$). In terms of normality, the Shapiro Wilk's p-value is $p = < 0.001$, meaning the null hypothesis for normality is rejected, and therefore that the data is not normally distributed. Therefore, Welch's t-test will be used as it is robust to unequal variances as well as normality when the sample size for both groups is large enough, as per Central Limit Theorem (Easterby-Smith et al., 2021, p.368).

Table 12 Homogeneity of Variance Tests

		F	df	df2	p
WTT_score_squared	Levene's	2.38	1	238	0.124
	Variance ratio	0.714	114	124	0.069

Note. Additional results provided by *moretests*

Table 13 Tests of Normality

Tests of Normality		statistic	p
WTT_score_squared	Shapiro-Wilk	0.915	< .001
	Kolmogorov-Smirnov	0.152	< .001
	Anderson-Darling	5.78	< .001

Note. Additional results provided by moretests

After establishing the use of Welch's t-test for the analysis, the independent samples t-test was conducted. H1 predicted that there is a difference in consumers' willingness to try (WTT) between brands that use emotional-to-rational and brands that use rational-to-emotional message framing within retro marketing. This hypothesis is accepted, as the p -value is significant ($p = 0.002$), meaning that there is a difference between the treatment group and the control group. Therefore, we can reject the null hypothesis. Upon further examination of the results and the plot, the treatment group emotional-to-rational ($M = 34.2$, $SD = 13.2$) has a lower willingness to try the new product than control group rational-to-emotional ($M = 39.1$, $SD = 11.2$). This gives a mean difference of - 4.90, with a medium effect size of - 0.40.

Table 14 Independent Samples T-Test

Independent Samples T-Test		95% Confidence Interval							
		Statistic	df	p	Mean difference	SE difference	Lower	Upper	Effect Size
WTT_score_squared	Student's t	-3.09	238	0.002	-4.90	1.59	-8.02	-1.78	Cohen's d -0.399
	Welch's t	-3.11	236	0.002	-4.90	1.57	-8.00	-1.80	Cohen's d -0.401

Note. $H_a: \mu_{E2R} \neq \mu_{R2E}$

Group Descriptives

	Group	N	Mean	Median	SD	SE
WTT_score_squared	E2R	125	34.2	36.0	13.2	1.18
	R2E	115	39.1	40.1	11.2	1.04

Plots

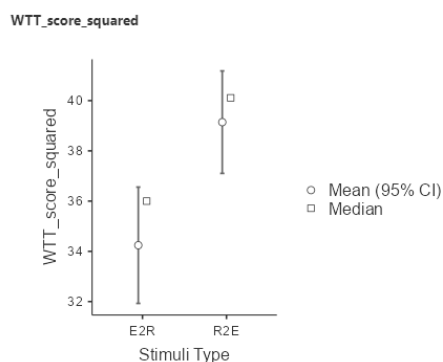


Figure 9 WTT_score_squared in plots, mean and median by stimuli type

In order to understand which factors explain the relationship between the message sequence and subsequent willingness to try the new, retro-advertised product, a series of multiple linear regressions will be conducted in Model 2.

6.2.2 Model 2

Building on the initial findings from Model 1, the following section presents the results of Hypotheses 2 through 4 in a Model 2. These hypotheses investigate the main and interactive effects of two personality trait characteristics - nostalgia proneness and domain-specific innovativeness on participants willingness to try (WTT) a new retro advertised FMCG product.

Specifically, we examined:

- Their main effects (H2;3),
- Their moderating effects on the relationship between message framing (E2R vs. R2E) and WTT (H2a; H3a), and
- A three-way interaction testing whether the combined presence of high nostalgia proneness and innovativeness amplifies the impact of message sequencing (H4).

Multiple linear regression models were used to test these effects after confirming that key statistical assumptions were met.

To ensure the reliability and validity of our regression model, thorough assumption checks were conducted. The key assumptions of linearity, normality and multicollinearity were assessed to ensure that the fundamental assumptions underlying linear regression analysis are met. Given that the model included two continuous moderator variables, these variables were mean-centered to reduce multicollinearity in the interaction terms and to improve the interpretability of the regression coefficients. The binary stimulus variable was dummy-coded and WTT as outcome score was squared.

To assess the linearity assumption, the previously reported correlation matrix has been assessed, where the relationships between the moderators nostalgia proneness ($c_nostalgia$) and consumer innovativeness ($c_innovativeness$) and the outcome variable, WTT, were found to be linear. Accordingly, the correlation matrix showed significant weak to moderate positive correlations, respectively between $c_nostalgia$ and WTT ($r = 0.30, p < 0.001$), $c_innovativeness$ and WTT ($r = 0.57, p < 0.001$) and $c_nostalgia$ and $c_innovativeness$ ($r = 0.27, p < 0.001$). These results suggest a linear relationship between the continuous predictors and the outcome, thereby supporting the assumption of linearity.

Secondly, the normality assumption of regression models states that residuals should be normally distributed to make valid statistical inferences. Thus a normality check for linear regression models, through a Shapiro-Wilk test and Q-Q plot of residuals was conducted. Both, the

Shapiro-Wilk test with $p = 0.054$ as well as the visual inspection of the Q-Q plot indicated deviations from normal distribution. The Q-Q plot showed that the standardized residuals largely followed a straight line but indicated clear deviations at the tails. Given the large sample size ($N = 240$), the regression results remain robust, as the Central Limit Theorem allows for minor violations of normality. Therefore the analysis was continued with caution.

Table 15 Normality Tests

Normality Tests		
	Statistic	p
Shapiro-Wilk	0.989	0.054
Kolmogorov-Smirnov	0.0790	0.100
Anderson-Darling	1.17	0.005

Note. Additional results provided by moretests

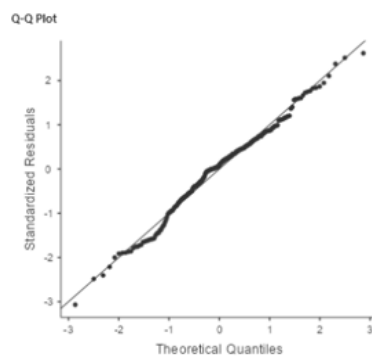


Figure 10 Q-Q plot, Normality of Residuals

To check for homoscedasticity, residuals were plotted against predicted values and the continuous predictor. The plots indicated some funnel-like patterns, indicating a potential violation of the homoscedasticity assumption. To further assess this, formal tests for heteroskedasticity were conducted. Heteroscedasticity tests also indicated the presence of Heteroskedasticity in the data (Breusch-Pagan: $p < 0.001$; Goldfeld-Quandt: $p = 0.11$; Harrison-Mc-Cabe: $p = 0.005$)

Table 16 Heteroskedasticity Tests

Heteroskedasticity Tests		
	Statistic	p
Breusch-Pagan	28.7	< .001
Goldfeld-Quandt	1.26	0.110
Harrison-McCabe	0.463	0.220

Note. Additional results provided by *moretests*

Residuals Plots

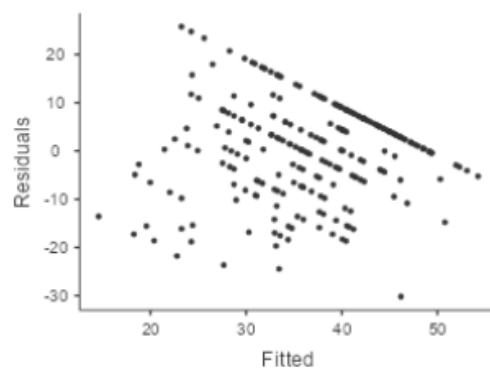


Figure 11 Residuals vs. Fitted plots

The Assumption of independence of residuals was tested using the Durbin-Watson statistic, which indicated that the residuals were independent (1.85, $p = 0.20$). Lastly Multicollinearity was assessed by evaluating the variance inflation factors (VIFs). All predictors had VIF values below 3.2, well under the threshold of 10, indicating that multicollinearity was not a concern and allow for reliable coefficient estimation.

