



INSTITUTO
UNIVERSITÁRIO
DE LISBOA

Exploring the Impact of Fear of Missing Out on Subjective Well-being in Utilitarian and Hedonic Purchase Contexts

Kristi Kodra

Master in Marketing

Supervisor: Sandra Maria Correia Loureiro, Full Professor at ISCTE-IUL Business School, Department of Marketing, Operation and General Management

January, 2025



**BUSINESS
SCHOOL**

Department of Marketing, Strategy and Operations

Exploring the Impact of Fear of Missing Out on Subjective Well-being in Hedonic and Utilitarian Purchase Contexts

Kristi Kodra

Master in Marketing

Supervisor: Sandra Maria Correia Loureiro, Full Professor at ISCTE-IUL Business School, Department of Marketing, Operation and General Management

January, 2025

Acknowledgments

Resumo

Palavras-Chave: Fear of Missing Out; Bem-estar Subjetivo; Hedônico; Utilitário; Independência do Consumidor; Necessidade de Singularidade do Consumidor

JEL Classification System: M31 Marketing; I310 General Welfare; Well-Being

Abstract

Keywords: Fear of Missing Out; Subjective Well-being; Hedonic; Utilitarian; Consumer Independence; Consumer Need for Uniqueness

JEL Classification System: M31 Marketing; I310 General Welfare; Well-Being

Index

Resumo	i
List of Figures	v
List of Tables.....	vi
1. Introduction	7
1.1 Relevance of the topic	9
1.2 Problem statement	10
1.3 Research objectives	11
1.4 Research questions	11
1.5 Research outline	12
2. Literature Review	13
2.1 Fear of Missing Out.....	13
2.1.1. Origin and definitions.....	13
2.1.2. Theoretical background in Marketing	14
2.1.3. Personal and Social dimensions of FoMO from a self-concept perspective	15
2.2 Fear of Missing Out Drivers.....	16
2.2.1. Consumer Independence	16
2.2.2. Consumer Need for Uniqueness	17
2.3 Subjective Well-Being	18
2.3.1. Origin and definitions.....	18
2.3.2. The impact of Fear of Missing Out on Subjective Well-Being.....	19
2.4 The mediating effect of Fear of Missing Out in the relationship between Consumer Independence, Consumer Need for Uniqueness, and Subjective Well-being	21
2.4.1. Consumer Independence and Subjective Well-being.....	21
2.4.2 Consumer Need for Uniqueness and Subjective Well-being	21
2.4.3 Fear of Missing Out as a mediator between consumer traits and subjective well-being	21
2.5 The Moderating Role of Hedonic and Utilitarian Product Categories	22
2.5.1. Hedonic vs Utilitarian	22
2.5.2. Fear of Missing Out depending on Consumer Independence, Consumer Need for Uniqueness, and Product Category	23
2.5.3. Subjective Well-Being depending on FoMO and Product Category	23
3. Hypothesis Development and Conceptual Model.....	25
3.1 Consumer Independence and Fear of Missing Out	25
3.2 Consumer Need for Uniqueness and Fear of Missing Out.....	25

3.3 Fear of Missing Out and Subjective Well-Being	25
3.4 The mediating effect of Fear of Missing Out in the relationship between Consumer Independence, Consumer Need for Uniqueness, and Subjective Well-being	26
3.5 The Moderating Role of Hedonic and Utilitarian Product Categories	27
3.6 Conceptual Model	28
4. Methodology	29
4.1 Research design and approach	29
4.2 Data collection and sample.....	29
4.2.1. Questionnaire development.....	29
4.2.2. Data measurement and scales.....	31
4.2.3. Sample	32
5. Results and Discussions	34
5.1 Measurement Model.....	34
5.2 Structural Model.....	37
5.3 Mediation Analysis.....	40
5.5 Multigroup Analysis.....	42
5.4 Discussions.....	46
5.4.1. Consumer Independence, Consumer Need for Uniqueness, and Self-Concept FoMO	46
5.4.2. Self-Concept FoMO and Subjective Well-Being	46
5.4.4. Consumer Independence, Consumer Need for Uniqueness and SWB: The mediating role of Social FoMO.....	47
5.4.4. The role of product category (Utilitarian vs Hedonic)	48
6. Conclusions	50
6.1 Theoretical implications	50
6.2 Managerial implications	51
6.3 Limitations and future research	53
Bibliography	54
Annexes	63
Annex A – Pre-Test Questionnaire	63
Annex B – Pre-Test Results	67
Annex C – Questionnaires Hedonic and Utilitarian Goods	71
Annex D – PLS Algorithm Results (Measurement Model)	83
Annex E – Bootstrapping Results (Common Method Bias – Marker Variable).....	89
Annex F - Bootstrapping Results (Structural Model)	94
Annex G Mediation Analysis Results	105
Annex H - Permutation multigroup analysis (MGA).....	106

List of Figures

Figure 1 3.6.1. Conceptual model	28
Figure 2 5.2.1. Research model with Bootstrapping results.....	38

List of Tables

Table 1 4.2.2.1.– Scales authors and number of items	31
Table 2 4.2.3.1. – Demographic information: Hedonic and Utilitarian Questionnaires	32
Table 3 5.1.1. - Reliability and convergent validity tests (Merged Model)	36
Table 4 5.1.2. - Discriminant validity tests Fornell–Larcker criterion analysis and HTMT	37
Table 5 5.1.3. - Multicollinearity Statistics (VIF) (Merged Model)	37
Table 6 5.2.1. Structural Model Results (Merged Model)	38
Table 7 5.2.2.- Model Fit Summary - Merged Model	39
Table 8 5.3.1. - Mediation Analysis Results (Merged model)	42
Table 9 5.5.1. - Bootstrap MGA Results Across Hedonic and Utilitarian	45
Table 10 5.5.2. Bootstrapping results across hedonic and utilitarian products	45

1. Introduction

The pursuit of happiness lies at the heart of many human decisions. In commerce, in particular, consumption (e.g., arts consumption) serves as a means for consumers to enhance their subjective well-being (An et al., 2022).

From transactional marketing, which prioritizes short-term sales and profits, to relationship marketing, which stresses long-term trust and commitment between brands and customers, well-being marketing (Sirgy & Lee, 2008) has evolved as a paradigm shift in marketing. Building on these pillars, well-being marketing incorporates ethical considerations by emphasizing the improvement of consumer's subjective well-being at every stage of the consumer or product life cycle while defending the interests of the environment and society.

In this sense, subjective well-being is also vital for companies and retailers as a significant aspect of business success, not only related to positive word-of-mouth (El Hedhli et al., 2016), customer loyalty (Troebbs et al., 2018), but also healthy long-term brand-customer relationships (Chang, 2020).

The inception of notions like ‘‘shopping well-being’’ (El Hedhli et al., 2016) further emphasizes the recognition of the link between well-being and sustained business growth. From a managerial standpoint, retailers are realizing more and more that putting customers’ needs first, results in increased outcomes, ending up in a win-win situation.

Over the past few years, prominent brands have operated within the framework of well-being marketing, running campaigns that focus on subjective well-being which suggests the importance of well-being for having strategic marketing.

These campaigns can take the form of marketing beneficence, which emphasizes the promotion of customer well-being (Sirgy & Lee, 2008). In 2021, Apple for instance launched its Fitness+ ‘‘Time to Walk’’ campaign, which encourages customers to be active while taking guided audio walks with famous people (Apple, 2021).

They can also manifest as marketing non-maleficence, which puts more focus on the well-being of other stakeholders such as society and the environment rather than the customer (Sirgy & Lee, 2008) Adidas’ ‘‘Run for the Oceans’ campaign is a good example of this type of marketing initiatives, where they raised awareness about plastic pollution (Adidas Press Release, 2022).

(Dominko & Verbič, 2022) raise attention to looking at subjective well-being as an outcome as well. In retailing, for instance, positive emotions during in store experiences enhance hedonic

value and satisfaction, leading to a higher sense of well-being (Cachero-Martínez & Vázquez-Casielles, 2017).

Because of this importance, it is essential for companies to understand what affects subjective well-being. While well-being marketing does have the potential to promote consumer well-being, (Sirgy & Lee, 2008) underscore that this enhancement should not come at the cost of negative effects either on the consumers themselves, meaning it should be achieved safely, or in other stakeholders, involving employees, the general public, the local community, and the environment.

On that note, Fear of Missing Out (FoMO) significantly affects customer's subjective well-being, but with a cost to consumers, becoming a phenomenon that retailers should be aware of as it can disrupt consumer's buying intentions and jeopardize consumer-brand relationships, especially brand trust (Morsi et al., 2024).

FoMO has grown as a psychological phenomenon that is ingrained in today's youth culture and psyche, becoming a defining characteristic of contemporary consumer behavior. About 15% of American adults say they experience FoMO every week, while 50% say they do so at least once a month (Milyavskaya et al., 2018). Even though the concept itself is not new, social media's development has been a tremendous accelerant in its patterns, allowing for continual comparisons with others and intensifying the psychological impacts of FoMO. (Brailovskaia & Margraf, 2024).

This issue has grown so widespread and overwhelming in recent years that a lot of young people are now calling for a change to JOMO, or the Joy of Missing Out. By putting their mental health first, people are finding happiness and tranquility and consciously embracing disconnection and joy in missing out on events, experiences, or products (Chan et al., 2022).

Nonetheless, marketers continue to intentionally use FOMO to increase sales and engagement, despite the negative effects they create on their consumers. They create ads that are intended to elicit impulsive buying habits by utilizing influencer endorsements, limited-time deals, and scarcity attractions. Although these tactics frequently result in short-term gains, they may have detrimental effects on the well-being of customers (Hodkinson, 2019).

These unfavorable results, in turn, put not only customers, but brands at risk. Customers that are unhappy are less likely to make another purchase and are more likely to spread negative word-of-mouth about a business, both of which can harm its reputation. For instance, (Morsi et al., 2024) characterize FOMO-prone consumers as "Butterflies," who frequently switch brands and express their displeasure in public.

These trends emphasize how marketers have an ethical obligation to think through the long-term effects of their initiatives and better understand the emotional triggers that affect consumer's purchasing decisions.

Hence, this study examines FoMO influences on subjective well-being in the context of commerce and retail, with a special focus on the distinction between hedonic and utilitarian goods purchases. On top of that, consumer traits like Consumer Independence and Consumer Need for Uniqueness are investigated to provide insights into the emotional and psychological elements that influence FoMO, and therefore subjective well-being.

1.1 Relevance of the topic

One important indicator of both individual and societal progress is subjective well-being (SWB), encompassing emotional satisfaction and psychological fulfillment. Well-being marketing has made SWB more prominent in the marketing field by combining moral values with commercial objectives to improve customer well-being (Sirgy & Lee, 2008). Fear of Missing Out (FoMO), fueled by social media, has a huge impact on consumer behavior through anxiety and social comparison, altering decisions and purchasing patterns (Argan et al., 2022). Understanding FoMO's impact on SWB is critical, as it promotes short-term engagement while potentially harming long-term well-being which is crucial to brands nowadays (Morsi et al., 2024).

From an academic and empirical point of view, this topic tackles gaps in the literature, specifically the understudied interplay between FoMO and SWB in the context of hedonic and utilitarian consumption. Current studies commonly address FoMO's general implications on well-being but neglect to explore how product type shapes its impacts (Argan et al., 2022). Additionally, incorporating consumer traits, namely Consumer Independence and Consumer Need for Uniqueness provides a unique lens to understand individual differences in how FoMO influences SWB, further strengthening theoretical insights.

The value of this research applies to both consumers and business. From a consumer standpoint, FoMO induced marketing strategies often capitalize on emotional vulnerabilities leading to dissatisfaction (Hodkinson, 2019). Understanding the dynamics between FoMO and SWB can empower consumers to make more rational decisions, creating a healthier consumption behavior and minimizing the psychological well-being toll of FoMO.

From a business perspective, the increase of scarcity tactics and experience-driven marketing portrays FoMO as a potent yet double-edged tool for capturing consumers as it comes

with adverse effects on well-being. Businesses that involve SWB in their marketing frameworks stand to gain a competitive advantage by creating deeper, more meaningful connections with their target audience, as consumers increasingly prioritize well-being. (El Hedhli et al., 2016). In this sense, studying the relationship between FoMO and SWB is relevant, as it helps marketers find the balance between short-term profitability and ethical business values (Sirgy & Lee, 2008). Moreover, the comparison of these effects between utilitarian and hedonic goods guides marketers in tailoring strategies to suit each product category.

The topic also has broader insights in domains such as societal well-being, psychology, and public policy (Dominko & Verbič, 2022).

Accordingly, in psychology, this research offers implications of FoMO in the consumption context, looking into how individual traits shape emotional responses. On a societal level, initiatives like the OECD's Better Life Index highlights the importance of subjective well-being (OECD, n.d.). Lastly, policymakers can make use of this research findings when developing programs that promote healthy consumption behaviors, regulate marketing initiatives, and support mental health activities, all of which play a role in improving overall society well-being.

1.2 Problem statement

In recent years, there has been an increased interest in the research of Fear of Missing Out (FoMO) and its impact on subjective well-being (SWB) (Baker et al., 2016; Przybylski et al., 2013; Roberts & David, 2020). However, much of this research lacks extensive examination of the nuanced manners in which FoMO interacts with SWB in different consumption contexts.

Emerging research in the context of FoMO (Argan et al., 2022) has connected consumer characteristics, FoMO, and consumer behavior, namely conspicuous consumption and conformity consumptions. This study highlights the need for further investigation of how FoMO influences consumer behavior for different types of commodities, such as convenience versus exclusive goods, or hedonic versus utilitarian goods, as the product type can shape the role of FoMO in influencing different domains (Milyavskaya et al., 2018).

Despite the progress in research, a significant gap holds regarding connecting consumer traits, FoMO and SWB. Research proposing a self-concept perspective of FoMO calls for further examination of the relationship between self-concept FoMO and well-being, suggesting that the self-concept dimensions of FoMO can bring novelty in marketing studies (Zhang et al., 2020)

Additionally, even though the influences of FoMO on SWB have been studied, they lack the self-concept perspective and frequently lean on qualitative methods, creating a need of

quantitative research to verify findings and assess causal mechanisms. In line with (Argan et al., 2022), (Morsi et al., 2024) emphasizes the need to take into account product characteristics in understanding these correlations.

To this data, no study appears to have connected the mentioned constructs, indicating a notable gap in the existing knowledge of literature. This study closes this gap by responding to calls for quantitative approaches to explore the relationship between FoMO, SWB, the moderation of product type, utilitarian or hedonic, and how the consumers traits affect these correlations.

1.3 Research objectives

The main objective of this study is to investigate the relationship between consumer traits, Consumer Independence and Consumer Need for Uniqueness, Fear of Missing Out (FoMO), and subjective well-being (SWB). This research poses an extended model placing the attention on the moderating effect of product type, namely utilitarian and hedonic goods, while examining FoMO's mediating impact between consumer traits and SWB.

This study stands out from previous literature by addressing important gaps (Argan et al., 2022; Morsi et al., 2024; Zhang et al., 2020). While existing studies have investigated FoMO's impact on well-being, less attention has been paid to the self-concept perspective of FoMO and its interaction with SWB. Furthermore, prior research focuses on qualitative methodologies, emphasizing the importance of quantitative research. This study additionally considers customer traits and product type, resulting in a more comprehensive understanding of FoMO's effects.

The goal is to add to the marketing and retail literature by providing actionable insights that will assist marketers in developing more ethical and effective tactics in line with well-being marketing.

1.4 Research questions

In this regard, the following research questions were developed to lead this study:

R1: How do the consumers traits of Consumer Independence and Consumer Need for Uniqueness influence Personal and Social dimensions of Fear of Missing Out?

R2: How do Personal and Social Fear of Missing Out affect Subjective Well-Being?

R3: To what extent do Personal and Social Fear of Missing out mediate the relationship between Consumer Independence and Consumer Need for Uniqueness with Subjective Well-Being?

R4: How do these effects vary across hedonic and utilitarian goods purchases?

1.5 Research outline

There are six primary chapters in this thesis dissertation. In the first chapter the research topic is introduced, and its relevance is discussed. Additionally, this chapter outlines the research problem, and research questions, and sets the stage with an overview of the thesis structure.

The second chapter covers a thorough assessment of the literature review exploring research within the main topics of FoMO, Consumer Need for Uniqueness, Consumer Independence, Subjective Wellbeing, utilitarian, and hedonic consuming contexts.

Clarifying the relationships between these concepts, the third chapter specifies and expands upon the conceptual model and summarizes the research hypothesis.

The research approach, data collection methods, and questionnaire development and structure are all presented in the fourth chapter. Information about the sample, and the measurement scales are also included.

Following the interpretation of the research findings, in chapter five, the validity of the proposed research hypothesis is assessed and discussed.

Finally, the main finding of the study, together with theoretical and managerial implications are covered in chapter six, which concludes with the study's limitations and suggestions for future research.

2. Literature Review

The aim of this review is to explore previous literature on subjective well-being, fear of missing out, and its drivers, recognize gaps, and build the rationale for the current research.

2.1 Fear of Missing Out

2.1.1. Origin and definitions

Herman (2000) was the first to use the term ‘Fear of Missing Out’ (FoMO) in academia, identifying it as a possible rationale behind the increase of limited-edition brands, shifts in consumer behavior and the rise of the so-called modern consumer. He described this new consumer as a person primarily driven by one fundamental motivation: *“The ambition to exhaust all possibilities and the fear of missing out on something.”*

McGinnis, however, then a student at Harvard Business School, introduced the acronym Fear of Missing Out (FoMO) only later in 2004. McGinnis coined the word to characterize a new type of stress that he saw among his classmates. As detailed in the Boston Magazine (Schreckinger, 2014) the social atmosphere at Harvard Business School during McGinnis's time was marked by a chaotic rush to maximize social connections. There was a widespread fear that students would miss something important if they left the city, so they frequently hurried to attend several events on Friday nights, even ignoring prior commitments, such as prearranged ski trips in their family villas.

Since then, FoMO has been defined in different ways from the eye of different disciplines. The first empirical investigation on FoMO was initiated in the field of psychology, where it was defined as “the uncomfortable and occasionally disrupting sense that you’re missing out - that your peers are doing, are aware of, or in possession of more or something better than you” (Przybylski et al., 2013).

Contrasting this perspective, Hayran & Gürhan-Canli (2022) theorized FoMO as a situational variable instead of a trait variable framing it as a feeling rather than a fear. They described it as the aversive emotional state caused by becoming aware of unattended rewarding experiences in one's surrounding world. They went even further by exploring the temporal nature of FoMO introducing the concept of a ‘retrospective’ or ‘distant’ feeling of missing out, explaining it as an uncomfortable emotional state caused by recalling past gratifying events in one's environment.

Other researchers have investigated FoMO as a momentary experience. For example, (Milyavskaya et al., 2018), discovered that FoMO is frequently induced later in the day or week, and during everyday tasks such as studying or working, noting that it emerges situationally, and that it is associated with stress, weariness, and negative affect over time.

2.1.2. Theoretical background in Marketing

FoMO has been extensively researched in the field of marketing. Hodkinson (2019) specifically explored how FoMO-based appeals influence consumer behavior. The study looked at how marketers exploit the fear of losing out to build urgency and motivate rapid action, particularly in adolescent markets. Hodkinson discovered that these appeals efficiently stimulate emotional responses by making consumers vividly aware of what they may be losing out on (2019). This emotional response increases the incentive to act rapidly, often skipping rational decision-making processes. Notably, FoMO-based marketing is unique in its capacity to appeal to personal and social components of consumer psychology, making it a potent tool in advertising efforts.

(Morsi et al., 2024), likewise categorized FoMO prone customers towards FoMO marketing appeals into four distinct categories, including Butterflies, Devotees, Endorsers, and Shopaholics. What stood out is that all types identified shared emotions of sadness, and dissatisfaction after buying under the influence of FoMO. Despite, they differed in their re-purchase intentions, and word-of-mouth, with Devotees, and Shopaholics engaging in positive after purchase behaviors regardless of the negative emotions.

(Good & Hyman, 2021) further showed that FoMO based appeals significantly impact purchase decisions through creating feelings of excitement and the desire to upgrade self-image, leading to consumers who are more likely to buy. Interestingly, these appeals also reduced post-purchase regret. These effects were especially pronounced for products or experiences that bring pleasure and enjoyment, or simply hedonic.

Alternatively, FoMO has been found to cause a reluctance to repeat present experiences as it lowers an individual's value of ongoing experiences resulting in a reduction of loyalty to those experiences (Hayran et al., 2020).