Table 17 Collinearity Statistics

Collinearity Statistics		
	VIF	Tolerance
c_nostalgia	2.21	0.452
c_innovativeness	3.01	0.333
Stimuli Type	1.13	0.883

In conclusion, these checks indicate that the assumptions for multiple linear regression were adequately met, therefore Hypothesis testing for Model 2 was conducted.

The overall regression model was statistically significant, $F(7, 232) = 20.2$, $p < 0.001$, and explained 38 % of the variance in the outcome variable WTT ($R^2 = 0.38$, Adjusted $R^2 = 0.36$).

Table 18 Model Fit Measures for Model 2

Model Fit Measures							
Model	R	R^2	Adjusted R^2	Overall Model Test			
				F	df1	df2	p
1	0.616	0.379	0.360	20.2	7	232	< .001

Note. Models estimated using sample size of N=240

Looking at the main effects, all of them appear to be statistically significant.

Table 19 Model Coefficients

Model Coefficients - WTT_score_squared						
Predictor	Estimate	SE	t	p	Stand. Estimate	
Intercept*	38.495	1.004	38.337	< .001		
c_nostalgia	1.373	0.663	2.070	0.040	0.1591	
c_innovativeness	4.647	0.892	5.210	< .001	0.4675	
Stimuli Type:						
E2R – R2E	-3.768	1.373	-2.744	0.007	-0.3017	
c_nostalgia * c_innovativeness	-0.630	0.534	-1.179	0.240	-0.0918	
c_nostalgia * Stimuli Type:						
c_nostalgia * (E2R – R2E)	0.409	0.949	0.431	0.667	0.0479	
c_innovativeness * Stimuli Type:						
c_innovativeness * (E2R – R2E)	0.580	1.131	0.513	0.609	0.0580	
c_nostalgia * c_innovativeness * Stimuli Type:						
c_nostalgia * c_innovativeness * (E2R – R2E)	1.523	0.691	2.204	0.029	0.2218	

* Represents reference level

As demonstrated earlier in H1, the stimuli type has a p -value of 0.007, with a negative estimate coefficient ($\beta = -3.77$) demonstrating that the emotional-to-rational (E2R) sequence generates significantly less favourable outcomes than the rational-to-emotional (R2E) sequence when it comes to willingness to try.

Hypothesis 2 predicts that consumers with a higher level of nostalgia proneness will exhibit greater willingness to try a new retro-advertised product. A significant main effect of nostalgia proneness on willingness to try can be observed, supporting Hypothesis 2. Specifically, individuals with higher levels of nostalgia proneness reported greater WTT for the

retro-advertised product, regardless of the message sequence ($\beta = 1.37, p = 0.04$), but the overall size of the effect is small.

Furthermore H2a states that the effect of E2R (vs. R2E) message framing within retro marketing on WTT will be stronger for consumers with a high level of nostalgia proneness. However, the interaction effect between stimuli type and nostalgia proneness does not appear to be statistically significant ($\beta = 0.41, p = 0.67$). The p value for this interaction is $p = 0.67$, meaning that the difference in effects between the E2R and R2E sequences is not significant between those who score low or high in nostalgia proneness. In conclusion, H2a needs to be rejected.

- Stimuli Type x $c_nostalgia$ ($\beta = 0.41, SE = 0.95, t = 0.43, p = 0.67$).

Similarly, H3 predicts that consumers with a higher level of consumer innovativeness will exhibit a greater willingness to try a new retro-advertised product. Hypothesis 3 was also supported, as domain-specific innovativeness showed a significant positive effect on WTT. Thus, participants who scored higher in innovativeness demonstrated a greater willingness to try new retro-advertised products overall, regardless of the message sequence ($\beta = 4.65, p < 0.001$), and the overall size of the effect is moderate.

However, when accounting for the interaction effect between stimuli type and domain-specific innovativeness, as proposed by H3a, the relationship does not appear to be statistically significant ($\beta = 0.58, p = 0.61$). With a p -value of $p = 0.61$, the difference in effects between the E2R and R2E sequence is not significant between those who score low or high in DSI. In conclusion, H3a is rejected.

- Stimuli Type x $c_innovativeness$ ($\beta = 0.58, SE = 1.13, t = 0.51, p = 0.61$).

In conclusion, while on their own, nostalgia proneness, domain-specific innovativeness and stimuli type have a significant effect on WTT. However, when accounting for the interaction between the variables $c_nostalgia$ x stimuli type and $c_innovativeness$ x stimuli type, the significant effect disappears.

Although not hypothesized directly, an exploratory analysis was conducted to examine whether nostalgia proneness and domain-specific innovativeness interact independently of message framing to predict WTT. The interaction term ($c_nostalgia$ x $c_innovativeness$) was added to the regression model. Results indicated that this two-way interaction was not statistically significant ($\beta = -0.58, p = 0.24$), suggesting that the combined presence of both traits does not independently enhance WTT, regardless of message framing.

- $c_nostalgia$ x $c_innovativeness$ ($\beta = -0.63, SE = 0.53, t = -1.18, p = 0.24$).

For the central part of this analysis section, the study examines whether the effects of message framing and sequencing on willingness to try are jointly moderated by nostalgia proneness and domain-specific consumer innovativeness, a moderated moderation analysis (i.e., a 3-way

interaction) was conducted. Hypothesis 4 therefore builds on H2-3 by including the three-way interaction term between stimulus type, nostalgia proneness, and DSI. This analytical approach was selected to test whether the relationship between the independent variable (stimulus type: E2R vs. R2E) and the dependent variable (WTT) is conditional on both moderators simultaneously. This method is well-suited for examining complex interaction effects and assessing how combinations of individual difference variables shape the effectiveness of the advertising strategy. The multiple linear regression is used to examine the amount of variance in one outcome score (dependent continuous variable) that can be explained by multiple predictors (independent variables). In this case, the outcome variable WTT is continuous, and predicted from:

- A categorical predictor (stimulus type: emotional-to-rational vs. rational-to-emotional),
- Two continuous moderators (nostalgia proneness and domain-specific innovativeness), and
- Their respective interaction term with the stimulus condition.

Hypothesis 4 proposed that the relationship between message framing and WTT is moderated by the interaction between nostalgia proneness and domain-specific innovativeness, such that the positive effect of E2R message framing is most pronounced among consumers high in both characteristics, and significantly weaker when one or both are low.

Results indicate that the three-way interaction between stimulus type, nostalgia proneness and DSI is statistically significant ($\beta = 0.15$, $SE = 0.07$, $t = 2.13$, $p = 0.03$). Therefore these findings support hypothesis 4, indicating that the effect of message framing on WTT is dependent upon the combination of both moderators. Specifically, the negative main effect of E2R framing which has been reported previously, is diminished and even potentially reversed when participants are both high in nostalgia proneness and consumer innovativeness.

To further interpret the significance of the three-way interaction observed in H4, we conducted follow-up analyses using the GAMLj General Linear Model module extension in Jamovi. Specifically, this allowed us to visualize the interaction between message framing (Stimuli Type), nostalgia proneness, and consumer innovativeness through simple slopes plots.

To interpret this effect, we examined both the fixed effects parameter estimates and the interaction plots.

Table 20 Fixed Effects Parameter Estimates for General Linear Model

Names	Effect	Estimate	SE	95% Confidence Interval		β	df	t	p
				Lower	Upper				
(Intercept)	(Intercept)	36.618	0.687	35.266	37.971	0.0000	232	53.335	< .001
Stimuli Type1	E2R - (R2E)	-3.768	1.373	-6.473	-1.062	-0.3017	232	-2.744	0.007
c_nostalgia	c_nostalgia	1.578	0.474	0.644	2.513	0.1831	232	3.327	0.001
c_innovativeness	c_innovativeness	4.937	0.565	3.823	6.051	0.4965	232	8.734	< .001
Stimuli Type1 * c_nostalgia	E2R - (R2E) * c_nostalgia	0.413	0.949	-1.457	2.282	0.0479	232	0.435	0.664
Stimuli Type1 * c_innovativeness	E2R - (R2E) * c_innovativeness	0.577	1.130	-1.651	2.804	0.0580	232	0.510	0.611
c_nostalgia * c_innovativeness	c_nostalgia * c_innovativeness	0.131	0.345	-0.549	0.812	0.0191	232	0.380	0.704
Stimuli Type1 * c_nostalgia * c_innovativeness	E2R - (R2E) * c_nostalgia * c_innovativeness	1.523	0.691	0.162	2.884	0.2218	232	2.204	0.029

The three-way interaction was statistically significant, $\beta = 1.5$, $SE = 0.7$, $t(232) = 2.20$, $p = 0.03$, 95% CI [0.16, 2.88], providing support for Hypothesis 4.

The interaction plots (see Figure 12) revealed distinct patterns depending on the levels of nostalgia proneness and consumer innovativeness:

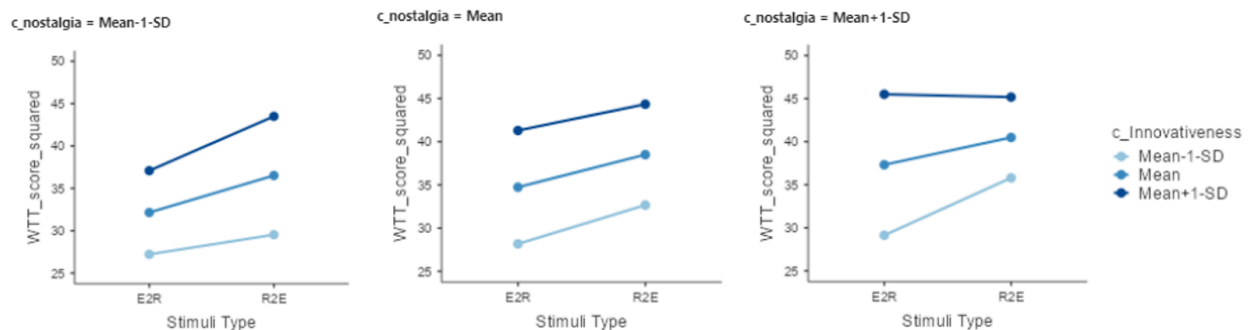


Figure 12 Comparative Visualization of Nostalgia Effect on WTT at -1SD, Mean, and +1SD Levels

As shown in the simple slopes plots, the effect of message framing varied substantially across different combinations of nostalgia proneness and consumer innovativeness.

At low levels of nostalgia proneness (-1SD), and consistent with our earlier findings (H1), highly innovative participants (+1SD) exhibited higher willingness to try (WTT) in the R2E condition compared to the E2R condition. In contrast, participants low in innovativeness (-1SD) demonstrated relatively consistent low WTT regardless of the message framing, indicating minimal sensitivity to sequencing when neither trait is pronounced.

At mean levels of nostalgia proneness, the pattern of framing effects began to emerge and reverse more clearly among highly innovative individuals. While the participants low in innovativeness continued to show only modest variation in WTT by stimuli type, those high in innovativeness now exhibited higher WTT in the E2R condition, marking a shift from their earlier preference for R2E at low nostalgia levels. This emerging shift highlights the growing relevance of emotional-first messaging as nostalgia proneness increases.

Crucially, at high levels of both moderators (+1SD), the E2R framing clearly resulted in higher WTT than the R2E condition, as evidenced by both the plotted means and the estimated marginal means table. While the visualization suggests this trend, this effect is substantiated by the Fixed Effect Parameter Estimates. Specifically this suggests that message sequencing is most effective when participants are high in both individual characteristics conditions.

The significant three-way interaction aligns with our central hypothesis, demonstrating that the positive effect of emotional-to-rational message framing on WTT is indeed most pronounced among participants who are high in both nostalgia proneness and domain-specific innovativeness, consistent with our theoretical expectations of H4.

Table 21 Final Summary of Hypotheses

Hypotheses	Main & interaction effects	Willingness-to-try (DV)	Result
1	Stimuli Type E2R-R2E	-3.77 ** (0.007)	Supported
2	Nostalgia proneness	1.37 * (0.04)	Supported
2a	Nostalgia proneness x Stimuli Type	0.41 (<0.67)	Not supported
3	Domain-specific Innovativeness	4.65 *** (<0.001)	Supported
3a	Domain-specific Innovativeness x Stimuli Type	0.58 (0.61)	Not supported
4	Nostalgia x Domain-specific- Innovativeness x Stimuli Type	1.52 * (0.03)	Supported

p values in parentheses

**p* < 0.05

***p* < 0.01

****p* < 0.001

7. Discussion

The aim of our study was to investigate how message framing and sequencing within the context of retro marketing affects willingness to try (WTT) a new product. To do this, a series of hypotheses were tested, with each subsequent model including additional variables or interaction effects. Together, these hypotheses work to determine first if the message sequence itself had an effect, but also which other variables play a role in influencing a consumer's willingness to try a new, retro-marketed product. Therefore, the results expand on limited research on the role of emotional to rational message sequencing within advertising, as well as how message framing and sequencing alone contribute to retro marketing strategies to persuade consumers to try a new product.

Based on the analysis of our results, we can conclude that both sequences result in favourable outcomes when it comes to willingness to try a new product within FMCG. This is a significant finding which builds on existing research where the effects of retro visual elements and retro messaging were studied simultaneously (Chen, 2022), demonstrating that retro-framed messaging in advertising is still successful on its own in increasing consumer receptivity to a new product - in this case a new soda drink. Furthermore, it supports the notion of retro marketing as a strategy for launching new products that wish to be associated with the 'real' past instead of leveraging a heritage (Hallegate, 2014).