Moreover, FoMO has been linked to compulsive buying behaviors as well, pushed by factors like depression, social anxiety, materialism, and obsessive brand passion. The moderating roles of mindfulness (Hussain et al., 2023) and age (Japutra et al., 2025) have been highlighted as key in mitigating or intensifying this relationship.

FoMO also plays a critical role in driving conspicuous consumption, as shown by its mediation in the relationship between influencers and followers, by fostering social comparisons and a desire to align with trends (Dinh & Lee, 2022). Likewise, FoMO compels individuals to engage in conspicuous and conformity consumption rooted in a desire for belonging and anxiety of isolation (Argan et al., 2022).

The effect of FoMO on non-sustainable buying behavior, customer satisfaction, and influencer imitation driven purchase intent have additionally been studied in the context of marketing. These studies draw attention to FoMO's impact on behaviors including fast-fashion consumption (Bläse et al., 2024), customer imitation of influencers (Dinh & Lee, 2022), and trend-driven consumption (Kim et al., 2020).

2.1.3. Personal and Social dimensions of FoMO from a self-concept perspective

This research adopted a self-concept perspective on FoMO, as proposed by Zhang et al., (2020), considering that their conceptualization and scale allow for investigating FoMO in diverse contexts, which was crucial for the comparative nature of this study.

According to this perspective, FoMO is defined as an emotional response to perceived psychological threats to one's self-concept, encompassing both personal and social dimensions (Zhang et al., 2020).

One can separate the self-concept into a private and a public self. The private self is a person's assessment of their own ideas, emotions, and actions, which are frequently kept confidential or shared with a select group of people. On the contrary, the public self develops as a form of how people think others see them and is managed to affect how others perceive them (Ruganct, 1995).

Moreover, although the public and the private self can often overlap, for instance an individual may establish personal objectives (such as a bucket list) that align with their preferred public persona, researchers however have noted that individuals can compartmentalize their self-concept at least in these two aspects.

Nonetheless, since the public and private selves can be different, it is critical to capture both aspects. Acknowledging this compartmentalization, the self-concept defined FoMO was conceptualized as made up of two dimensions: Personal FoMO and Social FoMO, in contrast to other studies that have mainly focused on the social compartment (Przybylski et al., 2013). Personal FoMO refers to threats to an individual's private self-concept, such as missing out on experiences tied to personal goals or identity. Social FoMO, on the contrary, arises from

concerns about public perception and the fear of missing out on experiences that shape how others view the individual.

This conceptualization also differs from that of (Przybylski et al., 2013) in two more ways. First, instead of seeing FoMO as a situational disposition, it frames it as an emotion that arises from missing out on experiences that enhance the self-concept. Secondly, it establishes FoMO outside of the context of social media, allowing for the study of the concept in any type of consumption situation that involves the enhancement or maintenance of the self-concept, either online or offline (Zhang et al., 2020)

(Zhang et al., 2020) point out that missing out on such consumption situations can put the customer's well-being at risk. They further raise attention to studying the relationship between this FoMO framework and well-being. Drawing from this premise, this study situates the concept within utilitarian and hedonic consumption, focusing on its correlation with subjective well-being.

2.2 Fear of Missing Out Drivers

2.2.1. Consumer Independence

Consumers are affected by the norms, beliefs, and behaviors of the social group they belong to or want to join (Escalas & Bettman, 2003). According to the self-concept theory, individuals strive to acquire and sustain a complex sense of self while simultaneously constructing their identities through interactions with other peers (Maxwell et al., 2022)

Recent research has shown that changes in the fulfillment of these fundamental psychological needs contribute to the development of FoMO. Specifically, studies have found that when these needs are not adequately satisfied, individuals are more likely to experience heightened levels of FoMO, as evidenced by positive correlations between unmet psychological needs and FoMO (Oberst et al., 2017). Conversely, the fulfillment of these needs serves as a significant negative predictor of FoMO (Xie et al., 2018).

There are three ways in which customers respond to social influence: they can conform by imitating others, rebel against the norms, or remain indifferent by following their own personal preferences.

In the context of consumer behavior and marketing, this third approach, known as consumer independence, reflects the psychological needs related to developing and maintaining a sense of self (Gilal et al., 2019).

Consumer independence demonstrates a tendency to favor individual preferences over socially dictated trends when selecting a product or brand, being this way more motivated by internal taste rather than external approval (Goldsmith & Clark, 2012). The authors concluded that consumer independence is negatively linked to materialism and status consumption, as those who value self-sufficiency and intrinsic choices are less swayed by external incentives or societal pressures.

In addition, status consumption mediates the relationship between materialism and consumer independence, implying that materialistic principles promote the pursuit of status, reducing independence. Independent consumers have traits like autonomy and self-confidence, making them less vulnerable to normative social influence, external praise, or social comparison anxiety (Goldsmith & Clark, 2012).

Similarly, research linking personality traits or the self to FoMO support that those with an independent self-construal, who value isolation and autonomy from outsiders, different from interdependent self-construal are less vulnerable to FoMO (Dogan, 2019; W. Zhang et al., 2024).

In line with the literature review, empirical evidence implies that consumer independence has a negative influence on consumer-centric FoMO which inherently expresses a widespread concern about other's possessions and experiences consistent with the social dimension of the self-concept perspective FoMO construct (Argan et al., 2022; Zhang et al., 2020).

Alternatively, Personal FoMO measures the level of FoMO on experiences related to the private self where social susceptibility, typically negatively linked to consumer independence, is not as crucial as it is for Social FoMO. Moreover, the definition of Consumer Independence has overlapping elements with the conception of Personal FoMO, implicating that an individual through the desire to maintain a sense of self can have increased levels of Personal FoMO which encompasses the threat to one's self-concept (Zhang et al., 2020).

2.2.2. Consumer Need for Uniqueness

Tian & McKenzie (2001) conceptually defined Consumer's Need for Uniqueness (CNFU) as the individuals' desire to distinguish themselves from others, manifested through the acquisition, usage, and disposal of consumer goods to acquire a sense of distinctiveness. They identified three dimensions as behavioral demonstrations including: unpopular choice counter-conformity, creative choice counter-conformity, and avoidance of similarity.

Likewise, CNFU is considered as a specific form of the more general need for uniqueness (NFU) where distinguishment is achieved through product and brand choices (Nail, 1986).

Yet, in contrast to consumer independence, where consumers willfully disregard social influences, individuals motivated by NFU continue to be impacted by other's behaviors while attempting to demonstrate their distinctiveness by intentionally going against social norms (Ohmann & Burgmer, 2016).

Correspondingly, individuals with high CNFU tend to be socially motivated and value expressing their distinctiveness to others, as opposed to independent consumers who prioritize personal preferences (Tian & McKenzie, 2001).

In a study investigating the duality of CNFU, (Ruvio, 2008), emphasizes that CNFU represents both a desire to be different and a socially influenced need for assimilation. This dual nature reinforces the socially driven character of the construct, where individuals put greater value on communicating their unique identity with the world, rather than pursuing uniqueness solely for their own satisfactions - a behavior that differs from that of an independent consumer.

Consequently, consumers with high CNFU may feel pressure to pursue unique experiences or possessions to maintain their uniqueness, leading to heightened social fear of missing out. This drive is further amplified by their dependance on others' evaluations, as upholding distinctiveness asks for constant attention to other's actions to be able to tell opportunities for differentiation.

2.3 Subjective Well-Being

2.3.1. Origin and definitions

Subjective well-being has been defined as an individual's personal judgement of their own life experiences, which includes both emotional and cognitive components of satisfaction. According to (Diener et al., 1985) subjective well-being is intrinsically individualized and based on the individual's own experiences. They support this view, arguing that subjective well-being research focuses on people's subjective evaluations of their life. This framework assumes that to completely comprehend an individual's quality of life, it is necessary to investigate their individual feelings and judgements in the context of their specific standards.

SWB's theoretical foundations fall into two perspectives: hedonic and eudaimonic. Based on the concept of maximizing pleasure, the hedonic approach prioritizes happiness that comes from avoiding unpleasant emotional experiences and obtaining satisfaction from favorable ones (Diener et al., 1993). The eudaimonic approach, on the other hand, emphasizes reaching one's potential and living in accordance with one's values. This perspective emphasizes that self-

realization, purpose, and personal development are the foundations of true well-being (Ryff, 1989).

Understanding how these viewpoints differ from one another is essential to comprehending SWB as a whole. Hedonic well-being prioritizes temporary pleasure, yet eudaimonic well-being is associated with long-term life satisfaction and significant experiences.

Subjective well-being is also frequently confused with happiness, however the two are distinct yet interconnected concepts (Kay Smith & Diekmann, 2017). Happiness has been identified as an important component of subjective well-being, often characterized as the presence of positive affect and the lack of negative affect. Moreover, happiness is more unstable, tied to specific moments or experiences, while SWB provides a more comprehensive, steady measure of an individual's overall quality of life (McCabe & Johnson, 2013).

Life satisfaction is adopted as the main SWB measure in this study moving away from the concept of happiness. A cognitive component of SWB, life satisfaction provides a consistent way to measure a person's well-being, is consistent with more general measures of quality of life, and has been used to measure SWB in multiple consumer behavior studies (McLean et al., 2023)

SWB has been especially researched in the field of tourism, retailing, and customer services (Bagheri et al., 2023; Dominko & Verbič, 2022; Holm et al., 2017; Prentice & Loureiro, 2018; Su et al., 2016). Risk-tourism, engaging with luxury brands, positive emotions during in-store experience, and customer-company identification have all been identified as boosters of subjective-well-being.

2.3.2. The impact of Fear of Missing Out on Subjective Well-Being

FoMO has been associated with numerous addictive behaviors and adverse outcomes in past research including problematic smartphone use (Dempsey et al., 2019), long screen exposure (Fang et al., 2020), compulsive consumption (Good & Hyman, 2021), negative emotional responses, and depression (H. J. Park, 2022).

(Baker et al., 2016) found that FoMO negatively influences psychological well-being through increasing physical complaints, depressive symptoms, and reducing mindful attention, underscoring FoMO's potential role in reducing overall subjective well-being. Correspondingly, (Reer et al., 2019) noted that greater FoMO contributes to reduced psychological well-being as a mediator of its relationship with social media engagement. In the same way, FoMO exerts a comparable adverse effect on life satisfaction (Bakioğlu et al., 2022).

Related research has looked at the fundamental causes of FoMO in addition to behavioral correlations. A few studies have particularly demonstrated a correlation between elevated levels of FoMO and a decline in psychological well-being. As argued by (Przybylski et al., 2013), higher levels of FoMO are substantially correlated with lower levels of positive mood and life satisfaction, as well deficiencies in meeting the fundamental psychological needs of competence, relatedness, and autonomy.

Social media usage acts as an important mediator in the discussed relationships, with FoMO increasing social media usage, which often decreases psychological well-being (Brailovskaia & Margraf, 2024; Roberts & David, 2020). (Stead & Bibby, 2017) have also negatively related FoMO with subjective well-being, noting that the strength of the effect as it goes above and beyond personality.

Given that psychological well-being and subjective well-being are closely correlated concepts (F. F. Chen et al., 2013; Moreta-Herrera et al., 2023), it stands to reason that the relationship between FoMO and subjective-wellbeing may likewise be impacted in a similar way.

Regardless, (Roberts & David, 2020) also suggested a contrasting viewpoint, implying that FoMO's influence on well-being is not exclusively negative. While FoMO directly diminishes well-being, it can also have an indirect positive impact through stimulating social media use that cultivates meaningful social connections. This nuanced perspective points out that, under certain conditions, FoMO may boost well-being. (Morsi et al., 2024), building on the framework of FoMO laden marketing appeals (Hodkinson, 2019) support this idea, as they have concluded that aside increased cognitive and emotional responses of sadness, regret, and dissatisfaction, some customers can experience joy (e.g., devotee characterized FoMO prone customers due to FoMO laden marketing appeals).

Some other negative predictors of subjective well-being include increased stress, excessive social comparison, and neuroticism. (Malkoç, 2011). Given that neuroticism as a personality trait increases the intensity of FoMO, it follows that FoMO is likely to decrease SWB (Blackwell et al., 2017; W. Zhang et al., 2024).

Furthermore, intrapersonal (e.g., low satisfaction with life), affective (e.g., negative state affect) and contextual factors (e.g., life events) have all been noted as significant negative predictors of SWB, with contextual factors exerting more lasting factors over time (Galinha & Pais-Ribeiro, 2012).

However, to this date, no study has directly examined the relationship between self-concept ideation of FoMO and subjective well-being. The only cue comes from (Zhang et al., 2020) that

implied that the experience of personal or social FoMO could have a significant influence on psychological well-being.

2.4 The mediating effect of Fear of Missing Out in the relationship between Consumer Independence, Consumer Need for Uniqueness, and Subjective Well-being

2.4.1. Consumer Independence and Subjective Well-being

Grounded in the self-determination theory, autonomy nurtures personal growth, self-acceptance, and alignment with intrinsic values. A vital component of eudaimonic well-being - an approach to subjective well-being distinct to the hedonic one - self-realization and fulfillment are fostered by acting in accordance with one's own self (Ryan & Deci, 2025).

This alignment leads to believe that consumer independence, which embodies these principles, improves subjective well-being by promoting psychological health and life satisfaction.

2.4.2 Consumer Need for Uniqueness and Subjective Well-being

Previous studies have reported mixed results regarding the relationship between CNFU and well-being. On the one hand, while obtaining uniqueness can lead to satisfaction and a sense of fulfillment (Schumpe & Erb, 2015), individuals may come across barriers or social pressures that restrict their ability to fulfill this need (Snyder & Fromkin, 1980).

Consistent with the Consumer Aspirations Theory (Petrescu & Kara, 2018), heightened aspirations like the pursuit of uniqueness or social power, can evoke stress and dissatisfaction when unmet.

In this sense, CNFU is projected to negatively influence subjective well-being if this need holds unfilled. Even so, as the present study does not measure whether this need is fulfilled and given the indirect and limited literature on the subject, the relationship is foreseen to be insignificant.

2.4.3 Fear of Missing Out as a mediator between consumer traits and subjective well-being

The potential role of FoMO as a mediator in these dynamics stays relatively unexplored, especially with respect to its differentiating dimensions of personal and social FoMO.

Findings from (Argan et al., 2022) concluded that consumer-centric FoMO is a mediator in the relationship between Consumer Independence and Consumer Need for Uniqueness with both conspicuous and conformity consumption. Notably, this correlation is significantly

influenced by two aspects of consumer-centric FoMO: the anxiety of isolation and the desire for belonging. These dimensions are quite similar to the traits of social FoMO, which stresses worries about inclusion and social connections.

Furthermore, previous research has examined the connection between conspicuous consumption and subjective well-being (Brown, 2019). According to (Linssen et al., 2011), conspicuous consumption can have a negative impact on subjective well-being, especially in lower-income contexts.

Conversely, it is also known that conspicuous consumption allows people to indicate a higher social status, which has a favorable impact on subjective well-being. In emerging economics, where ‘keeping up with the Joneses’ is a source of fulfillment, this impact is particularly noticeable (Jaikumar et al., 2018).

Research on Personal FoMO, or related variables as a mediator in consumer behavior or well-being domains of study is unknown, unlike social FoMO. Consequently, its mediation role between Consumer Independence, Consumer Need for Uniqueness, and subjective well-being lacks theoretical justification. In this absence, it is critical to assess the direct relationships between these constructs and the theoretical alignment of personal FoMO with the predictor and outcome variables.

Consumer Independence and Consumer Need for Uniqueness were found to be strong predictors of personal FoMO, and the latter has been found to be a significant predictor of subjective well-being based on the literature reviewed earlier in this chapter. In turn mediation effect is expected.

2.5 The Moderating Role of Hedonic and Utilitarian Product Categories

2.5.1. Hedonic vs Utilitarian

A utilitarian product is primarily associated with instrumental, functional, and practical features while a hedonic product is connected to features that are more experiential, pleasurable, and exciting (Rathee et al., 2022).

Hedonic goods are intended to evoke emotional responses by providing fun and excitement while fulfilling desires for pleasure and enjoyment (Hirschman & Holbrook, 1982). Utilitarian goods, on the other hand, are essentially functional and meet practical needs motivated by goal-oriented concerns (Strahilevitz & Myers, 1998). In brief, hedonic products are typically wanted, while utilitarian products are necessary (Batra & Ahtola, 1991).

Although the dichotomy between utilitarian and hedonistic products is known, (Kousi et al., 2023) however, notes that especially for tangible goods, the balance between hedonic and utilitarian is fluid and often distorted. A smartwatch, for example, can serve two functions: tracking health data (utilitarian) and acting as a trendy accessory that increases someone's confidence and social attractiveness (hedonic).

This duality makes it more difficult to categorize products and implies that the relative importance of hedonistic and utilitarian qualities may change depending on the situation and personal opinions.

2.5.2. Fear of Missing Out depending on Consumer Independence, Consumer Need for Uniqueness, and Product Category

The moderating role of product type, utilitarian or hedonic, shapes FoMO dynamics, specifically in its interactions with Consumer Independence and Consumer Need for Uniqueness. Individuals with high need for uniqueness levels are more likely to want to stand out and show their distinctiveness through hedonic consumption, as these products provide more opportunity for identity communication to the world and social approval (Berger & Heath, 2007). This heightens Social FOMO for CNFU-driven clients in hedonic consumption compared to utilitarian ones, since losing out on distinctive or limited hedonic products puts at risk their ability to identify themselves.

Hedonic commodities, which are distinguished by their emotional and experiential appeal, are highly related to social comparison and exposure, making them more inclined to spark tension among consumers who value autonomy and intrinsic decision-making (Hirschman & Holbrook, 1982). These commodities frequently include socially gratifying experiences, such as luxury indulgences or exclusive parties, in which participation might indicate status or group membership. Such societal limitations contradict highly independent consumers' quest for self-determination, as they are less motivated by external approval.

2.5.3. Subjective Well-Being depending on FoMO and Product Category

The contrast between hedonic and utilitarian goods and their association with different constructs such as well-being (Kousi et al., 2023) has been widely discussed in the literature. Despite the differing motives behind hedonic and utilitarian purchases in enhancing quality of life, hedonic goods eliciting happiness, and utilitarian goods fulfilling needs, the study discovered that goods with hedonic qualities have a stronger influence on well-being.

Similarly, other research emphasizes that experiential and conspicuous spending, especially in areas like leisure and dining out, plays a crucial role in enhancing subjective well-being, highlighting the greater impact of hedonic consumption over materialistic or utilitarian spending, even though the latter remains significant (Zimmermann, 2014).

(Zhong & Mitchell, 2010) further notes that hedonic consumption enhances subjective well-being by increasing satisfaction in life domains such as social life, leisure, and health, showcasing its mediating effects. Hedonic experiences that are frequent and inexpensive have a greater positive effect on well-being than those that are infrequent and expensive, giving importance to minor, but regular pleasures. Using longitudinal data, the study additionally validates the long-term impact of hedonic consumption on SWB.

Consumer traits, however, particularly materialism, can influence these relationships. Specifically, hedonic consumption through luxury goods improves the well-being of materialistic consumers by satisfying their need for achievement and prestige, which in turn improves their mood and level of life satisfaction. Nevertheless, these benefits are usually short-lived since luxury spending creates a cycle of dependence on material possessions for happiness and thus alters the link between consumption and well-being (Hudders & Pandelaere, 2012).

3. Hypothesis Development and Conceptual Model

3.1 Consumer Independence and Fear of Missing Out

In line with the literature review discussed, while (Zhang et al., 2020) have recognized that Personal FoMO and Social FoMO can share the same antecedents, the existing literature gives a good reason to believe that consumer independence will impact Personal FoMO and Social FoMO in significantly opposite directions, respectively negative and positive, leading to the following hypothesis:

H1: Consumer Independence positively affects Personal FoMO.

H2: Consumer Independence negatively affects Social FoMO.

3.2 Consumer Need for Uniqueness and Fear of Missing Out

Extending upon the literature, the socially initiated component of CNFU aligns with previous findings that have concluded in a positive relationship between CNFU and Consumer-Centric FoMO (Argan et al., 2022). Given the social focus of CNFU, it is predicted to have an opposite impact to that of Consumer Independence on Social FoMO.

Moreover, besides its discussed social nature, CNFU as a part of the dual nature, also shares a connection to the private self, a factor it holds in common with Personal FoMO (Ruvio, 2008).

Accordingly, CNFU is anticipated to have a positive influence on both Personal FoMO and Social FoMO, pointing towards the following hypothesis:

H3: Consumer Need for Uniqueness positively affects Personal FoMO.

H4: Consumer Need for Uniqueness positively affects Social FoMO.

3.3 Fear of Missing Out and Subjective Well-Being

To close the gap in relating self-concept FoMO to subjective well-being, this study explores its two dimensions.