Taking a high-level view, model 1 shows that sequencing rational-to-emotional appears to lead to an increased willingness to try than the emotional-to-rational sequence - a finding which disputes our initial hypothesis based on existing research (Lim et. al., 2018). One possible explanation for this surprising finding is that the respondents had differing needs for cognition (Cacioppo & Petty, 1982), a factor that not only determines how consumers process information, but also what kind of messages they find more appealing. Different needs for cognition also determine appeal preference, where rational appeals have a stronger effect for those who are high in need for cognition, while those who have a low need for cognition prefer emotional, affective appeals (Leonidou & Leonidou, 2009). Retro marketing is a complex, multifaceted phenomenon that relies on both affective resonance and perceived relevance. Without strong alignment to individual traits like nostalgia proneness and innovativeness, starting with an emotional stimulus may have failed to provide the initial rational clarity or justification that consumers implicitly seek. This interpretation aligns with prior research suggesting that some audiences require cognitive anchoring through logic that facilitates subsequent emotional processing (Leonidou & Leonidou, 2009).

Furthermore, to clearly distinguish between the emotional and rational sentence that made up each message, a visible gap was deliberately put in between the two sentences. This gap can be interpreted as a 'chunking' effort (Petty et. al., 2001), which is processed differently by those

with different needs for cognition. For those who are high in need for cognition, the text they read first is remembered more than what they read last, while the pattern is reversed for those who are low in need for cognition. Combining these insights, the rational to emotional appeal may be so effective because it appeals to both cognition types, where each naturally pays more attention to the part of the message that appeals to them most because of its sequence. Therefore, these findings invite deeper investigation into cognitive factors that determine information processing, such as chunking and need for cognition, as well as prompting further evaluation of emotional-to-rational sequencing to improve the robustness of our findings, given they are contrary to previous research in this field.

Within Model 2, which examines consumer traits and message sequencing, another interesting finding is that individuals with high levels of nostalgia proneness reported a greater willingness to try the retro-advertised product, regardless of the message sequence. This can be explained by the consumer trait reflecting a dispositional fit with retro cues, enabling the translation of emotional resonance and engagement into behavioral intent such as WTT (Chen, 2022). This finding aligns with prior research suggesting that nostalgia-prone consumers tend to respond positively to retro cues due to their emotional resonance and sense of familiarity (Chen, 2022). While the main effect was statistically significant, the explanatory power was still weak. Thus, backing up the prior research by Brown et. al. (2003a), who points out that today's consumers would not be satisfied with exact replicas of past products despite their nostalgia, as these often fall short on performance and current market needs. More recently, Cattano and Guerini (2012) empirically verified that consumers prefer modern updates to products from the past, indicating that nostalgia alone is not enough.

Building on these findings, H2a tested the hypothesis which proposed that the effects of emotional-to-rational (E2R) versus rational-to-emotional (R2E) message sequencing within retro marketing on WTT would be stronger for consumers' with high levels of nostalgia proneness. However the hypothesis was not supported, as the interaction between nostalgia proneness and message sequencing on WTT did not reach significance. In other words, the sequence in which emotional and rational appeals were presented did not alter the moderating effect of nostalgia proneness on WTT. This suggests that nostalgic individuals responded positively regardless of sequence, likely due to the affective content itself. Thus, while nostalgia proneness enhances receptivity to retro messaging overall, it does not necessarily influence sensitivity to how the message is sequenced.

Similarly, findings also support Hypothesis 3, which revealed that consumer innovativeness significantly predicted WTT, regardless of the message sequence. This is consistent with past research, suggesting that innovative consumers are more open to trying new products, particularly when they are framed as offering novelty or added functionality (Goldsmith & Hofacker, 1991). In this line WTT has been found to be strongly associated with consumer innovativeness, making it a valuable indicator when examining individual responses to

marketing stimuli for new product introductions (Araujo et al., 2016). Therefore in the context of retro marketing, the “newness” inherent in updating a product with health-conscious or modernized features likely resonated with innovative individuals’ preference for novelty and progress. This aligns with the brand congruence and self-congruity theory and the idea that individuals who value novelty see greater alignment with retro advertising when they are framed as modernized or innovative (Voorn et al., 2020.) This alignment reflects both functional congruence, the goal of seeking novel products and trait congruence, which affirms an identity as curious and future oriented (Voorn et al., 2020). Although the explanatory power was stronger than for Hypothesis 2a, much of the variance was still left unexplained. This result is consistent with prior studies which indicate that a large percentage of new products cease to exist after one year of being on shelves (Victory et. al., 2021). Additionally, this finding proves that strategies such as retro marketing are necessary for new brands or new products to differentiate themselves from their competitors, even without a heritage (Hallegate, 2014).

Furthermore, H3a was not supported, as the interaction between consumer innovativeness and message sequencing was not significant. That is, the sequence of emotional and rational appeals did not differentially affect consumers based on their level of innovativeness. One explanation may lie in the nature of the message itself: since both types of appeal were always present, the variation in order may not have been strong enough to elicit distinct responses among more innovative consumers. This suggests that while consumer innovativeness plays a role in shaping trial intentions, it may not necessarily influence how consumers respond to nuanced message sequencing formats.

In conclusion, neither of the interaction terms reached significance, indicating that the framing and sequencing effect observed was not meaningfully moderated by nostalgia proneness or consumer innovativeness in isolation. In other words neither nostalgia proneness nor innovativeness appeared to amplify or diminish the impact of the message on consumers’ behavioral intentions alone. These findings extend Cattaneo & Guerini’s (2012) observations, proposing that Nostalgia proneness and Consumer Innovativeness alone can not be the core of retro strategies. While individually these traits show potential to influence WTT, separately they appear insufficient to fully explain variability in message effectiveness. This raises the possibility that any moderating influence may be more nuanced and contingent on the joint presence of both traits, as further examined in H4.

Hypothesis 4 therefore investigated the three-way interaction between message sequencing (E2R vs. R2E), nostalgia proneness, and consumer innovativeness (DSI) on WTT. Specifically, the findings support the hypothesis which proposed that the effect of E2R message framing is the strongest among individuals high in both characteristics, underscoring that advertising effectiveness is contingent on the combination of both consumer traits. This highlights the importance of considering multiple consumer personality traits not in isolation, but as

interconnected dimensions whose joint influences have a higher impact on behavioral intentions than each trait alone (Cattaneo & Guerini, 2012).

The significance and substantial proportion of variance explained in this model further emphasizes the value of considering high-order interactions in predicting consumer outcomes, particularly in complex contexts such as retro marketing. Furthermore, the three-way interaction revealed a particularly intriguing reversal of the framing effect. While earlier analysis showed that R2E stimuli generally led to higher WTT, when both nostalgia proneness and consumer innovativeness are high, the E2R sequence became more effective, outperforming the initial R2E stimuli results. This reversal strongly aligns with our theoretical expectations that nostalgic emotional framing followed by rational justification resonates most with individuals exhibiting this hybrid personality profile (Brown et al., 2003a; Cattano & Guerini, 2012). The growing relevance of emotional-first messaging as nostalgia proneness increases helps explain this reversal effect, highlighting that an emotional opening better captures the attention and engagement of consumers high in nostalgia before rational justification is presented. These shifts invite deeper theoretical interpretations and offer a powerful insight into retro marketing as a hybrid strategy to increase advertising effectiveness.

Our findings not only support the hybrid nature of retro marketing itself but also the complex and multiple aspects of personality traits interacting together when strategically aligned through the advertising message. The reversal and superior effectiveness of the E2R stimuli under dual high nostalgia proneness and consumer innovativeness can be understood through the lens of sequencing effects. According to Kuperman et al. (2010), messages are subjective to a “start-up” and “warp-up” effect, where emotional content placed at the beginning captures attention and slows processing, while rational arguments at the end benefit from consumer’s attempts to evaluate and decisively justify a decision to try the product. While the emotional sequence early on acts as a hook, affectively engaging consumers high in nostalgia proneness, the concluding rational cue satisfies the need for logical justification and legitimization of the initial pull for consumers high in innovativeness. This reflects the complex nature of retro marketing as a hybrid phenomenon, combining affective nostalgia with modern innovation appeals in a mutually reinforcing manner (Cattano & Guerini, 2012). This congruence further implies that through retro marketing, brands can align with several personality aspects simultaneously. Triggering both nostalgia and innovativeness increases advertising effectiveness when aligned with message sequencing.

By contrast, the R2E framing might have failed to initially resonate with consumers' emotional needs, thereby weakening engagement among those high in nostalgia. Furthermore our model also supports the view that emotional and rational sequences are not merely parallel strategies, but mutually reinforcing dynamics that work best in tandem. In light of Yoo and MacInnes’ (2005) findings, nostalgia primes the emotional resonance early on, enhancing the

message's perceived credibility, while the rational closure provides the logical justification that innovative consumers seek – together yielding a powerful synergistic effect on WTT.

The results of this thesis mirror this dual reinforcement: the emotional-to-rational stimuli appears to combine the emotional strength of nostalgia with the cognitive assurance of modern innovation, resulting in a more compelling retro-themed message. This provides rational why the E2R outperforms the R2E stimuli, when audiences are psychologically prone in both traits. Thus, retro-themed messages are not only more effective when dual-framed, but when strategically sequenced to align with the combined consumer dispositions. Together, these findings suggest that effective retro marketing benefits from a dual-pathway approach, that does not simply emphasize either nostalgia or innovation in isolation, but strategically integrating both through E2R sequencing. Thus triggering multiple dimensions of consumer personality simultaneously, creating a more robust and congruent brand appeal. In doing so, E2R messaging bridges affective resonance with future-oriented justification, particularly among consumers who are both emotionally engaged and open to innovation. While prior research has often examined emotional and rational strategies separately (Habiba et al., 2021), our results demonstrate the added value of combining them sequentially and underscore that their effectiveness depends heavily on the interplay with consumer's psychological traits.

From a theoretical perspective, these findings align closely with Brand Congruence Theory and Self-Congruity Theory, both of which propose that consumers respond more favorably to brand messages that align with their own self-concept and values (Abosag et al., 2019). Individuals high in nostalgia proneness are typically motivated by emotional, identity-reinforcing cues rooted in the past (Chen, 2022), whereas highly innovative consumers are driven by novelty, progress, and future oriented behavior (Goldsmith & Hofacker, 1991; Araujo et al., 2016). While these orientations may initially seem contradictory, the results of this thesis demonstrate that when a retro-themed message activates both dispositions simultaneously, it can unlock a uniquely persuasive motivational state. The E2R framing appears to facilitate this dual activation by first anchoring the message in affective nostalgia, and then offering rational justifications that appeal to innovative consumers' need for validation and modern relevance. This structured integration fosters a sense of internal congruence — a psychological bridge between past and future — making the E2R strategy particularly compelling for individuals who score high on both traits. In doing so, the findings contribute to a more nuanced understanding of retro marketing, suggesting that nostalgia and innovativeness are not necessarily oppositional, but co-exist and reinforce each other in ways that enhance message effectiveness.

Ultimately, the central finding of this thesis is that retro marketing is inherently a hybrid strategy, consisting of both emotional and rational appeals. This dual nature is uniquely effective among consumers who are high in both nostalgia proneness and consumer innovativeness, as it simultaneously activates their emotional connections to the past and their interest in novelty and innovation.

8. Conclusion

Ultimately what do these insights really mean?

To answer this question, we return to the retail aisle – the exact setting where consumers make on-the-spot decisions, navigating a clutter of various stimuli that influence their behavior.

Imagine again a consumer walking down a grocery store aisle. They pause in front of a retro-themed display for a new soda. A message catches their eye: "It's the soda that was in your best friend's fridge every summer, only better. Now packed with vitamins, enriched with 10g of protein and infused with botanicals." This moment, brief and spontaneous, captures the very mechanism this study has demonstrated. In an increasingly saturated retail environment, where consumer attention is limited and new brands struggle to gain visibility, we have shown that retro-themed in-store advertising, rooted in targeted message framing and sequencing, does influence consumers' willingness to try a new product. Specifically, our findings highlight that it is not only the content of the message that matters, but also its sequence, and crucially, to whom it is addressed. A carefully framed retro-themed message, when aligned with consumer traits such as nostalgia proneness or domain-specific innovativeness, can create both emotional and cognitive resonance, ultimately driving initial trial behavior. This study demonstrates that such text-based in-store advertising can effectively cut through retail clutter and capture consumers' attention.

8.1 Theoretical Implications

The present study contributes to retro marketing research by demonstrating its predictive effects on consumer outcomes, specifically in triggering initial trial of a new product which is a key objective in the FMCG context. In doing so, two specific theoretical contributions that pertain to FMCG have been made. First, existing research within retailing has been expanded by demonstrating that retro marketing is a viable strategy within in-store advertising, not merely on product packaging. Based on our experiment which used a mockup of an aisle fin as its stimuli, the study found that retro-framed messages on an in-store advertisement can positively influence willingness to try a new product.

Second, while previous studies have explored retro branding for brands with established heritage, this study extends the application to new, non-heritage FMCG brands, using a fictional product in a realistic in-store advertising setting (Hallegate, 2014; Chen, 2022). Importantly, our findings show that framing a fictional new product using both nostalgic and functional textual cues is effective in triggering consumer trial. This supports the broader argument that retro strategies, particularly when constructed around nostalgic and functional appeals are especially fruitful for new, non-heritage brands seeking initial trial and visibility in cluttered retail environments. This addresses a notable research gap and highlights retro marketing as a viable visibility strategy.

Furthermore, in doing so this study contributes to the conceptual refinement of retro marketing. While retro branding has traditionally referred to retro strategies tied to heritage brands, our findings reinforce the argument that retro can be decoupled from a brand's history (Hallegate, 2014; Chen, 2022). By focusing on a fictional, non-heritage brand, this research contributes to advancing the distinction between retro branding and retro marketing, positioning the latter as a concept that describes leveraging the 'real' past, whether personal, historic or even cultural, instead of the brand past which is what the former depends on. This captures how nostalgic and modern elements can be leveraged effectively by new brands, particularly in the FMCG environment.