Regarding Personal and Social dimensions of FoMO, both are predicted to have a negative effect on SWB, nevertheless through distinctive mechanisms.

Subjective well-being, which is based on one's self-assessed life satisfaction, is in line with personal FoMO, which is motivated by risks to one's private self-concept, such as unfulfilled personal ambitions. Taking into consideration (Przybylski et al., 2013) findings, it is shown that

unmet fundamental needs increase FoMO, which in turn lowers well-being. Thus, through intensifying emotions of inadequacy and unfulfilled expectations or aspirations (Petrescu & Kara, 2018), higher personal FoMO is logically predicted to lower SWB.

Pursuing a similar line of thought, Social FoMO reflects worries about exclusion and diminished social connection, which directly challenges an individual's sense of belonging which is a crucial predictor a key predictor of subjective well-being through comparison (Galinha & Pais-Ribeiro, 2012). Comparably, a notion that is close to social dimension of FoMO, social comparison orientation, has been linked to decreased psychological well-being (S. Y. Park & Baek, 2018). Moreover, unmet needs, particularly those for relatedness, are a major negative contributor to FoMO (Przybylski et al., 2013). As such it can be implied that social FoMO also undermines SWB.

Hence:

H5: Personal FoMO negatively affects Subjective Well-Being.

H6: Social FoMO negatively affects Subjective Well-Being.

3.4 The mediating effect of Fear of Missing Out in the relationship between Consumer Independence, Consumer Need for Uniqueness, and Subjective Well-being

The literature provides evidence of significant direct relationships between Consumer Independence and Uniqueness and SWB. While Consumer Need for Uniqueness is anticipated to significantly negatively affect SWB, this only holds true if the need of uniqueness is unmet. Since this study does not measure the need fulfillment, the direct correlation is likely predicted to be insignificant. Moreover, there is proof that these relationships can be better explained through the mediation role of personal and social dimensions of FoMO, guiding the development of the suggested hypothesis:

H7a: Personal FoMO will mediate the relationship between Consumer Independence and Subjective Well-Being.

H7b: Social FoMO partially mediates the relationship between Consumer Independence and Subjective Well-Being.

and,

H8a: Personal FoMO will fully mediate the relationship between Consumer Need for Uniqueness and Subjective Well-Being.

H8b: Social FoMO will fully mediate the relationship between Consumer Need for Uniqueness and Subjective Wellbeing.

3.5 The Moderating Role of Hedonic and Utilitarian Product Categories

From the above discussion, it can be inferred that the correlations between Consumer Independence, Consumer Need for Uniqueness, Self-Concept FoMO and subjective well-being is likely to have a larger correlation for hedonic goods purchases as opposed to utilitarian purchases. Following the outlined relationships in the literature, the subsequent hypothesis is developed:

H9: The effects proposed in Hypotheses 1-6 are significantly stronger for hedonic goods purchases than for utilitarian goods purchases

The hypotheses are summarized as follows:

H1: Consumer Independence positively affects Personal FoMO.

H2: Consumer Independence negatively affects Social FoMO.

H3: Consumer Need for Uniqueness positively affects Personal FoMO.

H4: Consumer Need for Uniqueness positively affects Social FoMO.

H5: Personal FoMO negatively affects Subjective Well-Being.

H6: Social FoMO negatively affects Subjective Well-Being.

H7a: Personal FoMO will mediate the relationship between Consumer Independence and Subjective Well-Being.

H7b: Social FoMO partially mediates the relationship between Consumer Independence and Subjective Well-Being.

H8a: Personal FoMO will fully mediate the relationship between Consumer Need for Uniqueness and Subjective Well-Being.

H8b: Social FoMO will fully mediate the relationship between Consumer Need for Uniqueness and Subjective Wellbeing.

H9: The effects proposed in Hypotheses 1-6 are significantly stronger for hedonic goods purchases than for utilitarian goods purchases

3.6 Conceptual Model

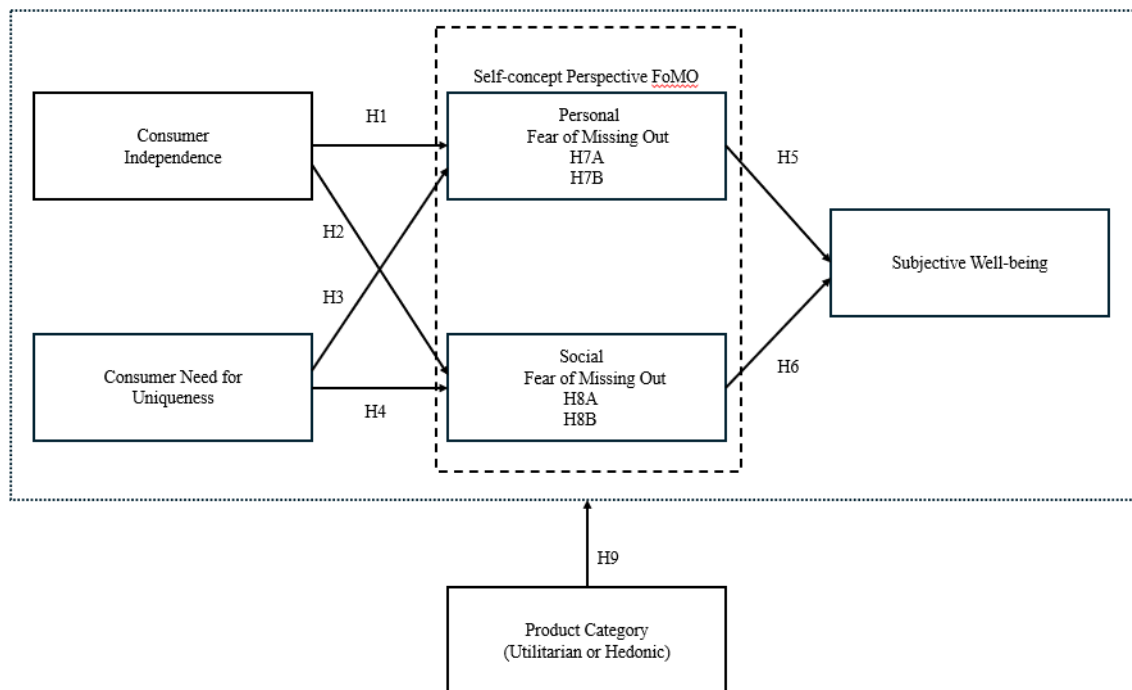


Figure 1 3.6.1. Conceptual model

This model building upon (Argan et al., 2022; Zhang et al., 2020) essentially focuses on investigating the relationships between Personal Fear of Missing Out (FoMOP), and Social Fear of Missing Out (FoMOS) with subjective well-being. It aims to analyze how these constructs effect well-being in the context of consumer behavior in commerce and retail. Consumer Independence and Consumer Need for Uniqueness are incorporated in the model as antecedents of Fear of Missing Out (both personal and social), testing their respective relationships with these variables.

Additionally, the mediating effects of Personal Fear of Missing Out and Social Fear of Missing Out are explored in the effects between Consumer Independence and Subjective Well-being and between Consumer Need for Uniqueness and Subjective Well-being.

To find any possible variations in the magnitude or direction of all the model's effects between the two groups, the study also compares these correlations in contexts of utilitarian and hedonic products, adding product category as a moderator of these relationships.

4. Methodology

The following chapter outlines an overview of the empirical study, including its design and approach, implementation, data collection and measurement methods, the sample, and pre-test process.

4.1 Research design and approach

The aim of this investigation is to test the proposed hypothesis informed by the literature, derive conclusions, and ultimately address the study's research questions. Adopting a deductive approach, and given the predictive nature of the study's objectives, a quantitative methodology was chosen in the form of a survey through a structured questionnaire.

Apart from that, most surveys include a variety of questions, which allows for the assessment of numerous variables at the same time. This method makes it easier to collect descriptive data and test multiple hypotheses within the scope of a single study (Neuman, 2014, p. 317). As such, the use of the questionnaire survey method was considered as appropriate for this study.

4.2 Data collection and sample

4.2.1. Questionnaire development

Taking into consideration that this study investigates the proposed relationships between two distinctive types of purchases, utilitarian and hedonic, to facilitate the comparison two independent questionnaires were created.

These questionnaires were structured and administered using Qualtrics Survey Software, which was also used to gather the data. It was then distributed via the Prolific platform to reinforce high data quality and facilitate participant recruitment. Participants accessed it using two separately generated links, for either the utilitarian or hedonic questionnaire, assuring equal participation of both groups.

While the questions in both questionnaires remained identical, the vignettes varied. The vignettes were designed to inspire participants to think about specific decision-making circumstances while also assessing their emotions and behaviors. In the hedonic vignette, respondents were asked to imagine purchasing a piece of jewelry. In contrast, the utilitarian scenario guided participants to envision buying a reusable water bottle.

To choose the right products for designing the vignettes and minimize any potential bias, a pre-test was undertaken which was particularly essential due to the limited availability of literature that clearly distinguishes between utilitarian and hedonic products especially in the context of FoMO.

This pre-test, with a sample size (=118) involved providing participants with a list of 20 products and services and asking them to rate each on a scale ranging from completely utilitarian, associating with utility, practicality, or functionality to completely hedonic, associating with excitement, pleasure, or fun. This step was critical in classifying and finding the goods that reflected the two categories, and the results were further used to finalize the product selection for the main questionnaire.

The questionnaire for this analysis can be found in Appendix A, and results including demographic information, descriptive statistics, demographic frequencies, services and goods ranking from most hedonic to most utilitarian are presented in Appendix B.

The main questionnaire on its own began with an introductory section, which generally informed the topic of the study and assured participants that their data would be treated anonymously and confidentially. Following the introduction, the survey was broken into three main sections.

The first part presented participants with the vignette tailored to their assigned group as previously explained. This way the context was set for the questions that followed.

The second section consisted of the primary questions of the study where participants answered a series of Likert-type questions (1=Completely disagree – 7=Completely agree) based on validated scales to measure the study variables.

The final section dealt with collecting demographic information to build the participant profile. This section included questions on gender, age, current occupation, monthly income, and the highest level of education, which provided a more in-depth understanding of the sample. The Attitude Towards the Color Blue was used as an ideal marker variable to reduce common method bias. Additionally, the ATCB scale is perceptual, measured on a Likert scale, and is highly unlikely to be theoretically related to most social science variables, making it effective and adaptable for the questionnaire (B. Miller et al., 2024) (B. K. Miller & Simmering, 2023). At the end of the questionnaire participants were thanked for their time and participation. The main questionnaire for both hedonic and utilitarian group is illustrated in Appendix C.

4.2.2. Data measurement and scales

The questionnaire was designed with questions slightly adapted for the vignettes (e.g., substitute product with product of choice: reusable water bottle) using the scales identified in the literature to measure the variables in the model. The table below shows how many items each scale has and links each variable to the scale's original author.

Table 1 4.2.2.1.– Scales authors and number of items

Variable	Scale's Author	N ^a of items
Consumer Independence	(Goldsmith & Clark, 2012)	5
Consumer's Need for Uniqueness Short-version Scale (CNFU)	(Ruvio et al., 2008)	12
Self-concept perspective FoMO: Personal FoMO	(Zhang et al., 2020)	5
Self-concept perspective FoMO: Social FoMO	(Zhang et al., 2020)	4
Subjective Wellbeing	(C. C. Chen et al., 2016)	5
Attitude Towards Color Blue	(B. K. Miller & Simmering, 2023)	4

All questionnaire items from the above listed scales were assessed using a 7-point Likert scale, with responses ranging from: 1 "Completely disagree" to 7 "Completely agree". On top of the primary scales, for demographic variables, gender was divided in between "female", "male", and "other. Age was measured through five categories: "Under 18", "18-24", "25- 34", "35-44", and "45 or older". The highest level of education was categorized into five: "less than high school", "high school degree or equivalent", "bachelor's degree", "master's degree", and "doctorate (Ph.D. or equivalent)". The categories of "Less than €1,000", "€1,001-€1,400", " €1,401-€1,800", " €1,801-€2,200", and "More than €2,200" were used to measure level of monthly income. Lastly, the current occupation was classified as "student", "employed full-time", "employed part-time", "unemployed", and "retired".

All data from the two questionnaires were loaded into SmartPLS, where the proposed model was tested using partial least squares structural equation modeling (PLS-SEM).

Researchers can model complex theoretical concepts with PLS-SEM without being constrained by rigid methodological requirements because it enables both formative and reflective constructs. Even in conditions with small sample sizes, PLS-SEM is perfect for estimating complex models with many variables and indicators. This adaptability improves its

use in a variety of marketing research projects which typically involves analyzing complicated relationships with small amounts of data (Guenther et al., 2023a).

4.2.3. Sample

Table 2 4.2.3.1. – Demographic information: Hedonic and Utilitarian Questionnaires

N= 231	Demographic	% (Hedonic)	% (Utilitarian)
Gender			
	Female	47%	53%
	Male	52%	47%
	Other	1%	0%
Age			
	Less than 18	0%	0%
	18-24	26%	21%
	25-34	35%	29%
	35-44	20%	16%
	45 or older	19%	33%
Current Occupation			
	Student	10%	7%
	Employed full-time	52%	55%
	Employed part-time	27%	22%
	Unemployed	10%	10%
	Retired	2%	7%
Education			
	Less than high school	0%	0%
	High school degree or equivalent	21%	30%
	Bachelor's degree	55%	44%
	Master's degree	20%	22%
	Doctorate (Ph.D. or equivalent)	3%	4%
Monthly Income			
	Less than €1,000	17%	18%
	€1,001- €1,400	15%	13%
	€1,401- €1,800	19%	15%
	€1,801 - €2,200	13%	18%
	More than €2,200	35%	36%

This study focuses on US consumers making use of two independent questionnaires. To achieve wide reach and better quality of data, the URLs to the online questionnaires were distributed using the Prolific platform. A number of 231 valid responses were registered for each

questionnaire. Between these responses, in the first questionnaire (hedonic) 47% of the respondents were female, 52% were male, and 1% were identified as other. In the second questionnaire (utilitarian), female dominate with 53%, passed by males with 47%, and participants identified as other don't represent the sample.

The table above provides further demographic information about the respondents, including age, current occupation, education, and monthly income.

5. Results and Discussions

The findings for this study are analyzed using partial least square structural equation modelling (PLS-SEM) through the SmartPLS 4 software to test the model (Ringle, 2024). Two steps are undertaken to evaluate the research model: the outer model (measurement) and the inner model (structural) (Hair et al., 2019a). Bootstrapping re-sampling with 5,000 samples was used to test the hypotheses.

5.1 Measurement Model

Tests for reliability, convergent and discriminant validity, multicollinearity, internal consistency, and common method bias were considered in this research to assess the measurement model.

Calculating the PLS-SEM algorithm, the outer loadings, Cronbach's alpha and composite reliability were used to evaluate reliability, whereas the Average Variance Extracted (AVE) was used to determine convergent validity. Fornell-Larcker criterion, the Heterotrait-Monotrait (HTMT) ratio, and cross-loadings were used to verify discriminant validity. The Variance Inflation Factor (VIF) was tested for multicollinearity, and the blue marker variable technique compared R^2 and direct effects between models with and without the marker variable linked to latent variable to investigate common method bias. These tests were carried out for the merged model, utilitarian model, and hedonic model. The tables presented in this section (5.1.1; 5.1.2.; 5.1.3.) demonstrate the specific results for the merged model, while results for the utilitarian and hedonic models can be found in Annex D.

According to (Hair et al., 2019a), all outer loadings are statistically significant ($p < 0.001$) and exceed the threshold of 0.70 for all models. The Consumer Need for Uniqueness items CNFU1 (0.579), CNFU2 (0.626), CNFU3 (0.612), and CNFU4 (0.635) were eliminated from the hedonic model due to their outer loadings falling below the recommended threshold of 0.70 (Hair et al., 2019b). Likewise, items CNFU6 (0.588), CNFU7 (0.621), CNFU8 (0.672), and CNFU11 (0.638) were removed from the utilitarian model. Despite being below the threshold, CNFU5 (0.662) was kept in the utilitarian model since it increased the model construct's R^2 . In the merged model, only items CNFU1 and CNFU2 were removed due to their low outer loadings.

To do this, an iterative process was used, which involved taking out the items with the lowest outer loadings one at a time and running calculations after each step. As a result, the

outer loadings of the remaining indicators increased, improving construct reliability and validity while aiming for a balance with the model's explanatory power.

On top of that, all models were guaranteed to be internally reliable because all constructs' Cronbach's alpha and composite reliability values were higher than the suggested threshold of 0.70. Furthermore, convergent validity was confirmed for all models by the average variance extracted (AVE) for each construct being greater than 0.50 (Hair et al., 2019a).

Based on the Fornell-Larcker criterion, discriminant validity is proven when each construct's square root of the AVE is greater than its highest correlation with any other construct. In addition, it is confirmed by the Heterotrait-Monotrait (HTMT) ratio criterion, which requires that values for every construct must be less than 0.9. (Guenther et al., 2023b). These conditions are satisfied for every construct in all models, providing strong evidence of discriminant validity in the data.

Moreover, in each model, indicators consistently load higher on their respective constructs than on others, supporting once more discriminant validity using cross-loadings. Comparing Consumer Independence to other constructs, for instance, CI1 strongly loads on itself (0.789 in the hedonic model, 0.815 in the utilitarian model, and 0.818 in the merged model) (Annex D).

The Variance Inflation Factor (VIF) values for the merged, utilitarian and hedonic models, respectively, range from 1.030 to 2.508, 1.040 to 2.860, and 1.000 to 2.801, all of which are significantly below the generally recognized threshold of 3.0 stated by (Hair et al., 2019a). These results show that there are no significant concerns with the indicators' multicollinearity.

Finally, the common method bias (CMB) was evaluated through a marker variable approach, with marker variables generated and linked with each latent variable in all models (B. K. Miller & Simmering, 2023). As presented in Annex E, the inclusion of marker variables in each model did not significantly alter the R^2 or the path coefficients values even though the p -values indicate that some marker variables are significant, for example the p -value of Marker Variable 4 \rightarrow FOMOP being $0.010 < 0.05$. For instance, in the merged model, the path coefficient for CI \rightarrow FOMOP adjusted from -0.177 to -0.174, and the R^2 value for FOMOP slightly increased from 0.373 to 0.397 (Annex E). These results lead to the conclusion that CMB is not present, which reinforces the reliability and validity of the models, without any distortions in the results.

Table 3 5.1.1. - Reliability and convergent validity tests (Merged Model)

	Items	Outer Loadings	Cronbach's α	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Consumer Independence	CI1	0.818	0.915	0.979	0.934	0.740
	CI2	0.852				
	CI3	0.815				
	CI4	0.908				
	CI5	0.903				
Consumer Need for Uniqueness	CNFU3	0.714	0.912	0.915	0.927	0.560
	CNFU4	0.704				
	CNFU5	0.719				
	CNFU6	0.749				
	CNFU7	0.721				
	CNFU8	0.747				
	CNFU9	0.787				
	CNFU10	0.798				
	CNFU11	0.734				
	CNFU12	0.803				
Personal Fear of Missing Out	FOMOP1	0.851	0.923	0.928	0.942	0.765
	FOMOP2	0.881				
	FOMOP3	0.887				
	FOMOP4	0.881				
	FOMOP5	0.871				
Social Fear of Missing Out	FOMOS1	0.929	0.959	0.960	0.970	0.890
	FOMOS2	0.946				
	FOMOS3	0.957				
	FOMOS4	0.941				
Subjective Wellbeing	WELL1	0.869	0.910	0.943	0.931	0.730
	WELL2	0.911				
	WELL3	0.872				
	WELL4	0.813				
	WELL5	0.803				

Table 4 5.1.2. - Discriminant validity tests Fornell–Larcker criterion analysis and HTMT ratios (Merged Model)

	CI	CNFU	FOMOP	FOMOS	WELL
Consumer Independence	0.860				
Consumer Need for Uniqueness	-0.010 (0.093)	0.748			
Personal Fear of Missing Out	-0.183 (0.179)	0.584 (0.632)	0.874		
Social Fear of Missing Out	-0.267 (0.261)	0.510 (0.541)	0.802 (0.849)	0.943	
Subjective Wellbeing	0.079 (0.099)	0.212 (0.217)	0.240 (0.241)	0.239 (0.234)	0.855

Note: The HTMT ratios of Consumer Independence (CI); Consumer Need for Uniqueness (CNFU); Personal Fear of Missing Out (FOMOP); Social Fear of Missing Out (FOMOS); Subjective Wellbeing (WELL) are in parentheses. The square roots of the variance between the constructs and their measurements (AVE) are shown by the diagonal elements in bold.