Methodologically, theoretical contributions have been made to communications literature by focusing solely on static, text-only manipulations to isolate the effects of message appeals, which were previously treated collectively alongside visual appeals in retro research (Chen, 2022). This approach enabled a clear investigation of which textual cues and in which combination drive consumer responses. Therefore, the findings highlight the predictive power of specific textual elements, contribute to the operationalization of retro-themed advertising and make retro effects more measurable and generalizable.

Building on that, our research challenges the existing style of research into emotional and rational advertising strategies, where each strategy is treated distinctly, with its effects analysed separately from its counterpart (Stafford & Day, 1995; Drolet, Williams and Lau-Gesk, 2007; Leonidou & Leonidou, 2009, de Pelsmacker et. al., 2022; Marzouk et. al., 2022). This research has continued Lim et. al. (2018)'s work to apply both strategies together in the same advertisement, resulting in favourable outcomes. As Habiba et. al. (2021) determined, this dichotomous approach of separating emotional from rational does not match the reality: that these elements are often intertwined within one advertising strategy. This study supports this critique of existing studies in rational and emotional advertising, showing that they are in fact most effective when used in tandem, in the right sequence, than when they are apart.

Importantly, by examining the structure of the retro message and not just the content, our research provides empirical support to the impact of the under researched concept of message sequencing within advertising. Despite the two stimuli using almost exactly the same words, just placed in a different order, consumers respond differently, thus supporting the findings of Lim et. al. (2018) that word placement has an impact on consumer intentions. Even though initial analyses indicated that a rational-to-emotional sequence is generally the most effective in triggering willingness to try a new product, further investigations reveal that an emotional-to-rational sequence is most effective for consumers high in both nostalgia proneness and innovativeness. This reversal effect adds theoretical nuance by showing that the sequencing of retro messaging interacts with consumer characteristics, rather than working uniformly across audiences.

Building on brand congruence theory, this study shows that the success of retro communication depends on individual consumer traits, particularly nostalgia proneness and consumer innovativeness. Consumer responses to retro communications are not universally driven by nostalgia alone; instead they are contingent on the interaction of nostalgia and innovativeness, highlighting the importance of sequencing in aligning with consumer traits. While previous studies (Hallegatte et. al., 2018; Chen, 2022) have focused on the positive effect of nostalgia proneness alone, our findings emphasize a dual-trait congruence, showing that consumers high in both traits respond most favorably to retro advertisements. This extends trait-based segmentation in retro advertising by incorporating openness to innovation as a critical moderator alongside nostalgia.

While previous studies on retro marketing have largely focused on nostalgia as the primary trait driving consumer responses, this has led to the implicit construction of singular consumer archetypes such as “the nostalgic consumer” (Chen, 2022). However, this one-dimensional perspective overlooks the hybrid nature not only of retro marketing, which blends emotional (past-oriented) and functional (modern) elements, but also of consumers themselves (Brown et al., 2003a). In line with our findings, individuals embody multiple, coexisting traits such as nostalgia and innovativeness, which are not necessarily oppositional but exist jointly. This suggests that congruence should not be limited to aligning brand messages with a single dominant trait, but can be more impactful when it simultaneously resonates with multiple aspects of the consumer’s personality (Cattaneo & Guerini, 2012). Our results show that the moderating effects of nostalgia proneness and consumer innovativeness on message sequencing becomes especially salient when considered jointly, indicating a synergistic interaction that enhances initial trial behavior (Goldsmith & Hofacker, 1991; Huotilainen et al., 2005). Therefore our findings contribute towards clarifying the boundary condition under which retro marketing is most effective.

As well as identifying this dual-trait congruence, with consumer innovativeness as the second, less recognised trait, we also contribute to the growing effort to operationalize retro-specific consumer responses. While well-established scales exist for nostalgia proneness (Sedikides et al., 2008) and domain-specific innovativeness (Goldsmith and Hofacker, 1991), no dedicated scale yet captures retro receptiveness as a hybrid construct. Our application of both trait measures in one framework represents a step toward such operational clarity, however further work is needed to develop a robust, standalone scale that can capture the unique dimension of retro responses as well as the psychological mechanisms underlying the retro appeal.

Overall, this research conceptualizes retro marketing as a hybrid strategy which balances the emotional pull of nostalgia with the rational reassurance of innovation. It empirically supports the theory of brand-consumer fit by demonstrating that the message itself, when aligned with both nostalgic and novelty-seeking tendencies, can create congruence and enhance willingness to

try. Furthermore, this study demonstrates that sequencing should be given just as much consideration as the visual elements when creating a message for an advertisement, and further work should more rigorously test sequencing across different audiences and products. These insights lay a foundation for future research on retro receptiveness and contribute to a more dynamic understanding of how retro strategies can be optimized for new product launches in the FMCG environment.

8.2 Managerial Implications

The fast-moving consumer goods (FMCG) retail environment is marked by high competition, narrow profit margins and limited shelf visibility, especially for new brands without heritage (Kuzmina et al., 2018; Muranko et al., 2021; Bocken et al., 2022; Fuller et al., 2023). Within this context, breaking through the retail clutter and influencing consumers at the product shelf remains a critical challenge. In-store marketing strategies, particularly for impulse-driven categories like beverages, must balance cost efficiency while appealing to the customer (Beck & Kenning, 2015).

This research uncovered several actionable insights that managers should consider when designing advertising campaigns, especially seeking lean, scalable communications that resonate with diverse consumer profiles (Garrido-Morgado & Gonzalez-Benito, 2024). Through our thesis, retro marketing emerges as a flexible communication tool through which marketers can engage not only nostalgic customers, but also those who enjoy novelty and innovation - showing that these traits can coexist and be simultaneously activated.

Starting with the message itself, we have determined that textual content and its structure, not just visual elements of advertising, have a positive effect on consumer willingness to try new products. The order of the rational and emotional appeals in a message, as well as how it is framed, both play a key role in how a consumer processes the message, and their subsequent intention towards the new product. Subtle shifts in sequencing can meaningfully impact advertising effectiveness, even when the message content remains the same (Tversky & Kahneman, 1981; Levin, Schneider and Gaeth, 1998; Lim et. al., 2018). Therefore, managers should take care when drafting messages for both new products and new brands, as subtle differences in framing and the order of the words in the message have an impact on a consumer's willingness to try. Most importantly, advertisements should not just focus on emotional appeals or functional attributes: combining both in the same message is key to maximise impact.

Furthermore, our results support the idea that emotional appeals rooted in retro-themed advertising can be successful, even for brands without heritage, especially when embedded within the right message sequence. Determining which sequence is most optimal is context dependent. If managers are not in a position to access customer profiling data, or are unsure as to the type of customer they are targeting in terms of demographics or characteristics, the

rational-to-emotional sequence is most appropriate and serves as an effective default, in contrast to Lim. et. al (2018)'s findings. However, our results also demonstrate that emotional-to-rational sequencing can outperform rational-to-emotional messaging among highly nostalgic and innovative consumers. This indicates that retro-themed advertising should not be approached with a one-size-fits-all approach. Instead, it allows marketers to adopt a segmentation-based approach and a versatile tool which enables them to tailor message frames to the personality traits of their targeted audience. For instance, if retailers have access to consumer insights that indicate high levels of nostalgia proneness or innovativeness, emotional-to-rational sequencing can be strategically employed to maximize consumer outcomes. In this sense, retro marketing can serve not only nostalgic but also innovative consumers, broadening its relevance and reach, thus underscoring the importance of congruence between consumers' personality traits and brand messaging (Gardner et al., 1999; Kühnen et al., 2001 as cited in Chen, 2022).