Table 5 5.1.3. - Multicollinearity Statistics (VIF) (Merged Model)

	CI	CNFU	FOMOP	FOMOS	WELL
Consumer Independence			1.000	1.000	
Consumer Need for Uniqueness			1.000	1.000	
Personal Fear of Missing Out					2.801
Social Fear of Missing Out					2.801
Subjective Wellbeing					

5.2 Structural Model

The structural model demonstrates a good fit to the data, with a SRMR value of 0.067, (Guenther et al., 2023b) meeting the recommended threshold of 0.08, thus proving that the proposed model is well-suited to the data.

Detailed in Figure and Table 5.2.1, and Annex F the assessment of the structural model for all models includes examining the *p*-values, effect sizes (f^2), test statistics (t-values), path coefficients (β), Stone-Geisser's Q^2 values, and R^2 values.

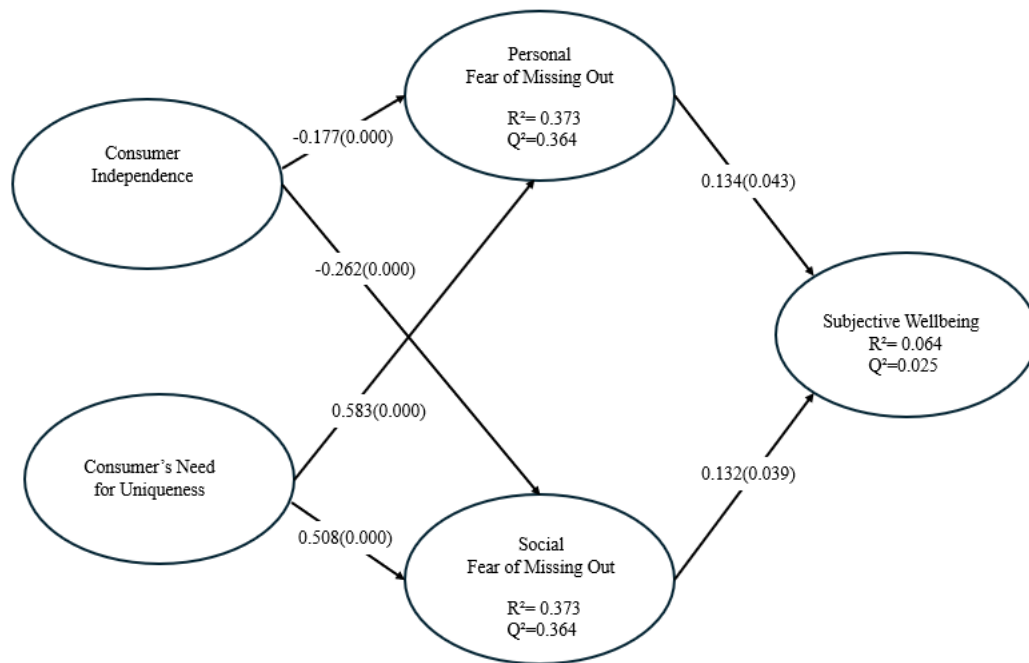


Figure 2 5.2.1. Research model with Bootstrapping results

Note: The path coefficients are represented by the values and the parenthesis indicate the *p*-values

Table 6 5.2.1. Structural Model Results (Merged Model)

Hypothesized Relationship	Proposed Effect (Direction)	β - Original Sample (O)	T-statistic	f ²	Results
Consumer Independence → Personal Fear of Missing Out	H1: Positive	-0.177	4.757	0.050	Not supported
Consumer Independence → Social Fear of Missing Out	H2: Negative	-0.262	6.654	0.102	Supported
Consumer Need for Uniqueness → Personal Fear of Missing Out	H3: Positive	0.583	17.708	0.541	Supported
Consumer Need for Uniqueness → Social Fear of Missing Out	H4: Positive	0.508	14.204	0.384	Supported
Personal Fear of Missing Out → Subjective Wellbeing	H5: Negative	0.134	1.719	0.007	Not supported
Social Fear of Missing Out → Subjective Wellbeing	H6: Negative	0.132	1.764	0.007	Not supported

Table 7 5.2.2.- Model Fit Summary - Merged Model

	Saturated model
SRMR	0.067
d_ULS	1.973
d_G	0.882
Chi-square	2274.854
NFI	0.808

An understanding of the model's explanatory powers can be gained by looking at the R^2 values. According to the analysis, the model predicts 6.4% of the variance in Subjective Well-Being, 32.9% in Social FoMO, and 37.3% in Personal FoMO. These findings point to weak explanatory power for the variables in general, with relatively greater explanatory power for the FoMO constructs (Guenther et al., 2023b).

The f^2 values demonstrate the intensity of the relationships between independent and dependent variables. The results indicate a small effect size for Consumer Independence on FoMO, both personal and social ($f^2 = 0.050$ and $f^2 = 0.102$, respectively). Consumer Need for Uniqueness, on the other hand, has a moderate effect on Social FoMO ($f^2 = 0.384$), and a large effect on Personal FoMO ($f^2 = 0.541$). Subjective Well-Being is barely impacted by either of the FoMO components ($f^2 = 0.007$) (Cohen, 1988).

As reported by (Hair et al., 2019a), the predictive validity of the model is confirmed by the fact that all dependent variables have Stone-Geisser's Q^2 values above zero. Subjective Well-Being exhibits poor predictive relevance ($Q^2 = 0.025$), whereas personal and social FoMO exhibit stronger predictive relevance ($Q^2 = 0.364$ and $Q^2 = 0.318$).

The statistical significance of the proposed relationships is reflected by the t-values, with values greater than 1.96 (at $p < 0.05$) supporting significance, as observed through relationships like Consumer Independence to Social FoMO ($t = 6.654$) and Consumer Need for Uniqueness to Personal FoMO ($t = 17.708$) (Hair et al., 2019a).

Moreover, Annex F includes confidence intervals results for all the statistical analyses performed in this study.

All the proposed relationships were found to be statistically significant at a 95% confidence level ($\alpha = 5\%$; $p < 0.05$) in the merged model. Except for hypotheses 1, 5, and 6, the results generally support all the proposed hypotheses.

Results indicate that Consumer Independence has a negative effect on Social FoMO ($\beta = -0.262$, $p < 0.05$), therefore supporting H2. H3 and H4 are also supported since Consumer Need for Uniqueness has a positive effect on both dimensions of FoMO, respectively personal and social ($\beta = 0.583$, $p < 0.05$; $\beta = 0.508$, $p < 0.05$).

Concerning Hypothesis 1 (Consumer Independence \rightarrow Personal FoMO), although the effect was found to be statistically significant at the 5% significance level ($\beta = -0.177$; $p = 0.000 < 0.005$), it was rejected. Contrarily to the positive expected effect, results revealed that Consumer Independence negatively affects Personal FoMO, showcasing similar effects with Social FoMO.

Moreover, Hypotheses 5 and 6, which relate to the model's primary effects (Personal FoMO \rightarrow Subjective Well-Being and Social FoMO \rightarrow Subjective Well-Being) are also rejected ($\beta = 0.134$ and $p = 0.043$; $\beta = 0.132$ and $p = 0.039$), since both Personal FoMO and Social FoMO positively impact Subjective Well-Being.

These relationships are found to be insignificant in the utilitarian and hedonic model when isolated (Annex F). In the utilitarian model, the impact of Personal FoMO on Subjective Well-Being is statistically insignificant ($\beta = 0.092$, $p > 0.05$), same as the impact of Social FoMO on Subjective Well-Being ($\beta = 0.097$, $p > 0.05$). Similarly, these paths are insignificant in the hedonic model (Personal FoMO \rightarrow Subjective Well-Being $\beta = 0.182$, $p > 0.05$) and (Social FoMO \rightarrow Subjective Well-Being $\beta = 0.14$, $p > 0.05$). As a result, these hypotheses were proven incorrect. In the hedonic model, however, at 10% significance level, these routes are significant (Personal FoMO \rightarrow Subjective Well-Being: $p = 0.060 < 0.1$; Social FoMO \rightarrow Subjective Well-Being: $p = 0.095 < 0.1$).

These results, however, emphasize the significance and goal of the study in connection with the importance of examining and identifying relevant mediators and moderators for these relationships. In this manner, a mediation and multigroup analysis were conducted.

5.3 Mediation Analysis

The mediation analysis used in this study is based on (Sarstedt et al., 2020). The indirect effects using a 95% confidence interval were calculated using the bootstrapping process.

Full mediation can be defined as when the indirect effect is significant, but the direct effect is not, whereas partial mediation is defined as when both the direct and indirect effects are significant (Sarstedt et al., 2020).

In the merged model, the direct effect of consumer independence on subjective well-being is statistically significant ($\beta = 0.142, p = 0.006 < 0.05$). Nevertheless, the specific indirect effect mediated by personal fear of missing is not statistically significant ($\beta = -0.014, p = 0.162 > 0.05$), suggesting no mediation via this pathway. On the other side, the indirect effect mediated by Social Fear of Missing Out is statistically significant ($\beta = -0.043, p = 0.015 < 0.05$), indicating partial mediation of Social Fear of Missing Out.

Regarding Consumer Need for Uniqueness, its direct relationship with subjective wellbeing is not significant ($\beta = 0.079, p = 0.094 > 0.05$). Concerning the indirect effects, the mediation through Social Fear of Missing Out is significant ($\beta = 0.083, p = 0.015 < 0.05$) resulting in full mediation via this pathway.

On the contrary, no mediation is established through Personal Fear of Missing Out as the indirect effect is not statistically significant ($\beta = 0.048, p = 0.150 > 0.05$).

These results are further validated through the calculations of Variance Accounted For (VAF). As per (Sarstedt et al., 2020) a VAF value greater than 80% implies full mediation, whereas values between 20% and 80% indicate partial mediation, and values less than 20% indicate no mediation. Although other metrics revealed full mediation for Consumer Need for Uniqueness \rightarrow Social FoMO \rightarrow Subjective Well-Being, the VAF calculation ($20\% \leq 28.49\% \leq 80\%$) shows partial mediation. In reference to this, it can be implied that 95.02% of the total effect is credited to the combined influence of the mediation effects in the model.

The significance of the mediating relationships is further supported since none of the indirect effects confidence intervals contain zero.

According to these findings, social fear of missing out mediates the relationships for both consumers' need for uniqueness (fully) and consumer independence (partially) with subjective well-being, whereas personal fear of missing out does not. Hence, H7a and H8a were not supported, while H7b and H8b were supported.

While no mediation effects were found in the utilitarian model, similar outcomes were noted for the mediation effects in the hedonic model. Moreover, in the hedonic model, the significance of a particular relationship (Social FoMO \rightarrow Subjective Well-Being), changed when indirect effects were included, whereas this did not occur in the utilitarian model (Annex G).

Table 8 5.3.1. - Mediation Analysis Results (Merged model)

Effect	β - Indirect Effect	<i>p</i> -value	5%	95%	VAF	Results
Consumer Independence → Social FoMO → Subjective Wellbeing	-0.043 (0.142)	0.015 (0.006)	-0.076	-0.011	33.54%	Partial Mediation
Consumer Independence → Personal FoMO → Subjective Wellbeing	-0.014	0.162	-0.040	0.008	14.45%	No Mediation
Consumer Need for Uniqueness → Social FoMO → Subjective Wellbeing	0.083 (0.079)	0.015 (0.094)	0.021	0.148	28.49%	Full Mediation
Consumer Need for Uniqueness → Personal FoMO → Subjective Wellbeing	0.048	0.150	-0.027	0.125	18.54%	No Mediation
95.02%						

Note: The *p*-values for the direct effects are in bold and brackets in the second column, and the β for direct effects are in brackets in the first column

5.5 Multigroup Analysis

Following research on the effects of mediation, this study uses multi-group analysis (MGA) to examine whether there are potential significant differences in the effects of relationships between constructs among the hedonic and utilitarian goods purchasing scenarios groups.

For this analysis, the data from the two questionnaires, each with 231 participants per group, were combined into a single dataset. The PLS algorithm test was applied to the merged dataset model to prove reliability and validity of the model. The model was determined to meet established reliability and validity levels following the same tests and criteria as described in section 5.1.. Detailed results, comprising metrics for reliability and convergent validity, discriminant validity, multicollinearity, model fit, and common method bias (marker variable model comparisons) can be found in Annex D. Furthermore, because their outer loadings fell below the accepted limit of 0.7, CNFU1(0.685) and CNFU2 (0.690) items of the Consumer Need for Uniqueness construct were not included in the model.

The analysis follows with conducting the three-step MICOM procedure to assess measurement invariance (Hair et al., 2019a; Henseler et al., 2016).

The MICOM calculations supported configural invariance, as the model structure is identical across both the utilitarian and hedonic groups (Step 1) (Annex H). Moreover, compositional invariance was settled for all variables (Step 2) (Annex H). This was evidenced by the high original correlations (e.g., Consumer Independence = 0.997), aligning with the mean permuted correlations and all permutation p -values being greater than 0.05 (sig level: 5%).

Step 3 must, however, verify the equality of composite means and variances to establish full invariance. For a construct to prove equality of means, the permutation p -value must be higher than 0.05 and the original mean difference must be within the 95% confidence interval.

The results of MICOM Step 3 (Part 1) (Annex H), demonstrate significant differences in means for majority of constructs.

With a permutation p -value of $0.001 < 0.05$, the original mean difference (-0.265) for Consumer Independence is outside the 95% confidence interval [0.001, 0.151], suggesting a significant difference between the hedonic and utilitarian groups.

Likewise, for Consumer Need for Uniqueness, the original mean difference (0.732) falls outside the confidence interval [-0.001, 0.152], and a permutation p -value (0.000), indicating significant differences in the mean scores.

There are significant differences between the hedonic and utilitarian groups also in terms of FOMO, both social (mean difference = 0.459, confidence range [-0.002, 0.156], $p = 0.000$) and personal (mean difference = 0.514, confidence interval [0.000, 0.155], $p = 0.000$).

In contrast, there is no significant difference for Subjective Wellbeing because the original mean difference (0.090) has a p -value of $0.169 > 0.05$ and is within the 95% confidence interval [0.000, 0.156] (Annex H).

The criteria state that equality of variances is established if the permutation p -value is greater than 0.05 and the original variance difference is within the 95% confidence interval.

The MICOM Step 3 (Part 2) (Annex H) results evaluate how the hedonic and utilitarian groups differ in their variances.

With a p -value of $0.493 > 0.05$ and a variance difference (0.003) for Consumer Independence that is within the confidence interval [-0.289, 0.285], there is not a significant difference in variances. Similarly, there is no significant difference for Consumer Need for Uniqueness (variance difference = 0.105), which falls within the confidence interval [-0.179, 0.173] with a p -value of $0.161 > 0.05$.

However, there are significant differences in variance for social and personal fear of missing out among the hedonic and utilitarian groups. With a p -value of $0.008 < 0.05$, the variance difference (0.254) for personal fear of missing out is outside the confidence interval $[-0.186, 0.173]$. Accordingly, the variance difference (0.633) for Social Fear of Missing Out has a p -value of $0.000 < 0.05$ and is outside the interval $[-0.242, 0.229]$.

Lastly, there is no significant difference in variances for Subjective Wellbeing, as indicated by the variance difference (0.131) falling within the confidence interval $[-0.218, 0.218]$ and the p -value of $0.163 > 0.05$.

Constructs satisfying both conditions (equal means and variances across groups) indicate full measurement invariance, those meeting only one demonstrate partial invariance, whereas variables failing both criteria show no invariance.

As reflected in the data, full invariance is proven for Subjective Well-Being, allowing unbiased comparisons between hedonic and utilitarian groups. Consumer Independence and Consumer Need for Uniqueness on the other hand show partial invariance, asking for caution in interpretation, while Fear of Missing Out (Personal and Social), reflect no invariance, meaning that differences may be due to measurement inconsistencies rather than valid group differences (Annex H).

Furthermore, in both utilitarian and hedonic groups, the multi-group analysis (MGA) results show little variation in the correlations between components (Table 5.5.1.). Further analysis via bootstrapping reveals that certain relationships, respectively, $CI \rightarrow FOMOP$, $CI \rightarrow FOMOS$, $CNF \rightarrow FOMOP$, $CNFU \rightarrow FOMOS$ are significant within their own contexts as described in Section 5.2.

However, despite this, evidence from bootstrapping MGA illustrates non-significant p -values for most hypotheses, indicating that the differences in path coefficients between hedonic and utilitarian groups are not statistically significant (Table 5.5.2.), thus rejecting H9.

The path that makes the exception in significance differences between the groups is the relationship between Consumer Independence \rightarrow Personal FoMO ($\beta = -0.202$, $p = 0.005 < 0.05$) and Consumer Independence \rightarrow Social FoMO ($\beta = -0.136$, $p = 0.031 < 0.05$). Still, H9 is rejected for these paths as well, since it was anticipated that the relationships would be stronger for the hedonic group.

Against predictions, these effects were found to be stronger for the utilitarian group. Specifically, the relationship between Consumer Independence and Personal FoMO is stronger for utilitarian goods purchases by 0.202 units compared to the hedonic purchases. In parallel, the correlation with Social FoMO is stronger by 0.136 units in the utilitarian context.

Table 9 5.5.1. - Bootstrap MGA Results Across Hedonic and Utilitarian

	Proposed Effect	β Difference (Hedonic - Utilitarian)	1-tailed (Hedonic vs Utilitarian) p -value	2-tailed (Hedonic vs Utilitarian) p -value	Results
Consumer Independence → Personal Fear of Missing Out	H9: Significant	-0.202	0.995	0.005	Supported
Consumer Independence → Social Fear of Missing Out	H9: Significant	-0.136	0.969	0.031	Supported
Consumer Need for Uniqueness → Personal Fear of Missing Out	H9: Significant	0.066	0.161	0.161	Not supported
Consumer Need for Uniqueness → Social Fear of Missing Out	H9: Significant	-0.028	0.655	0.345	Not supported
Personal Fear of Missing Out → Subjective Wellbeing	H9: Significant	0.086	0.321	0.321	Not supported
Social Fear of Missing Out → Subjective Wellbeing	H9: Significant	0.049	0.397	0.397	Not supported

Table 10 5.5.2. Bootstrapping results across hedonic and utilitarian products

	β Original (Hedonic)	β Original (Utilitarian)	T - value (Hedonic)	T - value (Utilitarian)	p -value (Hedonic)	p -value (Utilitarian)
Consumer Independence → Personal FoMO	-0.290	-0.088	5.862	1.616	0.000	0.053
Consumer Independence → Social FoMO	-0.343	-0.207	6.125	4.273	0.000	0.000
Consumer Need for Uniqueness → Personal FoMO	0.611	0.545	12.651	11.912	0.000	0.000
Consumer Need for Uniqueness → Social FoMO	0.499	0.527	9.873	10.752	0.000	0.000
Personal FoMO → Subjective Well-Being	0.182	0.096	1.558	0.699	0.060	0.242
Social FoMO → Subjective Well-Being	0.142	0.093	1.311	0.681	0.095	0.248

5.4 Discussions

5.4.1. Consumer Independence, Consumer Need for Uniqueness, and Self-Concept FoMO

Findings confirmed that consumers with high levels of Need for Uniqueness experience higher levels of Personal and Social FoMO. This aligns with (Argan et al., 2022) upon which the conceptual model of this study was built, and findings from (Ohmann & Burgmer, 2016; Ruvio, 2008; Tian & McKenzie, 2001).

Regarding Consumer Independence, results are congruent with the literature (Dogan, 2019; Xie et al., 2018) in its relationship with the social dimension of FoMO, indicating that greater independence decreases susceptibility to FoMO. In contrast, the relationship with Personal FoMO has a different pattern from that suggested in the literature (Zhang et al., 2020), showing that higher Consumer Independence reduces levels of Personal FoMO

This unpredicted relationship can be attributed to the cognitive mechanisms and intrinsic goal orientation of independently self-construed individuals.

It is known that independent individuals tend to think analytically (Mao et al., 2016), which helps them assess possibilities logically and reduce irrational fears of lost opportunities. This analytical style of thinking lessens the emotional tension that might otherwise foster FoMO by enabling individuals to concentrate on the here and now and find fulfillment in self-aligned choices.

The findings support the notions stated in Chapter 2, suggesting that the more autonomous consumers are less vulnerable to FoMO, whether in personal or social dimensions.

5.4.2. Self-Concept FoMO and Subjective Well-Being

Interestingly, this study uncovered a positive relationship between FoMO and subjective well-being, conflicting from established research (Petrescu & Kara, 2018).

Even though FoMO is typically correlated with negative outcomes such as dissatisfaction, regret, and financial distress (Morsi et al., 2024), specific attributes of FoMO may encourage individuals to pursue personally or socially rewarding experiences, indirectly promoting wellbeing. (Roberts & David, 2020) for example, have suggested that under certain conditions, FoMO can foster social connections by motivating individuals to engage with opportunities that they would otherwise oversee.

To add, another study (Littman-Ovadia & Russo-Netzer, 2024) has addressed how FoMO can act as a signal of unmet needs as evidenced (Przybylski et al., 2013), urging individuals to reflect on their life decisions and make positive changes. This implies that whilst FoMO has mostly negative effects, it can also act as a motivator for self-improvement and personal growth, commonly known as positive predictors of subjective well-being (Weigold et al., 2024).

Another notable finding includes the insignificance of self-concept FoMO and Subjective Well-Being when analyzed in the utilitarian and hedonic models separately.

One possible explanation of this effect stands in the multifaceted and complex nature of SWB, which covers both emotional and cognitive evaluations of life such satisfaction (Diener et al., 1985). It is possible that while FoMO creates emotional stress, its long-term effect on life satisfaction is diluted by other influences, such as varying individual sensitivities to social comparison, life events, satisfaction life events (Galinha & Pais-Ribeiro, 2012) , or coping mechanisms such as mindfulness (Brailovskaia & Margraf, 2024).

5.4.4. Consumer Independence, Consumer Need for Uniqueness and SWB: The mediating role of Social FoMO

While mediation was foreseen for both personal and social dimensions of FoMO in the relationship between Consumer Independence and SWB, and Consumer Need for Uniqueness and SWB, only social FoMO mediated these relationships.

Consistent with literature, Consumer Independence positively influences SWB, however when partially mediated by Social FoMO, it turns into a negative predictor of SWB.

Consumer Need for Uniqueness on the other hand, confirming what the study proposed, doesn't impact SWB directly, only when fully mediated by Social FoMO, in a positive manner.

This implies that Social FoMO has an important role in changing the influence of consumer attributes on SWB. For Consumer Independence, the change to a negative effect can be due to the potential emotional conflict created by the need to balance independence with social pressures related to FoMO.

Consumer Need for Uniqueness's reliance on Social FoMO demonstrates that its link to SWB is solely dependent on external validation through social dynamics, rather than internal happiness.

5.4.4. The role of product category (Utilitarian vs Hedonic)

Presenting a contrast to the hypothesis established in prior work (Zhong & Mitchell, 2010; Zimmermann, 2014), the multigroup analysis demonstrated no significant differences in the relationships between Consumer Need for Uniqueness and both personal and social dimensions of FoMO, nor between the latter with Subjective Well-Being across the utilitarian and hedonic goods purchasing contexts. Besides, the results suggest that the negative effect of Consumer Independence on either personal or social FoMO is stronger for utilitarian purchases. This can be because, while independent consumers are mainly motivated intrinsically, hedonic goods attributes can sometimes trigger social influences in the case of the social side of FoMO, or means of enhancing the self for Personal FoMO. Conversely, the lack of emotional appeal in utilitarian goods allows these consumers to maintain their buffer against external pressures, resulting in lower negative effects.

Finding alternative literature is therefore necessary to rationalize and explain these unforeseen results.

First, these results are consistent with more comprehensive theoretical viewpoints and empirical studies that question the clear-cut distinction between utilitarian and hedonic consumption. For instance, a consumer purchasing products like shoes can still have hedonic satisfaction due to their aesthetic appeal. Likewise, hedonic consumption such as going to a nightclub can have utilitarian rationalizations, such as networking (Okada, 2005). These overlapping drivers blur distinctions, giving a potential explanation for the lack of significant differences between the groups.

Second, findings of (Kousi et al., 2023) suggest that the difference between hedonic and utilitarian consumption is at many times eclipsed by the impact of hedonism in fueling consumer happiness. Rather than being classified as either utilitarian or hedonic, the study shows that the satisfaction that comes from purchases is more closely related to their hedonic value. This supports the observation that hedonic and utilitarian properties can coexist in the same consumption settings and are not mutually exclusive.

Third, although research indicates a robust correlation between hedonic consumption and wellbeing, there is also evidence that this relationship is conditional. In particular, the advantages are contingent upon the frequency and cost of consumption with frequent and inexpensive hedonic purchases being more successful in raising life satisfaction than rare and expensive ones. The lack of assessment of these conditions in the current study can affect the significance of these relationships.

Lastly, referring to the MICOM procedure's results, some constructs, like subjective well-being attained measurement invariance, but others including CNFU and FoMO showed partial or no invariance. The observed insignificant differences in path coefficients may be partially explained by the lack of full invariance in important constructs, since measurement errors might mask true differences (Cheah et al., 2018).

6. Conclusions

Despite their growing relevance in marketing, limited research has investigated the relationship between consumer traits, the self-concept perspective of Fear of Missing Out (FoMO), and subjective well-being (SWB).

Employing a quantitative method through partial least squares structural equation modeling (PLS-SEM), this study assesses how the personal and social dimensions of FoMO correlate with consumer traits, in this case antecedents of FoMO, and SWB.

By bridging this gap in the literature, this research proposes a comprehensive framework that integrates the self-concept perspective FoMO, and SWB within the context of utilitarian or hedonic goods consumption, addressing the lack of quantitative studies and comparative research on the moderating effect of product type.

With the collection of 462 questionnaires from US participants, the findings from this study conclude that FoMO's influence on SWB does not depend on product characteristics, as no significant differences were observed between these two groups.

These results emphasize the significance of studying FoMO's impact on SWB, with implications for the relevant theoretical literature and the commerce and retail marketing context.

6.1 Theoretical implications

This study contributes to the literature by empirically exploring the correlation between Fear of Missing Out (FoMO) and subjective well-being (SWB), concentrating on the comparison of the model between utilitarian and hedonic goods.

First, this research advances FoMO and SWB research through testing the relationship between Consumer Independence, Consumer Need for Uniqueness, FoMO through prism of self-concept perspective FoMO - a recent approach the literature of FoMO (Zhang et al., 2020), and Subjective Well-Being.

The findings for the effects of Consumer Independence and Consumer Need for Uniqueness on both personal and social dimensions of FoMO are consistent with those of (Argan et al., 2022), which focused on consumer-centric FoMO. While this study integrates a self-concept perspective of FoMO, the concluded effects were similar, with Consumer Independence as a negative predictor, and Consumer Need for Uniqueness as a positive predictor of FoMO. Nevertheless, the correlation between Consumer Independence and Personal FoMO deviates from the discussed literature, which predicted a positive relationship. The results identified a

negative relationship between Consumer Independence and Personal FoMO offering new theoretical insights to be explored.

Moreover, the results call into question most studies that have linked FoMO with subjective well-being, which identify the correlation as negative (Chan et al., 2022; Milyavskaya et al., 2018; Morsi et al., 2024). In this research, however, the effects were found to be positive. This divergence can be attributed to the adoption of the self-concept perspective of FoMO in this study, which has not been widely tested in comparable conceptualizations throughout previous research.

Second, this research adds to the literature by examining the moderating role of product type, either hedonic or utilitarian in the previously described relationships. While it was predicted that product type would have a substantial impact on the FoMO-SWB relationship, the findings revealed no significant variations between hedonic and utilitarian settings. This implies that the effect of FoMO on SWB may not be as context dependent as previously thought, allowing for a more universal understanding of its function (Kousi et al., 2023). Similar conclusions were derived for the relation between Consumer Need for Uniqueness and FoMO. On the other hand, Consumer Independence has a statistically significant different effect on both personal and social FoMO for hedonic and utilitarian goods, with higher effects for utilitarian contexts, underscoring the relevance of product type in determining the link between consumer attributes and FoMO aspects.

Third, it was found that FoMOS partially mediates the relationship between Consumer Independence (CI) and subjective well-being (SWB) and fully mediates the relationship between Consumer Need for Uniqueness (CNFU) and SWB. In contrast, FoMOP did not exhibit any mediating effect on the relationship between these traits and SWB, highlighting the distinct roles of the FoMO dimensions.

6.2 Managerial implications

In parallel, this study's findings are of particular importance to commerce and marketing practitioners, specifically about the strategic use of Fear of Missing Out.

The positive effects of both personal and social FoMO on subjective well-being (SWB) suggest that specialists can reorient the narrative around FoMO from a negative pattern to a tool for improving consumer well-being.

These implications can be employed throughout the customer journey from pre-purchase to purchase and post-purchase.

However, it should be noted that this positive effect can happen only under certain circumstances such as FoMO acting as a foster of social connections, a prompter of reflection towards positive life changes, or a motivator of personal growth (Littman-Ovadia & Russo-Netzer, 2024; Roberts & David, 2020).

Thus, in the pre-purchase stage, marketers in the retail and commerce sectors can make use of these positive aspects of FoMO to create campaigns that encourage consumers to engage with products or services that correspond to meaningful experiences, such as purchasing items that promote social connection, personal expression, or self-improvement. Businesses can generate a sense of urgency while boosting consumer well-being by framing FoMO-driven messages to focus on fulfillment and the benefits of ownership, such as exclusivity and increased quality of life.

Considering the mediating effect of FoMO, if marketers want to use it strategically, they should tailor campaigns informed on the dual effect of Social FoMO. For highly independent consumers, FoMO marketing narratives should highlight self-empowerment and autonomy to avoid triggering negative well-being effects. Plus, they should reinforce the intrinsic value of the purchase through showcasing its harmony with customers' core values and long-term goals, moving away from the superficial emotional state of social FoMO.

On the other side, for consumers driven by the need for uniqueness, they should position their offerings as means of uniqueness-enhancement

Moreover, the self-concept conceptualization of FoMO into personal and social dimensions can be leveraged as psychographic segmentation to effectively target the audience.

During the purchase stage, marketers should concentrate on highlighting the value of their offer while improving the entire buying experience. For consumers, affected by Social FoMO, establishing community-driven experiences during the purchasing process, such as exclusive membership incentives or shared shopping events, can promote a sense of belonging. Personalization and self-expression options during the purchasing process might boost emotional pleasure associated with the decision for consumers driven by Personal FoMO.

In the post-purchase, the evaluation of the success of marketing should focus on customer's favorable cognitive and emotional perceptions, in addition to the influence on their behavior. Since the goal is to improve customers' well-being, the performance of marketing activities should be determined by their capacity to enhance well-being.

6.3 Limitations and future research

While care was taken to conduct this research prudently, a few limitations must be noted as they could affect the generalization of the conclusions.

Firstly, the study uses samples of US-based only participants, which may limit the findings' applicability to other cultural or geographical situations. Differences in culture in individualism and collectivism may have an impact on the role of FoMO in subjective well-being, thus future research might investigate these correlations in broader populations.

Secondly, the focus of this study is exclusively on products, particularly in hedonic and utilitarian categories, which concluded in relevant insights. However, future research could investigate the same effects focusing on services, experiences, or events where FoMO is more salient.

Third, while the study unveiled an unpredicted positive influence of FoMO on SWB, it does not deep into the underlying mechanisms that allow for this positive effect. Thus, future studies could take this conceptualization further through adopting qualitative methodologies, such as focus groups, or interviews to understand how, and under what circumstances FoMO can positively predict well-being.

Another route for future study is to broaden the model to investigate specific consuming habits, such as confirmatory ostentatious consumption, experiential purchases, or sustainability activities, as well as their relationship to brand loyalty. Furthermore, the model can be expanded by investigating other antecedents, such as personality traits, or the proneness of consumers towards FoMO (Morsi et al., 2024; Stead & Bibby, 2017; W. Zhang et al., 2024), to better understand the reasons that drive FoMO and its impact on subjective well-being.

Given that Social FoMO acted as a mediator between Consumer Independence and SWB, as well as for Consumer Need for Uniqueness and SWB, the mediating effect of additional variables such as self-esteem, social comparisons, and identity signaling in this relationship requires further examination. This would increase the understanding of how consumer traits influence well-being.

Bibliography

- Adidas Press Release. (2022). *Adidas: Run for the oceans*.
<https://www.adidas.co.uk/runfortheoceans>
- An, D., Jeong, B. ram, & Youn, N. (2022). Effects of art consumption on consumer well-being. *Journal of Consumer Affairs*, 56(2), 685–702. <https://doi.org/10.1111/joca.12429>
- Apple. (2021, January 25). *Time to Walk: An inspiring audio walking experience comes to Apple Fitness+*.
- Argan, M., Argan, M. T., Aydınoğlu, N. Z., & Özer, A. (2022). The delicate balance of social influences on consumption: A comprehensive model of consumer-centric fear of missing out. *Personality and Individual Differences*, 194.
<https://doi.org/10.1016/j.paid.2022.111638>
- Bagheri, F., Guerreiro, M., Pinto, P., & Ghaderi, Z. (2023). From Tourist Experience to Satisfaction and Loyalty: Exploring the Role of a Sense of Well-Being. *Journal of Travel Research*. <https://doi.org/10.1177/00472875231201509>
- Baker, Z. G., Krieger, H., & LeRoy, A. S. (2016). Fear of missing out: Relationships with depression, mindfulness, and physical symptoms. *Translational Issues in Psychological Science*, 2(3), 275–282. <https://doi.org/10.1037/tps0000075>
- Bakioğlu, F., Deniz, M., Griffiths, M. D., & Pakpour, A. H. (2022). Adaptation and validation of the Online-Fear of Missing Out Inventory into Turkish and the association with social media addiction, smartphone addiction, and life satisfaction. *BMC Psychology*, 10(1).
<https://doi.org/10.1186/s40359-022-00856-y>
- Batra, R., & Ahtola, O. T. (1991). Measuring the hedonic and utilitarian sources of consumer attitudes. *Marketing Letters*, 2(2), 159–170. <https://doi.org/10.1007/BF00436035>
- Berger, J., & Heath, C. (2007). Where Consumers Diverge from Others: Identity Signaling and Product Domains. *Journal of Consumer Research*, 34(2), 121–134.
<https://doi.org/10.1086/519142>
- Blackwell, D., Leaman, C., Tramposch, R., Osborne, C., & Liss, M. (2017). Extraversion, neuroticism, attachment style and fear of missing out as predictors of social media use and addiction. *Personality and Individual Differences*, 116, 69–72.
<https://doi.org/10.1016/j.paid.2017.04.039>
- Bläse, R., Filser, M., Kraus, S., Puumalainen, K., & Moog, P. (2024). Non-sustainable buying behavior: How the fear of missing out drives purchase intentions in the fast fashion

- industry. *Business Strategy and the Environment*, 33(2), 626–641.
<https://doi.org/10.1002/bse.3509>
- Brailovskaia, J., & Margraf, J. (2024). From fear of missing out (FoMO) to addictive social media use: The role of social media flow and mindfulness. *Computers in Human Behavior*, 150. <https://doi.org/10.1016/j.chb.2023.107984>
- Brown, G. G. J. (2019). Consumption Changes, Not Income Changes, Predict Changes in Subjective Well-Being. *Social Psychological and Personality Science*, 11(1).
<https://doi.org/10.1177/1948550619835215>
- Cachero-Martínez, S., & Vázquez-Casielles, R. (2017). Living positive experiences in store: how it influences shopping experience value and satisfaction? *Journal of Business Economics and Management*, 18(3), 537–553.
<https://doi.org/10.3846/16111699.2017.1292311>
- Chan, S. S., Van Solt, M., Cruz, R. E., Philp, M., Bahl, S., Serin, N., Amaral, N. B., Schindler, R., Bartosiak, A., Kumar, S., & Canbulut, M. (2022). Social media and mindfulness: From the fear of missing out (FOMO) to the joy of missing out (JOMO). *Journal of Consumer Affairs*, 56(3), 1312–1331. <https://doi.org/10.1111/joca.12476>
- Chang, C. (2020). How Branded Videos Can Inspire Consumers and Benefit Brands: Implications for Consumers' Subjective Well-Being. *Journal of Advertising*, 49(5), 613–632. <https://doi.org/10.1080/00913367.2020.1806153>
- Cheah, J. H., Sarstedt, M., Ringle, C. M., Ramayah, T., & Ting, H. (2018). Convergent validity assessment of formatively measured constructs in PLS-SEM: On using single-item versus multi-item measures in redundancy analyses. *International Journal of Contemporary Hospitality Management*, 30(11), 3192–3210.
<https://doi.org/10.1108/IJCHM-10-2017-0649>
- Chen, C. C., Petrick, J. F., & Shahvali, M. (2016). Tourism Experiences as a Stress Reliever: Examining the Effects of Tourism Recovery Experiences on Life Satisfaction. *Journal of Travel Research*, 55(2), 150–160. <https://doi.org/10.1177/0047287514546223>
- Chen, F. F., Jing, Y., Hayes, A., & Lee, J. M. (2013). Two Concepts or Two Approaches? A Bifactor Analysis of Psychological and Subjective Well-Being. *Journal of Happiness Studies*, 14(3), 1033–1068. <https://doi.org/10.1007/s10902-012-9367-x>
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd ed.). Routledge.
- Dempsey, A. E., O'Brien, K. D., Tiamiyu, M. F., & Elhai, J. D. (2019). Fear of missing out (FoMO) and rumination mediate relations between social anxiety and problematic

- Facebook use. *Addictive Behaviors Reports*, 9.
<https://doi.org/10.1016/j.abrep.2018.100150>
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment*, 49(1), 71–75.
https://doi.org/10.1207/s15327752jpa4901_13
- Diener, E., Sandvik, E., Seidlitz, L., & Diener, M. (1993). The relationship between income and subjective well-being: Relative or absolute? *Social Indicators Research*, 28(3), 195–223. <https://doi.org/10.1007/BF01079018>
- Dinh, T. C. T., & Lee, Y. (2022). “I want to be as trendy as influencers” – how “fear of missing out” leads to buying intention for products endorsed by social media influencers. *Journal of Research in Interactive Marketing*, 16(3), 346–364.
<https://doi.org/10.1108/JRIM-04-2021-0127>
- Dogan, V. (2019). Why Do People Experience the Fear of Missing Out (FoMO)? Exposing the Link Between the Self and the FoMO Through Self-Construal. *Journal of Cross-Cultural Psychology*, 50(4), 524–538. <https://doi.org/10.1177/0022022119839145>
- Dominko, M., & Verbič, M. (2022). The effect of subjective well-being on consumption behavior. *Journal of Consumer Affairs*, 56(2), 876–898.
<https://doi.org/10.1111/joca.12457>
- El Hedhli, K., Zourrig, H., & Chebat, J. C. (2016). Shopping well-being: Is it just a matter of pleasure or doing the task? The role of shopper’s gender and self-congruity. *Journal of Retailing and Consumer Services*, 31, 1–13.
<https://doi.org/10.1016/j.jretconser.2016.03.002>
- Escalas, J. E., & Bettman, J. R. (2003). You Are What They Eat: The Influence of Reference Groups on Consumers’ Connections to Brands. In *JOURNAL OF CONSUMER PSYCHOLOGY* (Vol. 13, Issue 3).
- Fang, J., Wang, X., Wen, Z., & Zhou, J. (2020). Fear of missing out and problematic social media use as mediators between emotional support from social media and phubbing behavior. *Addictive Behaviors*, 107. <https://doi.org/10.1016/j.addbeh.2020.106430>
- Galinha, I. C., & Pais-Ribeiro, J. L. (2012). Cognitive, affective and contextual predictors of subjective wellbeing. *International Journal of Wellbeing*, 2(1), 34–53.
<https://doi.org/10.5502/ijw.v2i1.3>
- Gilal, F. G., Zhang, J., Paul, J., & Gilal, N. G. (2019). The role of self-determination theory in marketing science: An integrative review and agenda for research. *European Management Journal*, 37(1), 29–44. <https://doi.org/10.1016/j.emj.2018.10.004>