Importantly, our study shows that nostalgia can effectively be evoked through text-based advertising scenarios, without the need for elaborate visuals. Considering the duality of retro marketing as a concept, marketers might emphasize specific keywords to elicit nostalgic associations while simultaneously providing rational, functional differentiation and value propositions. Finally, the findings of this study reinforce the value of retro-themed in-store advertising as a high impact solution for new FMCG brands. Unlike full packaging redesigns or large scale branding campaigns, text-based retro cues can be embedded into retail touchpoints, enhancing product visibility and encouraging initial trial behavior in a cluttered retail environment (Garrido-Morgado & Gonzalez-Benito, 2024).

8.3 Limitations

In terms of gender and age, all groups have been well represented within the data sample. However, the majority of the respondents came from one country, South Africa, and the effects of this overrepresentation were not investigated as part of our results. Therefore, this may have an effect on the generalisability of the findings. Furthermore, key demographics such as income level and occupation have not been collected which constrains how much the findings can be contextualised. This is further worth considering given that the data was collected using a survey platform to find respondents to make up the data sample. Those who register themselves with online survey platforms tend to exhibit certain traits, such as lower than average incomes, more likely to be university educated or currently working towards a university degree, as well as lower than average levels of social engagement (Newman et. al., 2020). Therefore, even if gender and age are well distributed within the dataset, it is fundamentally difficult to create a data sample that is truly representative of the general population, which subsequently means the generalizability and external validity of our findings is also limited.

Inattentiveness can also not be ruled out as a potential limitation of the survey and the validity of the sample (Newman et. al., 2020). While we manually checked the data and eliminated

responses from participants who provided the same likert scale value for both the original and reverse scaled version of the same question within the DSI section of the survey, thus indicating inattentiveness, we cannot be certain of attentiveness levels of the remaining respondents kept within the data sample given the survey was completed online, remotely.

As all variables were assessed using self-reported Likert scales, the study may be subject to common method variance and same-source bias. While the experimental design partially mitigates this risk by manipulating stimuli independently, the reliance on subjective perception measure may have introduced social desirability bias and extreme responding styles.

Focusing on the data quality, one problem that we have continuously faced when testing each hypothesis is the non-normality and potential heteroskedasticity of the data. While transformed values were used to improve interpretability, this carries a risk that the transformation actually hides some of the effect or leads to model results that may be misleading. While the t-test is fairly robust to normality concerns, especially with the sample size of our data, caution should still be taken when interpreting the strength and direction of the results.

Some constructs in our correlation matrix (e.g., nostalgia proneness, ad-evoked nostalgia, product involvement, DSI) showed moderate intercorrelations, which, while expected, raise the possibility of conceptual overlap. This could blur the distinctiveness of individual constructs and affect the interpretation of regression coefficients. Furthermore, detected issues of multicollinearity in the regression analyses needed to be ruled out through mean-centering. This can be explained due to the inherently correlated nature of personality traits and message framing perceptions. While assumptions of normality were visually supported through the Q-Q plots and theoretically justified via the Central Limit Theorem, deviations could not be ruled out.

As our study did not include a neutral baseline (non-retro, non-framed) condition, it is not possible for us to isolate the impact of retro-themed stimuli from other ad features. Another limitation concerns the manipulation checks, which primarily assessed whether the emotional sequence evoked nostalgia as intended. However, no specific checks were conducted to verify whether participants perceived or processed the order of the emotional and rational appeals—which was central to the experimental manipulation. This leaves open the question of whether observed effects were due to message order or simply content salience, i.e., whichever part participants found more relevant or emotionally resonant.

Finally, the design of the experiment, as well as both stimuli also needs to be taken into account. There are some limitations regarding the nature of our experiment being a remote survey instead of an in-person experiment in a real retail environment. Although the retro-themed in-store ad scenario aimed to simulate a real-world setting, participants' responses (e.g., WTT) do not fully reflect actual in-store behavior or decision making due to the artificial nature of the experiment. That is, the study measured behavioral intention rather than actual behavior, which is a common but important limitation in experimental research. Second, while this study aims to contribute to

existing research through examining the impact of messaging alone, visual aids were still used in the form of a picture of a soda can taken from a bird's eye view, as well as placing the text within a rectangle in order to make the stimuli feel like a 'real' in-store advertisement. Although efforts were made to make these visual elements as minimal as possible, for example showing the can from above so that packaging and logo could not be determined, the stimuli was not solely focused on the message. However, this trade-off was made so that the scenario could be seen by the respondents as mimicking real-life, allowing for more authentic answers in the subsequent Likert scales.

Despite these limitations, we have been able to draw significant conclusions from the results of our experiments, thus contributing to the field of research.

8.4 Future Research

While our research has made considerable contributions to retro marketing and communications theories, there is still more that can be done to increase the robustness of our findings and expand the research into the field. Firstly, in the absence of an existing scale, our findings have laid the groundwork into creating a scale that measures retro proneness. However, more work should be done to both replicate this scale, which combines existing nostalgia proneness and domain-specific innovativeness, within other contexts, as well as testing if alternative elements can be added to improve model fit. Together, this research will contribute to building a more established, consolidated scale for retro proneness that builds on our foundation.

Building on this, our research could be enriched by delving deeper into the characteristics of consumers. For example, looking into the demographics of consumers and using them as moderators could better explain the relationship between each message sequence and the subsequent willingness to try. In particular, attributes such as income level and occupation could help to boost the effectiveness of the model and better explain the variation in the data. Furthermore, their relationship with need for cognition (Cacioppo & Petty, 1982) should be assessed, as well as if this variable helps to determine which sequence is more effective. This would allow marketing managers to better plan message sequences based on the demographics of the local area they wish to target, with the ability to run the same advertisement with different sequences based on the needs of the target area, thus maximising the message's impact.

We also recommend looking beyond willingness to try as the ultimate goal. This research has established that both sequences result in a willingness to try a retro-advertised, new soda drink despite its lack of heritage, thus proving the growing popularity of retro marketing amongst today's consumers (Brown et. al., 2003a). While willingness to pay is the natural next step, we advise focusing on marginal gains instead of complete premiumisation based on sequencing and retro marketing alone. As FMCG is a low-margin, high-volume sector, even the smallest marginal increase would have a significant impact on revenue (Kuzmina et al., 2019; Muranko et

al., 2021). Continuing with the focus on FMCG, testing message sequencing on different FMCG products outside of soda drinks would also help to improve the robustness of our findings, as well as establish the bounds of its applicability. For example, Drolet, Williams and Lau-Gesk's (2007) work has previously established that there is difference in preference for messages with an emotional vs rational appeal based on whether they are perceived as hedonic or utilitarian.