- Goldsmith, R. E., & Clark, R. A. (2012). Materialism, status consumption, and consumer independence. *Journal of Social Psychology, 152*(1), 43–60.
<https://doi.org/10.1080/00224545.2011.555434>
- Good, M. C., & Hyman, M. R. (2021). Direct and indirect effects of fear-of-missing-out appeals on purchase likelihood. *Journal of Consumer Behaviour, 20*(3), 564–576.
<https://doi.org/10.1002/cb.1885>
- Guenther, P., Guenther, M., Ringle, C. M., Zaefarian, G., & Cartwright, S. (2023a). Improving PLS-SEM use for business marketing research. *Industrial Marketing Management, 111*, 127–142. <https://doi.org/10.1016/j.indmarman.2023.03.010>
- Guenther, P., Guenther, M., Ringle, C. M., Zaefarian, G., & Cartwright, S. (2023b). Improving PLS-SEM use for business marketing research. *Industrial Marketing Management, 111*, 127–142. <https://doi.org/10.1016/j.indmarman.2023.03.010>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019a). When to use and how to report the results of PLS-SEM. In *European Business Review* (Vol. 31, Issue 1, pp. 2–24). Emerald Group Publishing Ltd. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019b). When to use and how to report the results of PLS-SEM. In *European Business Review* (Vol. 31, Issue 1, pp. 2–24). Emerald Group Publishing Ltd. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hayran, C., Anik, L., & Gürhan-Canli, Z. (2020). A threat to loyalty: Fear of missing out (FOMO) leads to reluctance to repeat current experiences. *PLoS ONE, 15*(4).
<https://doi.org/10.1371/journal.pone.0232318>
- Hayran, C., & Gürhan-Canli, Z. (2022). Understanding the feeling of missing out: A temporal perspective. *Personality and Individual Differences, 185*.
<https://doi.org/10.1016/j.paid.2021.111307>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2016). Testing measurement invariance of composites using partial least squares. *International Marketing Review, 33*(3), 405–431.
<https://doi.org/10.1108/IMR-09-2014-0304>
- Hirschman, E., & Holbrook, M. (1982). Hedonic Consumption: Emerging Concepts, Methods, and Propositions. *Journal of Marketing, 46*, 92–101.
- Hodkinson, C. (2019). ‘Fear of Missing Out’ (FOMO) marketing appeals: A conceptual model. *Journal of Marketing Communications, 25*(1), 65–88.
<https://doi.org/10.1080/13527266.2016.1234504>

- Holm, M. R., Lugosi, P., Croes, R. R., & Torres, E. N. (2017). Risk-tourism, risk-taking and subjective well-being: A review and synthesis. In *Tourism Management* (Vol. 63, pp. 115–122). Elsevier Ltd. <https://doi.org/10.1016/j.tourman.2017.06.004>
- Hudders, L., & Pandelaere, M. (2012). The Silver Lining of Materialism: The Impact of Luxury Consumption on Subjective Well-Being. *Journal of Happiness Studies*, 13(3), 411–437. <https://doi.org/10.1007/s10902-011-9271-9>
- Hussain, S., Raza, A., Haider, A., Ishaq, M. I., & Talpur, Q. ul ain. (2023). Fear of missing out and compulsive buying behavior: The moderating role of mindfulness. *Journal of Retailing and Consumer Services*, 75. <https://doi.org/10.1016/j.jretconser.2023.103512>
- Jaikumar, S., Singh, R., & Sarin, A. (2018). ‘I show off, so I am well off’: Subjective economic well-being and conspicuous consumption in an emerging economy. *Journal of Business Research*, 86, 386–393. <https://doi.org/10.1016/j.jbusres.2017.05.027>
- Japutra, A., Gordon-Wilson, S., Ekinci, Y., & Adams, E. D. (2025). The dark side of brands: Exploring fear of missing out, obsessive brand passion, and compulsive buying. *Journal of Business Research*, 186. <https://doi.org/10.1016/j.jbusres.2024.114990>
- Kay Smith, M., & Diekmann, A. (2017). Tourism and wellbeing. *Annals of Tourism Research*, 66, 1–13. <https://doi.org/10.1016/j.annals.2017.05.006>
- Kim, J., Lee, Y., & Kim, M. L. (2020). Investigating “Fear of Missing Out” (FOMO) as an extrinsic motive affecting sport event consumer’s behavioral intention and FOMO-driven consumption’s influence on intrinsic rewards, extrinsic rewards, and consumer satisfaction. *PLoS ONE*, 15(12 December). <https://doi.org/10.1371/journal.pone.0243744>
- Kousi, S., Halkias, G., & Kokkinaki, F. (2023). Hedonic objects and utilitarian experiences: The overriding influence of hedonism in driving consumer happiness. *Psychology and Marketing*, 40(8), 1634–1645. <https://doi.org/10.1002/mar.21829>
- Linssen, R., van Kempen, L., & Kraaykamp, G. (2011). Subjective Well-being in Rural India: The Curse of Conspicuous Consumption. *Social Indicators Research*, 101(1), 57–72. <https://doi.org/10.1007/s11205-010-9635-2>
- Littman-Ovadia, H., & Russo-Netzer, P. (2024). Exploring the lived experience and coping strategies of Fear of Missing Out (FoMO) among emerging adults. *Current Psychology*, 43(42), 32665–32685. <https://doi.org/10.1007/s12144-024-06793-w>
- Malkoç, A. (2011). Big five personality traits and coping styles predict subjective wellbeing: A study with a Turkish sample. *Procedia - Social and Behavioral Sciences*, 12, 577–581. <https://doi.org/10.1016/j.sbspro.2011.02.070>

- Mao, H., Li, X., Desai, K. K., & Jain, S. P. (2016). Self-construal and feature centrality. *Marketing Letters*, 27(4), 781–789. <https://doi.org/10.1007/s11002-015-9380-z>
- Maxwell, L. C., Tefertiller, A., & Morris, D. (2022). The nature of FoMO: trait and state fear-of-missing-out and their relationships to entertainment television consumption. *Atlantic Journal of Communication*, 30(5), 522–534. <https://doi.org/10.1080/15456870.2021.1979977>
- McCabe, S., & Johnson, S. (2013). The happiness factor in tourism: Subjective well-being and social tourism. *Annals of Tourism Research*, 41, 42–65. <https://doi.org/10.1016/j.annals.2012.12.001>
- McLean, G., AlYahya, M., Barhorst, J. B., & Osei-Frimpong, K. (2023). Examining the influence of virtual reality tourism on consumers' subjective wellbeing. *Tourism Management Perspectives*, 46. <https://doi.org/10.1016/j.tmp.2023.101088>
- Miller, B. K., & Simmering, M. J. (2023). Attitude Toward the Color Blue: An Ideal Marker Variable. *Organizational Research Methods*, 26(3), 409–440. <https://doi.org/10.1177/10944281221075361>
- Miller, B., Simmering, M., & Ragland, E. (2024). Effective and adaptable: Four studies on the shortened attitude toward the color blue marker variable scale. *Behavior Research Methods*, 56(7), 7985–8008. <https://doi.org/10.3758/s13428-024-02465-6>
- Milyavskaya, M., Saffran, M., Hope, N., & Koestner, R. (2018). Fear of missing out: prevalence, dynamics, and consequences of experiencing FOMO. *Motivation and Emotion*, 42(5), 725–737. <https://doi.org/10.1007/s11031-018-9683-5>
- Moreta-Herrera, R., Oriol-Granado, X., González-Carrasco, M., & Vaca-Quintana, D. (2023). Examining the Relationship between Subjective Well-being and Psychological Well-being among 12-Year-Old-Children from 30 Countries. *Child Indicators Research*, 16(5), 1851–1870. <https://doi.org/10.1007/s12187-023-10042-0>
- Morsi, N., Sá, E., & Silva, J. (2024). Walking away: Investigating the adverse impact of FOMO appeals on FOMO-prone consumers. *Business Horizons*. <https://doi.org/10.1016/j.bushor.2024.11.001>
- Nail, P. R. (1986). Toward an Integration of Some Models and Theories of Social Response. In *Psychological Bulletin* (Vol. 100, Issue 2, pp. 190–206). <https://doi.org/10.1037/0033-2909.100.2.190>
- Neuman, W. Lawrence. (2014). *Social research methods : qualitative and quantitative approaches*. Pearson Education Limited.

- Oberst, U., Wegmann, E., Stodt, B., Brand, M., & Chamarro, A. (2017). Negative consequences from heavy social networking in adolescents: The mediating role of fear of missing out. *Journal of Adolescence*, 55, 51–60.
<https://doi.org/10.1016/j.adolescence.2016.12.008>
- OECD. (n.d.). *OECD Better Life Index*.
- Ohmann, K., & Burgmer, P. (2016). Nothing compares to me: How narcissism shapes comparative thinking. *Personality and Individual Differences*, 98, 162–170.
<https://doi.org/10.1016/j.paid.2016.03.069>
- Okada, E. (2005). Justification Effects on Consumer Choice of Hedonic and Utilitarian Goods. *Journal of Marketing Research*, 42(1).
- Park, H. J. (2022). Impact of Facebook usage intensity on fear of missing out and depression: Moderated mediating effect of Facebook usage behaviour. *Telematics and Informatics*, 74. <https://doi.org/10.1016/j.tele.2022.101878>
- Park, S. Y., & Baek, Y. M. (2018). Two faces of social comparison on Facebook: The interplay between social comparison orientation, emotions, and psychological well-being. *Computers in Human Behavior*, 79, 83–93.
<https://doi.org/10.1016/j.chb.2017.10.028>
- Petrescu, M., & Kara, A. (2018). Consumer Aspirations and Subjective Well-Being. *Journal of International Consumer Marketing*, 30(5), 304–316.
<https://doi.org/10.1080/08961530.2018.1459219>
- Prentice, C., & Loureiro, S. M. C. (2018). Consumer-based approach to customer engagement – The case of luxury brands. *Journal of Retailing and Consumer Services*, 43, 325–332.
<https://doi.org/10.1016/j.jretconser.2018.05.003>
- Przybylski, A. K., Murayama, K., Dehaan, C. R., & Gladwell, V. (2013). Motivational, emotional, and behavioral correlates of fear of missing out. *Computers in Human Behavior*, 29(4), 1841–1848. <https://doi.org/10.1016/j.chb.2013.02.014>
- Rathee, S., Masters, T. M., & Yu-Buck, G. F. (2022). So fun! How fun brand names affect forgiveness of hedonic and utilitarian products. *Journal of Business Research*, 139, 44–55. <https://doi.org/10.1016/j.jbusres.2021.09.041>
- Reer, F., Tang, W. Y., & Quandt, T. (2019). Psychosocial well-being and social media engagement: The mediating roles of social comparison orientation and fear of missing out. *New Media and Society*, 21(7), 1486–1505.
<https://doi.org/10.1177/1461444818823719>

- Roberts, J. A., & David, M. E. (2020). The Social Media Party: Fear of Missing Out (FoMO), Social Media Intensity, Connection, and Well-Being. *International Journal of Human-Computer Interaction*, 36(4), 386–392. <https://doi.org/10.1080/10447318.2019.1646517>
- Ruganct, R. N. (1995). PRIVATE AND PUBLIC SELF-CONSCIOUSNESS SUBSCALES OF THE FENIGSTEIN, SCHEIER AND BUSS SELF-CONSCIOUSNESS SCALE: A TURKISH TRANSLATION. In *Per.wn. individ. Dig* (Vol. 18, Issue 2).
- Ruvio, A. (2008). Unique like everybody else? The dual role of consumers' need for uniqueness. *Psychology and Marketing*, 25(5), 444–464. <https://doi.org/10.1002/mar.20219>
- Ruvio, A., Shoham, A., & Brenčič, M. M. (2008). Consumers' need for uniqueness: Short-form scale development and cross-cultural validation. *International Marketing Review*, 25(1), 33–53. <https://doi.org/10.1108/02651330810851872>
- Ryan, R. M., & Deci, E. L. (2025). *ON HAPPINESS AND HUMAN POTENTIALS: A Review of Research on Hedonic and Eudaimonic Well-Being* (Vol. 45). www.annualreviews.org.
- Ryff, C. D. (1989). Happiness Is Everything, or Is It? Explorations on the Meaning of Psychological Well-Being. In *Journal of Personality and Social Psychology* (Vol. 57, Issue 6).
- Sarstedt, M., Hair, J. F., Nitzl, C., Ringle, C. M., & Howard, M. C. (2020). Beyond a tandem analysis of SEM and PROCESS: Use of PLS-SEM for mediation analyses! *International Journal of Market Research*, 62(3), 288–299. <https://doi.org/10.1177/1470785320915686>
- Schreckinger, B. (2014). The Home of FOMO. *Boston Magazine*.
- Schumpe, B. M., & Erb, H. P. (2015). Humans and uniqueness. *Science Progress*, 98(1), 1–11. <https://doi.org/10.3184/003685015X14205597448201>
- Sirgy, M. J., & Lee, D. J. (2008). Well-being marketing: An ethical business philosophy for consumer goods firms. *Journal of Business Ethics*, 77(4), 377–403. <https://doi.org/10.1007/s10551-007-9363-y>
- Stead, H., & Bibby, P. A. (2017). Personality, fear of missing out and problematic internet use and their relationship to subjective well-being. *Computers in Human Behavior*, 76, 534–540. <https://doi.org/10.1016/j.chb.2017.08.016>
- Strahilevitz, M., & Myers, J. G. (1998). Donations to charity as purchase incentives: How well they work may depend on what you are trying to sell. *Journal of Consumer Research*, 24(4), 434–446. <https://doi.org/10.1086/209519>

- Su, L., Swanson, S. R., & Chen, X. (2016). The effects of perceived service quality on repurchase intentions and subjective well-being of Chinese tourists: The mediating role of relationship quality. *Tourism Management*, 52, 82–95.
<https://doi.org/10.1016/j.tourman.2015.06.012>
- Tian, K. T., & McKenzie, K. (2001). The Long-Term Predictive Validity of the Consumers' Need for Uniqueness Scale. *Journal of Consumer Psychology*, 10(3), 171–193.
https://doi.org/10.1207/s15327663jcp1003_5
- Troebs, C. C., Wagner, T., & Heidemann, F. (2018). Transformative retail services: Elevating loyalty through customer well-being. *Journal of Retailing and Consumer Services*, 45, 198–206. <https://doi.org/10.1016/j.jretconser.2018.09.009>
- Weigold, I. K., Weigold, A., Dykema, S. A., Drakeford, N. M., & Ethridge, E. T. (2024). Personal Growth Initiative: Relation to Coping Styles, Strategies, and Self-Efficacy. *Journal of Happiness Studies*, 25(6). <https://doi.org/10.1007/s10902-024-00782-3>
- Xie, X., Wang, Y., Wang, P., Zhao, F., & Lei, L. (2018). Basic psychological needs satisfaction and fear of missing out: Friend support moderated the mediating effect of individual relative deprivation. *Psychiatry Research*, 268, 223–228.
<https://doi.org/10.1016/j.psychres.2018.07.025>
- Zhang, W., He, L., Chen, Y., & Gao, X. (2024). The relationship between Big Five personality traits and fear of missing out: A meta-analysis. In *Personality and Individual Differences* (Vol. 230). Elsevier Ltd. <https://doi.org/10.1016/j.paid.2024.112788>
- Zhang, Z., Jiménez, F. R., & Cicala, J. E. (2020). Fear Of Missing Out Scale: A self-concept perspective. *Psychology and Marketing*, 37(11), 1619–1634.
<https://doi.org/10.1002/mar.21406>
- Zhong, J. Y., & Mitchell, V. W. (2010). A mechanism model of the effect of hedonic product consumption on well-being. *Journal of Consumer Psychology*, 20(2), 152–162.
<https://doi.org/10.1016/j.jcps.2010.01.001>
- Zimmermann, S. (2014). *The Pursuit of Subjective Well-Being through Specific Consumption Choice*. <https://ssrn.com/abstract=2484660>

Annexes

Annex A – Pre-Test Questionnaire

Exhibit 1 – Pre-Test Questionnaire

Understanding Customer Categorization of Hedonic and Utilitarian Purchases

Dear Participant,

My name is Kristi Kodra, and I am a Master's student in Marketing at ISCTE Business School. As part of my thesis for the completion of my Master's degree, I am studying how Fear of Missing Out (FoMO) influences well-being when customers make either hedonic or utilitarian purchases.

This pre-survey is designed to identify which goods and services are categorized by customers as hedonic (pleasure-oriented) and utilitarian (practical), and the insights will further form the base for my main study.

The survey is quick and should take no more than 7 minutes to complete.

Please read the question carefully and follow the instructions provided.

I want to assure you that your responses will remain completely anonymous and confidential.

**Thank you for taking the time to contribute to my research,
I truly appreciate your participation!**

Q1. Imagine you are considering purchasing each item presented below.

Please think how you view it in terms of its purpose or appeal, and rate it accordingly on a scale from 1 to 10 where:

1 = I associate this item mostly with practicality, utility, and functionality (completely utilitarian)

5 = I see this item as equally balanced between pleasure and practicality (a mix of hedonic and utilitarian)

10 = I associate this item mostly with fun, pleasure, and excitement (completely hedonic)

	1 Completely Utilitarian	2	3	4	5 Neutral	6	7	8	9	10 Completely Hedonic
Reusable water bottle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jewelry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Educational course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Smartphone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Art decor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cinema tickets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Food delivery subscription	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Night club	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spa package	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Boutique hotel reservation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gym membership	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Home cleaning services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sunglasses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Concert tickets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bicycle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Earphones	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fine dining in a restaurant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scented candles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Streamlining platform subscription	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Perfume	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Q5. What is your age?

- ☐ Under 18
- ☐ 18-24
- ☐ 25-34
- ☐ 35-44
- ☐ 45 or older

Q6. What is your gender?

- ☐ Female
- ☐ Male
- ☐ Other

Q7. What is your current occupation?

- ☐ Student
- ☐ Employed full-time
- ☐ Employed part-time
- ☐ Unemployed
- ☐ Retired

Q8. What is the highest level of education you have completed?

- ☐ Less than high school
- ☐ High school degree or equivalent
- ☐ Bachelor's degree
- ☐ Master's degree
- ☐ Doctorate (Ph.D. or equivalent)

Q9. What is your monthly income?

- ☐ Less than €1,000
- ☐ €1,001 – €1,400
- ☐ €1,401 – €1,800
- ☐ €1,801 – €2,200
- ☐ More than €2,200



Annex B – Pre-Test Results

Table 11 - Age Frequency

Age			
		Frequency	%
Valid	Under 18	1	1%
	18-24	33	28%
	25-34	62	53%
	35-44	18	15%
	45 or older	4	3%
	Total	118	100%

Table 12 – Education Frequency

Education			
		Frequency	%
Valid	Less than high school	2	2%
	High school degree or equivalent	2	2%
	Bachelor's degree	43	36%
	Master's degree	67	57%
	Doctorate (Ph.D. or equivalent)	4	3%
	Total	118	100%

Table 13 – Occupation Frequency

Occupation			
		Frequency	%
Valid	Student	25	21%
	Employed full-time	78	66%
	Employed part-time	10	8%
	Unemployed	4	3%
	Retired	1	1%
	Total	118	100%

Table 14 – Monthly Income Frequency

Monthly Income			
		Frequency	%
Valid	Less than €1,000	51	43%
	€1,001-€1,400	33	28%
	€1,401-€1,800	12	10%
	€1,801-€2,200	6	5%
	More than €2,200	16	14%
	Total	118	100%

Table 15 – Gender Frequency

Gender			
		Frequency	%
Valid	Female	80	68%
	Male	38	32%
	Other	0	0%
	Total	118	100%

Table 16 – Services Ranking

Services Ranking (Utilitarian to Hedonic)					
N= 118					
Item Rank	Mean	Std. Dev.	1 (Completely Utilitarian) Frequency	5 (Neutral) Frequency	10 (Completely Hedonic) Frequency
Educational Course	3.661	2.223	29	31	4
Home Cleaning Services	4.271	2.413	23	32	5
Gym Membership	4.771	2.105	10	47	6
Food Delivery Subscription	5.127	2.412	12	46	10
Streamlining Platform Subscription	5.83	2.559	9	33	15
Cinema Tickets	6.652	2.635	4	27	30
Boutique Hotel Reservation	6.703	2.664	5	23	27
Fine Dining in a Restaurant	7.237	2.574	5	21	35
Concert Tickets	7.144	2.724	3	22	41
Spa Package	7.076	2.453	3	22	33
Night Club	7.957	2.408	3	15	53

Table 17 - Goods Table Ranking (Utilitarian to Hedonic)

Goods Ranking (Utilitarian to Hedonic)					
N=118					
Item Rank	Mean	Std.Dev.	1 (Completely Utilitarian) Frequency	5 (Neutral) Frequency	10 (Completely Hedonic) Frequency
Reusable Water Bottle	3.338	2.361	46	23	4
Smartphone	4.711	2.211	14	46	8
Bicycle	4.737	2.146	13	52	6
Sunglasses	5.042	2.288	12	44	8
Earphones	5.338	2.397	7	43	11
Perfume	6.127	2.465	8	46	17
Scented Candles	6.728	2.747	5	24	30
Art Décor	6.779	2.673	5	19	29
Jewelry	7.288	2.501	5	20	34

Table 18 – Demographic Information

N=118	Demographic	Frequency	%
Gender	Female	80	68%
	Male	38	32%
	Other	0	0%
Age	Under 18	1	1%
	18-24	33	28%
	25-34	62	53%
	35-44	18	15%
	45 or older	4	3%
Occupation	Student	25	21%
	Employed full-time	78	66%
	Employed part-time	10	8%
	Unemployed	4	3%

Education	Retired	1	1%
	Less than high school	2	2%
	High school degree or equivalent	2	2%
	Bachelor's degree	43	36%
	Master's degree	67	57%
	Doctorate (Ph.D. or equivalent)	4	3%
Monthly Income	Less than €1,000	51	43%
	€1,001- €1,400	33	28%
	€1,401- €1,800	12	10%
	€1,801- €2,200	6	5%
	More than €2,200	16	14%

Annex C – Questionnaires Hedonic and Utilitarian Goods

Exhibit 2 – Questionnaire (Hedonic Goods)

What is your Prolific ID?

Imagine this scenario:

You are shopping for a new piece of jewelry to wear to a special event. You're looking for something that radiates sophistication, making you feel confident and unique in social settings.

As you answer the following statements, please take a moment to reflect on this scenario and select the option that best represents your feelings.

Please remember, there are no right or wrong answers—what matters most is your honest perspective.

Please indicate your level of agreement with each of the statements below on a scale from 1–7 where:

1 (Completely disagree)

7 (Completely agree)

	Completely disagree					Completely agree		
	1	2	3	4	5	6	7	
I buy the piece of jewelry that is best for me without worry of what others will think.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
When it comes to purchasing a piece of jewelry I just do my own thing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
I do not care if the piece of jewelry I buy conforms to the expectations of others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
I buy the piece of jewelry that I like whether others agree or not.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
When I am buying a piece of jewelry, my personal preferences and tastes are more important to me than the opinion of others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

Please indicate your level of agreement with each of the statements below on a scale from 1-7 where:

1 (Completely disagree)

7 (Completely agree)

	Completely disagree					Completely agree		
	1	2	3	4	5	6	7	
I often combine jewelry with other possessions in such a way that I create a personal image for myself that can't be duplicated.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
I often try to find a more interesting version of a run-of-the-mill piece of jewelry because I enjoy being original.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
I actively seek to develop my personal uniqueness by buying a special piece of jewelry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Having an eye for a piece of jewelry that is interesting and unusual assists me in establishing a distinctive image.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

	Completely disagree				Completely agree		
	1	2	3	4	5	6	7
When it comes to jewelry and the situations in which I use them, I have often broken customs and rules.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have often violated the understood rules of my social group regarding what piece of jewelry to buy or own.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have often gone against the understood rules of my social group regarding when and how a piece of jewelry is properly used.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy challenging the prevailing taste of people I know by buying a piece of jewelry they would not seem to accept.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When a piece of jewelry I own becomes popular among the general population, I begin using it less.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often try to avoid a piece of jewelry that I know is bought by the general population.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Completely disagree				Completely agree		
	1	2	3	4	5	6	7
As a rule, I dislike a piece of jewelry that is customarily purchased by everyone.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The more commonplace a piece of jewelry is among the general population, the less interested I am in buying it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate your level of agreement with each of the statements below on a scale from 1-7 where:

1 (Completely disagree)

7 (Completely agree)

	Completely disagree				Completely agree		
	1	2	3	4	5	6	7
I feel anxious when I do not experience using the piece of jewelry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Completely disagree				Completely agree		
	1	2	3	4	5	6	7
I believe I am falling behind compared with others when I don't buy a piece of jewelry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel anxious because I know something important or fun must happen when I don't buy the jewelry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel sad if I am not capable of buying the piece of jewelry due to constraints of other things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel regretful for not buying a piece of jewelry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think my social groups view me as unimportant when I don't buy the piece of jewelry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think I do not fit in social groups when I don't buy the piece of jewelry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think I am excluded by my social groups when I don't buy the piece of jewelry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Completely disagree				Completely agree		
	1	2	3	4	5	6	7
If I could live my life over, I would change almost nothing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What is your gender?

- ☐ Female
☐ Male
☐ Other

What is your age?

- ☐ Under 18
☐ 18 - 24
☐ 25 - 34
☐ 35-44
☐ 45 or older

What is your current occupation?

- ☐ Student
☐ Employed full-time

- ☐ Employed part-time
- ☐ Unemployed
- ☐ Retired

What is the highest level of education you have completed?

- ☐ Less than high school
- ☐ High school degree or equivalent
- ☐ Bachelor's degree
- ☐ Master's degree
- ☐ Doctorate (Ph.D. or equivalent)

What is your monthly income?

- ☐ Less than €1,000
- ☐ €1,001 – €1,400
- ☐ €1,401 – €1,800
- ☐ €1,801 – €2,200
- ☐ More than €2,200

Please indicate your level of agreement with each of the statements below on a scale from 1–7 where:

1 (Completely disagree)

7 (Completely agree)

	Completely disagree					Completely agree	
	1	2	3	4	5	6	7
I like the blue color	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The blue color is nice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I love the blue color	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I hope to buy a car in the blue color	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Completely disagree					Completely agree		
	1	2	3	4	5	6	7	
I feel ignored/forgotten by my social groups when I don't buy the piece of jewelry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

Please indicate your level of agreement with each of the statements below on a scale from 1–7 where:

1 (Completely disagree)

7 (Completely agree)

	Completely disagree					Completely agree		
	1	2	3	4	5	6	7	
In most ways my life is close to my ideal.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
The conditions of my life are excellent.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
I am satisfied with my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
I feel I have the important things I want in life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

Exhibit 3 – Questionnaire (Utilitarian Goods)

What is your Prolific ID?

Imagine this scenario:

You are purchasing a reusable water bottle to ensure you stay hydrated throughout the day. You are looking for something practical, durable, and easy to carry, with the primary purpose of being environmentally friendly and saving money on disposable bottles.

As you answer the following statements, please take a moment to reflect on this scenario and select the option that best represents your feelings.

Please remember, there are no right or wrong answers—what matters most is your honest perspective.

Please indicate your level of agreement with each of the statements below on a scale from 1–7 where:

1 (Completely disagree)

7 (Completely agree)

	Completely disagree					Completely agree	
	1	2	3	4	5	6	7
I buy the reusable water bottle that is best for me without worry of what others will think.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When it comes to purchasing a reusable water bottle, I just do my own thing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do not care if the reusable water bottle I buy conforms to the expectations of others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I buy the reusable water bottle that I like whether others agree or not.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Completely disagree					Completely agree	
	1	2	3	4	5	6	7
When I am buying a reusable water bottle, my personal preferences and tastes are more important to me than the opinion of others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate your level of agreement with each of the statements below on a scale from 1–7 where:

1 (Completely disagree)

7 (Completely agree)

	Completely disagree					Completely agree	
	1	2	3	4	5	6	7
I often combine the reusable water bottle with other possessions in such a way that I create a personal image for myself that can't be duplicated.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often try to find a more interesting version of a run-of-the-mill reusable water bottle because I enjoy being original.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Completely disagree				Completely agree		
	1	2	3	4	5	6	7
I actively seek to develop my personal uniqueness by buying a special reusable water bottle.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Having an eye for reusable water bottles that are interesting and unusual assists me in establishing a distinctive image.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When it comes to reusable water bottles and the situations in which I use them, I have often broken customs and rules.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have often violated the understood rules of my social group regarding what reusable water bottle to buy or own.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have often gone against the understood rules of my social group regarding when and how reusable water bottles are properly used.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Completely disagree				Completely agree		
	1	2	3	4	5	6	7
I enjoy challenging the prevailing taste of people I know by buying a reusable water bottle they would not seem to accept.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When a reusable water bottle I own becomes popular among the general population, I begin using it less.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often try to avoid reusable water bottles that I know are bought by the general population.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
As a rule, I dislike reusable water bottles that are customarily purchased by everyone.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The more commonplace a reusable water bottle is among the general population, the less interested I am in buying it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate your level of agreement with each of the statements below on a scale from 1-7 where:

1 (Completely disagree)

7 (Completely agree)

	Completely disagree				Completely agree		
	1	2	3	4	5	6	7
I feel anxious when I do not buy a reusable water bottle.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe I am falling behind compared with others when I don't buy a reusable water bottle.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel anxious because I know something important or fun must happen when I don't buy the reusable water bottle.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel sad if I am not capable of buying the reusable water bottle due to constraints of other things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel regretful for not buying the reusable water bottle.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Completely disagree				Completely agree		
	1	2	3	4	5	6	7
I think my social groups view me as unimportant when I don't buy the reusable water bottle.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think I do not fit in social groups when I don't buy the reusable water bottle.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think I am excluded by my social groups when I don't buy the reusable water bottle.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel ignored/forgotten by my social groups when I don't buy the reusable water bottle.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate your level of agreement with each of the statements below on a scale from 1-7 where:

1 (Completely disagree)

7 (Completely agree)

	Completely disagree				Completely agree		
	1	2	3	4	5	6	7
In most ways my life is close to my ideal.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The conditions of my life are excellent.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am satisfied with my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel I have the important things I want in life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I could live my life over, I would change almost nothing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What is your gender?

- ☐ Female
- ☐ Male
- ☐ Other

What is your age?

- ☐ Under 18
- ☐ 18 - 24
- ☐ 25 - 34

- ☐ 35–44
- ☐ 45 or older

What is your current occupation?

- ☐ Student
- ☐ Employed full-time
- ☐ Employed part-time
- ☐ Unemployed
- ☐ Retired

What is the highest level of education you have completed?

- ☐ Less than high school
- ☐ High school degree or equivalent
- ☐ Bachelor's degree
- ☐ Master's degree
- ☐ Doctorate (Ph.D. or equivalent)

What is your monthly income?

- ☐ Less than €1,000
- ☐ €1,001 – €1,400

- ☐ €1,401 – €1,800
- ☐ €1,801 – €2,200
- ☐ More than €2,200

Please indicate your level of agreement with each of the statements below on a scale from 1-7 where:

1 (Completely disagree)

7 (Completely agree)

	Completely disagree					Completely agree	
	1	2	3	4	5	6	7
I like the blue color	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The blue color is nice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I love the blue color	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I hope to buy a car in blue color	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Powered by Qualtrics

Annex D – PLS Algorithm Results (Measurement Model)

Table 19 - Reliability and convergent validity tests (Hedonic Model)

Constructs	Items	Outer Loadings	Cronbach's α	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Consumer Independence	CI1	0.789	0.910	0.976	0.930	0.727
	CI2	0.858				
	CI3	0.796				
	CI4	0.910				
	CI5	0.903				
Consumer Need for Uniqueness	CNFU5	0.738	0.905	0.906	0.923	0.600
	CNFU6	0.785				
	CNFU7	0.789				
	CNFU8	0.756				
	CNFU9	0.787				
	CNFU10	0.792				
	CNFU11	0.755				
	CNFU12	0.793				
Personal Fear of Missing Out	FOMOP1	0.827	0.916	0.918	0.937	0.749
	FOMOP2	0.849				
	FOMOP3	0.884				
	FOMOP4	0.884				
	FOMOP5	0.883				
Social Fear of Missing Out	FOMOS1	0.936	0.960	0.963	0.971	0.892
	FOMOS2	0.941				
	FOMOS3	0.959				
	FOMOS4	0.942				
Subjective Wellbeing	WELL1	0.869	0.916	0.949	0.936	0.745
	WELL2	0.914				
	WELL3	0.885				
	WELL4	0.828				
	WELL5	0.817				

Table 20 - Reliability and convergent validity tests (Utilitarian Model)

Constructs	Items	Outer Loadings	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Consumer Independence	CI1	0.815	0.917	1.056	0.934	0.738
	CI2	0.855				
	CI3	0.820				
	CI4	0.885				
	CI5	0.916				
Consumer Need for Uniqueness	CNFU1	0.756	0.890	0.891	0.912	0.567
	CNFU2	0.752				
	CNFU3	0.843				
	CNFU4	0.825				
	CNFU5	0.662				
	CNFU9	0.734				
	CNFU10	0.703				
	CNFU12	0.734				
Personal Fear of Missing Out	FOMOP1	0.854	0.921	0.933	0.940	0.759
	FOMOP2	0.910				
	FOMOP3	0.878				
	FOMOP4	0.862				
	FOMOP5	0.852				
Social Fear of Missing Out	FOMOS1	0.914	0.951	0.952	0.965	0.872
	FOMOS2	0.947				
	FOMOS3	0.946				
	FOMOS4	0.929				
Subjective Wellbeing	WELL1	0.871	0.903	0.916	0.926	0.717
	WELL2	0.917				
	WELL3	0.881				
	WELL4	0.794				
	WELL5	0.760				

Table 21 - Discriminant validity tests Fornell–Larcker criterion analysis and HTMT ratios (Utilitarian Model)

	CI	CNFU	FOMOP	FOMOS	WELL
Consumer Independence	0.859				
Consumer Need for Uniqueness	-0.171(0.174)	0.753			
Personal Fear of Missing Out	-0.184(0.157)	0.541(0.581)	0.871		
Social Fear of Missing Out	-0.300(0.274)	0.513(0.548)	0.775(0.818)	0.934	
Subjective Wellbeing	-0.061(0.091)	0.152(0.161)	0.167(0.166)	0.168(0.162)	0.847

Note: The HTMT ratios of Consumer Independence (CI); Consumer Need for Uniqueness (CNFU); Personal Fear of Missing Out (FOMOP); Social Fear of Missing Out (FOMOS); Subjective Wellbeing (WELL) are in parentheses. The square roots of the variance between the constructs and their measurements (AVE) are shown by the diagonal elements in bold.

Table 22- Discriminant validity tests Fornell–Larcker criterion analysis and HTMT ratios (Hedonic Model)

	CI	CNFU	FOMOP	FOMOS	WELL
Consumer Independence	0.853				
Consumer Need for Uniqueness	0.195 (0.239)	0.775			
Personal Fear of Missing Out	-0.150 (0.150)	0.548 (0.599)	0.866		
Social Fear of Missing Out	-0.227 (0.213)	0.440 (0.469)	0.806 (0.858)	0.945	
Subjective Wellbeing	0.209 (0.240)	0.241(0.253)	0.297 (0.303)	0.289 (0.283)	0.863

Note: The HTMT ratios of Consumer Independence (CI); Consumer Need for Uniqueness (CNFU); Personal Fear of Missing Out (FOMOP); Social Fear of Missing Out (FOMOS); Subjective Wellbeing (WELL) are in parentheses. The square roots of the variance between the constructs and their measurements (AVE) are shown by the diagonal elements in bold.

Table 23- Multicollinearity Statistics VIF (Inner Model Matrix) (Hedonic Model)

	CI	CNFU	FOMOP	FOMOS	WELL
Consumer Independence			1.040	1.040	
Consumer Need for Uniqueness			1.040	1.040	
Personal Fear of Missing Out					2.860
Social Fear of Missing Out					2.860
Subjective Wellbeing					

Table 24- Multicollinearity Statistics (VIF) (Utilitarian Model)

	CI	CNFU	FOMOP	FOMOS	WELL
Consumer Independence			1.030	1.030	
Consumer Need for Uniqueness			1.030	1.030	
Personal Fear of Missing Out					2.508
Social Fear of Missing Out					2.508
Subjective Wellbeing					

Table 25 - Cross loadings (Hedonic Model)

	Consumer Independence	Consumer Need for Uniqueness	Personal Fear of Missing Out	Social Fear of Missing Out	Subjective Wellbeing
CI1	0.789	0.236	-0.036	-0.100	0.185
CI2	0.858	0.164	-0.160	-0.219	0.172
CI3	0.796	0.191	-0.074	-0.088	0.215
CI4	0.910	0.173	-0.114	-0.199	0.176
CI5	0.903	0.141	-0.169	-0.253	0.181
CNFU5	0.170	0.738	0.383	0.328	0.115
CNFU6	0.273	0.785	0.372	0.309	0.111
CNFU7	0.228	0.789	0.425	0.418	0.089
CNFU8	0.294	0.756	0.402	0.349	0.136
CNFU9	0.085	0.787	0.463	0.351	0.261
CNFU10	0.057	0.792	0.446	0.301	0.291
CNFU11	0.016	0.755	0.440	0.317	0.194
CNFU12	0.102	0.793	0.451	0.339	0.283
FOMOP1	-0.030	0.486	0.827	0.594	0.302
FOMOP2	-0.191	0.480	0.849	0.696	0.250
FOMOP3	-0.150	0.479	0.884	0.780	0.323
FOMOP4	-0.130	0.471	0.884	0.679	0.187
FOMOP5	-0.141	0.450	0.883	0.734	0.210
FOMOS1	-0.270	0.434	0.749	0.936	0.285
FOMOS2	-0.235	0.376	0.742	0.941	0.239
FOMOS3	-0.179	0.426	0.782	0.959	0.294
FOMOS4	-0.170	0.420	0.774	0.942	0.269
WELL1	0.174	0.227	0.277	0.227	0.869
WELL2	0.169	0.221	0.241	0.242	0.914
WELL3	0.236	0.152	0.186	0.136	0.885
WELL4	0.188	0.162	0.189	0.189	0.828
WELL5	0.159	0.233	0.319	0.356	0.817

Table 26 - Cross loadings (Utilitarian Model)

	Consumer Independence	Consumer Need for Uniqueness	Personal Fear of Missing Out	Social Fear of Missing Out	Subjective Wellbeing
CI1	0.815	-0.022	-0.010	-0.105	0.003
CI2	0.855	-0.094	-0.148	-0.237	0.012
CI3	0.820	-0.200	-0.114	-0.193	-0.120
CI4	0.885	-0.117	-0.072	-0.201	-0.023
CI5	0.916	-0.201	-0.264	-0.372	-0.086
CNFU1	-0.142	0.756	0.386	0.343	0.144
CNFU10	-0.092	0.703	0.417	0.403	0.067
CNFU12	-0.126	0.734	0.339	0.380	0.171
CNFU2	-0.017	0.752	0.336	0.300	0.005
CNFU3	-0.067	0.843	0.441	0.351	0.114
CNFU4	-0.192	0.825	0.423	0.370	0.047
CNFU5	-0.121	0.662	0.429	0.425	0.174
CNFU9	-0.236	0.734	0.443	0.468	0.165
FOMOP1	-0.076	0.416	0.854	0.592	0.144
FOMOP2	-0.172	0.479	0.910	0.731	0.162
FOMOP3	-0.207	0.554	0.878	0.764	0.196
FOMOP4	-0.176	0.491	0.862	0.638	0.083
FOMOP5	-0.151	0.378	0.852	0.618	0.134
FOMOS1	-0.268	0.520	0.754	0.914	0.185
FOMOS2	-0.272	0.457	0.741	0.947	0.128
FOMOS3	-0.254	0.483	0.712	0.946	0.152
FOMOS4	-0.326	0.450	0.685	0.929	0.161
WELL1	-0.038	0.163	0.183	0.128	0.871
WELL2	-0.034	0.152	0.169	0.140	0.917
WELL3	-0.074	0.095	0.118	0.156	0.881
WELL4	0.028	0.062	0.050	0.037	0.794
WELL5	-0.088	0.123	0.124	0.181	0.760

Table 27 - Cross loadings (Merged Model)

	Consumer Independence	Consumer Need for Uniqueness	Personal Fear of Missing Out	Social Fear of Missing Out	Subjective Wellbeing
CI1	0.818	0.052	-0.061	-0.132	0.094
CI2	0.852	0.013	-0.164	-0.230	0.092
CI3	0.815	-0.018	-0.118	-0.154	0.048
CI4	0.908	-0.019	-0.134	-0.229	0.077
CI5	0.903	-0.034	-0.229	-0.312	0.047
CNFU10	-0.050	0.798	0.475	0.385	0.189
CNFU11	-0.091	0.734	0.414	0.350	0.114
CNFU12	-0.050	0.803	0.448	0.400	0.233
CNFU3	0.050	0.714	0.427	0.302	0.215

CNFU4	-0.013	0.704	0.412	0.299	0.146
CNFU5	0.007	0.719	0.430	0.391	0.147
CNFU6	0.094	0.749	0.403	0.377	0.099
CNFU7	0.042	0.721	0.407	0.427	0.106
CNFU8	0.059	0.747	0.454	0.425	0.113
CNFU9	-0.106	0.787	0.492	0.436	0.219
FOMOP1	-0.075	0.508	0.851	0.615	0.234
FOMOP2	-0.198	0.522	0.881	0.722	0.215
FOMOP3	-0.189	0.557	0.887	0.783	0.268
FOMOP4	-0.171	0.514	0.881	0.678	0.144
FOMOP5	-0.158	0.441	0.871	0.694	0.176
FOMOS1	-0.274	0.502	0.759	0.929	0.243
FOMOS2	-0.262	0.464	0.752	0.946	0.195
FOMOS3	-0.222	0.483	0.764	0.957	0.238
FOMOS4	-0.248	0.474	0.750	0.941	0.226
WELL1	0.067	0.203	0.241	0.193	0.869
WELL2	0.073	0.190	0.208	0.199	0.911
WELL3	0.083	0.136	0.152	0.141	0.872
WELL4	0.115	0.107	0.115	0.116	0.813
WELL5	0.034	0.214	0.241	0.291	0.803