Finally, alternative sequencing types could be tested to determine if there is an approach that is more effective than emotional-to-rational. Purnawiran et. al. (2012) discuss message wrapping as another successful sequencing approach in terms of influencing perceived usefulness of online reviews. In this case, placing a rational phrase or sentence in between two emotional ones, and vice versa, may also result in outcomes that are just as impactful, if not more so, on willingness to try a new, retro marketed product within FMCG.

9. Declaration of AI Usage

The authors of this thesis confirm that all work has been written in our own words except for where it has been explicitly cited otherwise, and has not been previously used in any other courses within any degree programme. In terms of AI, the tool ChatGPT has only been used in a support capacity for tasks such as identifying relevant journals and papers as starting points for conducting our own research, sparking initial ideas and identifying synonyms or otherwise refining text in some areas for increased clarity. No citations have been taken directly from ChatGPT - any names of papers or journals were treated as guidance and researched independently, at source. Finally, ChatGPT also assisted as a tutor in the method and analysis section to help clarify how certain outputs of our results in jamovi should be interpreted, as well as validate understanding of key concepts which were then cross-checked with the academic sources that were cited.

Example prompts include, but are not limited to:

- “What's an academic way of saying 'as a reminder?’”
- “When reading t-test results, what does the mean difference say and what does the effect size say?”
- “What does the t score mean in regressions?”
- “Does selection bias have an effect on the validity or reliability of findings?”
- “What are some attributes that a soda can have that make it modern, or innovative?”
- “What is the purpose of a moderating variable?”
- “What is a good structure for the problematization section?”

10. References

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11. Appendix

Appendix A - Questionnaire

Thank you very much for participating in our survey! We're conducting some research for a thesis on new products in a retail environment with a specific focus on soda drinks.

All information and responses gathered/ published will be completely anonymous. By participating in this survey, I give my consent that my responses will be recorded.

What age group do you belong to?

- 18-25
- 26-30
- 31-35
- 36-44
- 45-54
- 55+

What is your gender?

- Male
- Female
- Prefer not to say

What is your country of residence?

- Drop down list of all countries

—

Follow up questions about the **advertisement** [Ad-evoked nostalgia check]

The following questions refer to your feelings and thoughts about the advertisement you just saw. Please indicate how much you agree with the following statements about the **advertisement message** for the soda drink.

The advertisement message reminds me of the past

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

The advertisement message makes me feel nostalgic

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

The advertisement message makes me reminisce about a previous time

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

The advertisement message makes me think about when I was younger

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

—

Follow up questions about the **product** [Product Involvement check]

Please indicate how much you agree with the following statements regarding the product you saw in the advertisement

I like drinking soda

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

Soda is a beverage I regularly consume

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

I can imagine trying this product at least once

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

If I had the opportunity, I would try this soda drink

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

I would be curious to taste this soda drink

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

—

Pricing

Would you be willing to pay the following price for the advertised can of soda? Assume it is of a standard size of 330ml (11 fl oz)

- 0.99 euros
 - Yes
 - No
- 1.29 euros
 - Yes
 - No
- 1.59 euros
 - Yes
 - No
- 1.89 euros
 - Yes
 - No
- 2.29 euros
 - Yes
 - No

What is the maximum amount of money (in euros) you would personally be willing to pay for this 330 ml/11 fl oz can of soda?

—

Questions about you

The next questions refer to your general personality traits and are not about the specific product or advertisement

Nostalgia - according to the Oxford Dictionary, 'nostalgia' is defined as a 'sentimental longing for the past'.

How valuable is nostalgia for you

Not at all 1 2 3 4 5 6 7 Very much

How important is it for you to bring to mind nostalgic experiences?

Not at all 1 2 3 4 5 6 7 Very much

How significant is it for you to feel nostalgic

Not at all 1 2 3 4 5 6 7 Very much

How prone are you to feeling nostalgic?

Not at all 1 2 3 4 5 6 7 Very much

Specifically, how often do you bring to mind nostalgic experiences?

Not at all 1 2 3 4 5 6 7 Very much

—

Questions about new products

The following statements relate to your behaviour when it comes to trying new brands or products in the category of soft drinks. Please indicate how much you agree or disagree with each statement.

I know more about new beverages than other people do

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

In general, I am among the last in my circle of friends to purchase a new beverage when it appears

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

If I heard that a new beverage was available through a local store, I would be interested enough to buy it

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

Compared to my friends, I do little shopping for new beverages

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

I would consider buying a new beverage, even if I hadn't heard of it yet

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

In general, I am last in my circle of friends to know the latest beverages and their names

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

Appendix B - Reliability Analysis

Table 1 Reliability Analysis for DSI

Scale Reliability Statistics

	Mean	SD	Cronbach's α	McDonald's ω
scale	4.67	1.26	0.770	0.791

[4]

Item Reliability Statistics

	If item dropped
	Cronbach's α
I know more about new beverages than other people do.	0.715
If I heard that a new beverage was available through a local store, I would be interested enough to buy it.	0.708
I would consider buying a new beverage, even if I hadn't heard of it yet.	0.751
In general, I am among the last in my circle of friends to purchase a new beverage when it appears. *	0.781
Compared to my friends, I do little shopping for new beverages. *	0.763
In general, I am the last in my circle of friends to know the latest beverages and their names. *	0.689

* reverse scaled item

Table 2 Reliability Analysis for Ad-evoked nostalgia

Scale Reliability Statistics

	Mean	SD	Cronbach's α	McDonald's ω
scale	4.57	1.78	0.939	0.940

[3]

Item Reliability Statistics

	Mean	SD	If item dropped	
			Cronbach's α	McDonald's ω
The advertisement message reminds me of the past	4.61	1.88	0.912	0.916
The advertisement message makes me feel nostalgic	4.28	1.91	0.940	0.941
The advertisement message makes me reminisce about a previous time	4.63	1.96	0.902	0.905
The advertisement message makes me think about when I was younger	4.78	2.01	0.924	0.926

Table 3 Reliability Analysis for WTT

Scale Reliability Statistics

	Mean	SD	Cronbach's α
scale	5.92	1.25	0.907

[3]

Item Reliability Statistics

	Mean	SD	If item dropped	
			Cronbach's α	McDonald's ω
I can imagine trying this product at least once	5.88	1.42	0.903	0.903
If I had the opportunity, I would try this soda drink	5.96	1.33	0.857	0.859
I would be curious to taste this soda drink	5.92	1.32	0.841	0.842

Table 4 Reliability Analysis for Nostalgia proneness

Scale Reliability Statistics

	Mean	SD	Cronbach's α	McDonald's ω
scale	5.10	1.45	0.938	0.939

[3]

Item Reliability Statistics

	Mean	SD	If item dropped	
			Cronbach's α	McDonald's ω
How valuable is nostalgia for you	5.25	1.51	0.912	0.914
How important is it for you to bring to mind nostalgic experiences?	5.17	1.57	0.912	0.914
How significant is it for you to feel nostalgic?	5.06	1.65	0.908	0.911
How prone are you to feeling nostalgic?	4.90	1.57	0.942	0.943