Annex E – Bootstrapping Results (Common Method Bias – Marker Variable)

Table 28 - R² Bootstrapping Results (Without Marker Variable)
(Merged Model)

	Original sample (O)	Standard deviation (STDEV)	T statistics (O/STDEV)	p-values
Personal FoMO	0.373	0.035	10.596	0.000
Social FoMO	0.329	0.029	11.310	0.000
Subjective Well-Being	0.064	0.019	3.347	0.000

Table 29 - R² Bootstrapping Results (With Marker Variable) (Merged Model)

	Original sample (O)	Standard deviation (STDEV)	T statistics (O/STDEV)	p-values
Consumer Independence	0.026	0.016	1.658	0.049
Consumer Need for Uniqueness	0.098	0.027	3.602	0.000
Personal FoMO	0.397	0.036	10.934	0.000
Social FoMO	0.359	0.029	12.227	0.000
Subjective Well-Being	0.119	0.028	4.187	0.000

Table 30 - Path Coefficients and p-values Bootstrapping Results (Merged Model)
(Without marker variable)

	Original sample β (O)	Standard deviation (STDEV)	T statistics (O/STDEV)	p-values
Consumer Independence → Personal Fear of Missing Out	-0.177	0.037	4.757	0.000
Consumer Independence → Social Fear of Missing Out	-0.262	0.039	6.654	0.000

Consumer Need for Uniqueness → Personal Fear of Missing Out	0.583	0.033	17.708	0.000
Consumer Need for Uniqueness → Social Fear of Missing Out	0.508	0.036	14.204	0.000
Personal Fear of Missing Out → Subjective Wellbeing	0.134	0.078	1.719	0.043
Social Fear of Missing Out → Subjective Wellbeing	0.132	0.075	1.764	0.039

Table 31 - Path Coefficients and *p*-values Bootstrapping Results (Merged Model) (With marker variable)

	Original sample β (O)	Standard deviation (STDEV)	T statistics (O/STDEV)	<i>p</i> -values
Consumer Independence → Personal FoMO	-0.174	0.038	4.599	0.000
Consumer Independence → Social FoMO	-0.247	0.038	6.469	0.000
Consumer Need for Uniqueness → Personal FoMO	0.534	0.035	15.079	0.000
Consumer Need for Uniqueness → Social FoMO	0.441	0.040	10.990	0.000
Personal FoMO → Subjective Well-Being	0.084	0.073	1.148	0.126
Social FoMO → Subjective Well-Being	0.123	0.069	1.781	0.037
Marker Variable 1 → Subjective Well-Being	0.254	0.045	5.690	0.000
Marker Variable 2 → Consumer Need for Uniqueness	0.312	0.063	4.973	0.000
Marker Variable 3 → Consumer Independence	0.162	0.073	2.235	0.013
Marker Variable 4 → Personal FoMO	0.163	0.036	4.502	0.000
Marker Variable 5 → Social FoMO	0.190	0.074	2.563	0.005

Table 32- R² Bootstrapping Results (Without Marker Variable) (Hedonic Model)

	Original sample (O)	<i>p</i> -values
Personal FoMO	0.368	0.000
Social FoMO	0.295	0.000
Subjective Well-Being	0.095	0.003

Table 33 - R² Bootstrapping Results (With Marker Variable) - Hedonic Model)

	Original sample (O)	<i>p</i> - values
Consumer Independence	0.044	0.098
Consumer Need for Uniqueness	0.037	0.069
Personal FoMO	0.428	0.000
Social FoMO	0.380	0.000
Subjective Well-Being	0.170	0.000

Table 34 - Path Coefficients Bootstrapping Results (Without Marker Variable) (Hedonic Model)

	β Original sample (O)	<i>p</i> -value
Consumer Independence → Personal FoMO	-0.267	0.000
Consumer Independence → Social FoMO	-0.326	0.000
Consumer Need for Uniqueness → Personal FoMO	0.600	0.000
Consumer Need for Uniqueness → Social FoMO	0.503	0.000
Personal FoMO → Subjective Well-Being	0.182	0.060
Social FoMO → Subjective Well-Being	0.142	0.095

Table 35 - Path Coefficients Bootstrapping Results (With Marker Variable) (Hedonic Model)

	β Original sample (O)	<i>p</i> -values
Consumer Independence → Personal FoMO	-0.279	0.000
Consumer Independence → Social FoMO	-0.297	0.000

Consumer Need for Uniqueness → Personal FoMO	0.548	0.000
Consumer Need for Uniqueness → Social FoMO	0.430	0.000
Personal FoMO → Subjective Well-Being	0.117	0.140
Social FoMO → Subjective Well- Being	0.151	0.059
Marker Variable 1 → Subjective Well-Being	0.298	0.000
Marker Variable 2 → CNFU	0.191	0.080
Marker Variable 3 → CI	0.210	0.003
Marker Variable 4 → FOMOP	0.254	0.018
Marker Variable 5 → FOMOS	0.306	0.119

Table 36 - R² Bootstrapping Results (Without Marker Variable)
(Utilitarian Model)

	Original sample (O)	<i>p</i> -values
Personal FoMO	0.301	0.000
Social FoMO	0.309	0.000
Subjective Well-Being	0.032	0.047

Table 37 - R² Bootstrapping Results (With Marker Variable)
(Utilitarian Model)

	Original sample (O)	<i>p</i> -values
Consumer Independence	0.040	0.038
Consumer Need for Uniqueness	0.097	0.004
Personal FoMO	0.313	0.000
Social FoMO	0.319	0.000
Subjective Well-Being	0.077	0.011

Table 38 - Path Coefficients Bootstrapping Results (Without Marker Variable)
(Utilitarian Model)

	β Original sample (O)	<i>p</i> -values
Consumer Independence → Personal FoMO	-0.094	0.046
Consumer Independence → Social FoMO	-0.219	0.000
Consumer Need for Uniqueness → Personal FoMO	0.524	0.000
Consumer Need for Uniqueness → Social FoMO	0.475	0.000

Personal FoMO → Subjective Well-Being	0.092	0.250
Social FoMO → Subjective Well-Being	0.097	0.236

Table 39 - Path Coefficients Bootstrapping Results (With Marker Variable)
(Utilitarian Model)

	β Original sample (O)	<i>p</i> -values
Consumer Independence → Personal FoMO	-0.085	0.084
Consumer Independence → Social FoMO	-0.207	0.000
Consumer Need for Uniqueness → Personal FoMO	0.488	0.000
Consumer Need for Uniqueness → Social FoMO	0.439	0.000
Personal FoMO → Subjective Well-Being	0.060	0.275
Social FoMO → Subjective Well-Being	0.068	0.249
Marker Variable 1 → Subjective Well-Being	0.226	0.000
Marker Variable 2 → Consumer Need for Uniqueness	0.311	0.000
Marker Variable 3 → Consumer Independence	0.201	0.174
Marker Variable 4 → Personal FoMO	0.130	0.010
Marker Variable 5 → Social FoMO	0.126	0.006

Annex F - Bootstrapping Results (Structural Model)

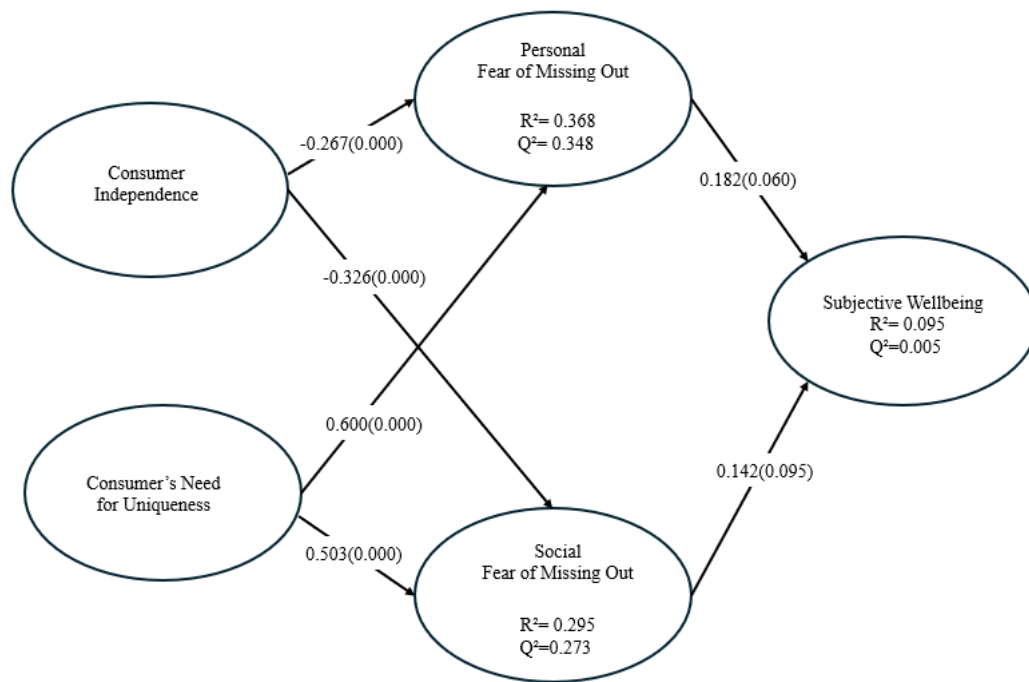


Figure 3 – Research model with bootstrapping results (Hedonic Model)

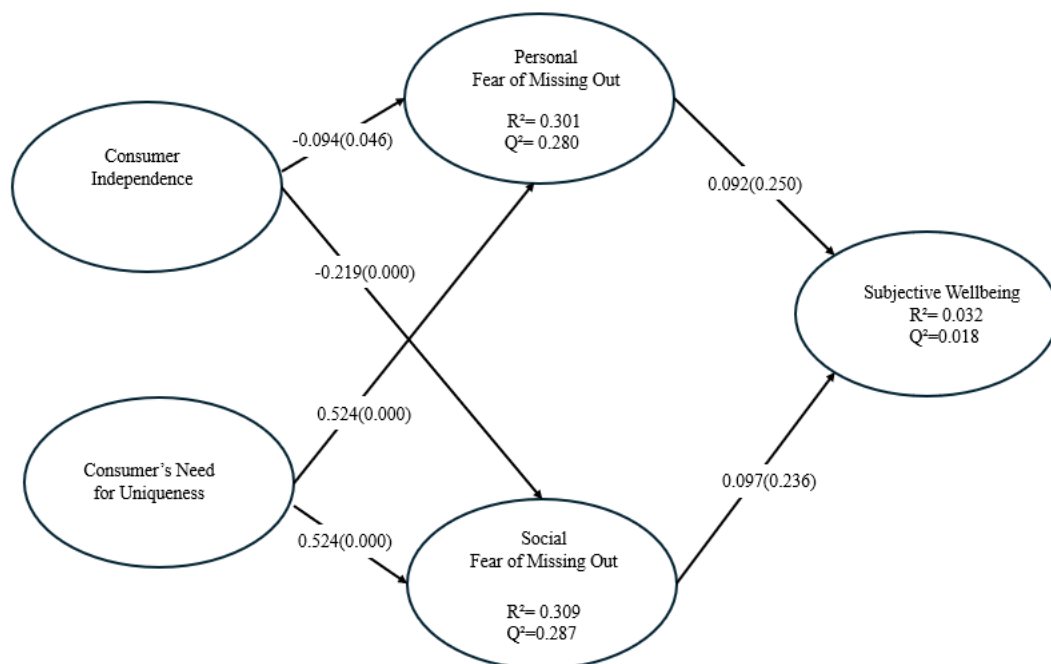


Figure 4 – Research model with bootstrapping results (Utilitarian Model)

Table 40 - Model Fit Summary - Utilitarian and Hedonic Model

	Saturated model (Hedonic)	Saturated model (Utilitarian)
SRMR	0.078	0.075
d_ULS	2.284	2.124
d_G	0.991	0.765
Chi-square	1348.250	1005.992
NFI	0.773	0.811

Table 41- Structural Model Results (Hedonic Model)

Hypothesized Relationship	Proposed Effect (direction)	β - Original Sample (O)	T-statistic	f ²	Results
Consumer Independence → Personal Fear of Missing Out	Positive	-0.267	5.310	0.108	Not supported
Consumer Independence → Social Fear of Missing Out	Negative	-0.326	5.806	0.145	Supported
Consumer Need for Uniqueness → Personal Fear of Missing Out	Positive	0.600	12.440	0.547	Supported
Consumer Need for Uniqueness → Social Fear of Missing Out	Positive	0.503	10.040	0.345	Supported
Personal Fear of Missing Out → Subjective Wellbeing	Negative	0.182	1.558	0.013	Not supported
Social Fear of Missing Out → Subjective Wellbeing	Negative	0.142	1.309	0.008	Not supported

Table 42 - Structural Model Results (Utilitarian Model)

Hypothesized Relationship	Proposed Effect (direction)	β - Original Sample (O)	T-statistic	f ²	Results
Consumer Independence → Personal Fear of Missing Out	Positive	-0.094	1.686	0.012	Not supported
Consumer Independence → Social Fear of Missing Out	Negative	-0.219	4.284	0.067	Supported

Consumer Need for Uniqueness → Personal Fear of Missing Out	Positive	0.524	11.399	0.382	Supported
Consumer Need for Uniqueness → Social Fear of Missing Out	Positive	0.475	9.777	0.317	Supported
Personal Fear of Missing Out → Subjective Wellbeing	Negative	0.092	0.674	0.003	Not supported
Social Fear of Missing Out → Subjective Wellbeing	Negative	0.097	0.718	0.004	Not supported

Table 43- Bootstrapping Results - Confidence Intervals (Hedonic Model)

	Original sample (O)	5.0%	95.0%
Consumer Independence → Personal Fear of Missing Out	-0.267	-0.351	-0.192
Consumer Independence → Social Fear of Missing Out	-0.326	-0.418	-0.247
Consumer Need for Uniqueness → Personal Fear of Missing Out	0.600	0.519	0.675
Consumer Need for Uniqueness → Social Fear of Missing Out	0.503	0.416	0.580
Personal Fear of Missing Out → Subjective Wellbeing	0.182	-0.020	0.368
Social Fear of Missing Out → Subjective Wellbeing	0.142	-0.031	0.325

Table 44- Bootstrapping Results - Confidence Intervals (Utilitarian Model)

	Original sample (O)	5.0%	95.0%
Consumer Independence → Personal Fear of Missing Out	-0.094	-0.195	-0.011
Consumer Independence → Social Fear of Missing Out	-0.219	-0.314	-0.146
Consumer Need for Uniqueness → Personal Fear of Missing Out	0.524	0.448	0.600

Consumer Need for Uniqueness → Social Fear of Missing Out	0.475	0.392	0.551
Personal Fear of Missing Out → Subjective Wellbeing	0.092	-0.144	0.293
Social Fear of Missing Out → Subjective Wellbeing	0.097	-0.132	0.302

Table 45 - Total Indirect Effects (Mean, STDEV, T values, p values) (Hedonic Model)

	Original sample β (O)	Standard deviation (STDEV)	T statistics (O/STDEV)	p-values
Consumer Independence → Subjective Wellbeing	-0.095	0.022	4.373	0.000
Consumer Need for Uniqueness → Subjective Wellbeing	0.181	0.041	4.432	0.000

Table 46- Total Indirect Effects (Confidence Intervals) (Hedonic Model)

	Original sample (O)	5.0%	95.0%
Consumer Independence → Subjective Wellbeing	-0.095	-0.130	-0.060
Consumer Need for Uniqueness → Subjective Wellbeing	0.181	0.117	0.251

Table 47- Total Indirect Effects (Confidence Intervals Bias Corrected) (Hedonic Model)

	Original sample (O)	Bias	5.0%	95.0%
Consumer Independence → Subjective Wellbeing	-0.095	0.000	-0.129	-0.060
Consumer Need for Uniqueness → Subjective Wellbeing	0.181	0.002	0.115	0.248

Table 48 - Specific Indirect Effects (Mean, STDEV, T values, p values) (Hedonic Model)

	Original sample β (O)	Standard deviation (STDEV)	T statistics (O/STDEV)	p-values
Consumer Independence → Social FoMO → Subjective Wellbeing	-0.046	0.036	1.298	0.097
Consumer Independence → Personal FoMO → Subjective Wellbeing	-0.049	0.032	1.504	0.066
Consumer Need for Uniqueness → Social FoMO → Subjective Wellbeing	0.071	0.056	1.283	0.100
Consumer Need for Uniqueness → Personal FoMO → Subjective Wellbeing	0.109	0.072	1.524	0.064

Table 49- Specific Indirect Effects (Confidence Intervals) (Hedonic Model)

	Original sample (O)	5.0%	95.0%
Consumer Independence → Social FoMO → Subjective Wellbeing	-0.046	-0.105	0.011
Consumer Independence → Personal FoMO → Subjective Wellbeing	-0.049	-0.101	0.006
Consumer Need for Uniqueness → Social FoMO → Subjective Wellbeing	0.071	-0.015	0.167
Consumer Need for Uniqueness → Personal FoMO → Subjective Wellbeing	0.109	-0.012	0.227

Table 50 - Specific Indirect Effects (Confidence Intervals Bias Corrected)
(Hedonic Model)

	Original sample (O)	Bias	5.0%	95.0%
Consumer Independence → Social FoMO → Subjective Wellbeing	-0.046	0.000	0.106	0.011
Consumer Independence → Personal FoMO → Subjective Wellbeing	-0.049	0.000	0.100	0.007
Consumer Need for Uniqueness → Social FoMO → Subjective Wellbeing	0.071	0.001	0.015	0.167
Consumer Need for Uniqueness → Personal FoMO → Subjective Wellbeing	0.109	0.001	0.016	0.222

Table 51- Total Indirect Effects (Mean, STDEV, T values, p values) (Utilitarian Model)

	Original sample β (O)	Standard deviation (STDEV)	T statistics (O/STDEV)	p-values
Consumer Independence → Subjective Wellbeing	-0.030	0.022	1.360	0.087
Consumer Need for Uniqueness → Subjective Wellbeing	0.094	0.037	2.540	0.006

Table 52- Total Indirect Effects (Confidence Intervals) (Utilitarian Model)

	Original sample (O)	5.0%	95.0%
Consumer Independence → Subjective Wellbeing	-0.030	-0.062	0.008
Consumer Need for Uniqueness → Subjective Wellbeing	0.094	0.040	0.155

Table 53 - Total Indirect Effects (Confidence Intervals Bias Corrected) (Utilitarian Model)

	Original sample (O)	Bias	5.0%	95.0%
Consumer Independence → Subjective Wellbeing	-0.030	-0.001	-0.055	0.025
Consumer Need for Uniqueness → Subjective Wellbeing	0.094	0.004	0.007	0.141

Table 54- Specific Indirect Effects (Mean, STDEV, T values, p values) (Utilitarian Model)

	Original sample β (O)	Standard deviation (STDEV)	T statistics (O/STDEV)	p- values
Consumer Independence → Social FoMO → Subjective Wellbeing	-0.021	0.032	0.666	0.253
Consumer Independence → Personal FoMO → Subjective Wellbeing	-0.009	0.017	0.500	0.309
Consumer Need for Uniqueness → Social FoMO → Subjective Wellbeing	0.046	0.064	0.719	0.236
Consumer Need for Uniqueness → Personal FoMO → Subjective Wellbeing	0.048	0.072	0.669	0.252

Table 55- Specific Indirect Effects (Confidence Intervals) (Utilitarian Model)

	Original sample (O)	5.0%	95.0%
Consumer Independence → Social FoMO → Subjective Wellbeing	-0.021	-0.070	0.032
Consumer Independence → Personal FoMO → Subjective Wellbeing	-0.009	-0.038	0.016
Consumer Need for Uniqueness → Social FoMO → Subjective Wellbeing	0.046	-0.061	0.148

Consumer Need for Uniqueness → Personal FoMO → Subjective Wellbeing	0.048	-0.073	0.159
---	-------	--------	-------

Table 56- Specific Indirect Effects (Confidence Intervals Bias Corrected) (Utilitarian Model)

	Original sample (O)	Bias	5.0%	95.0%
Consumer Independence → Social FoMO → Subjective Wellbeing	-0.021	0.000	-0.067	0.037
Consumer Independence → Personal FoMO → Subjective Wellbeing	-0.009	-0.001	-0.040	0.014
Consumer Need for Uniqueness → Social FoMO → Subjective Wellbeing	0.046	0.001	-0.074	0.139
Consumer Need for Uniqueness → Personal FoMO → Subjective Wellbeing	0.048	0.003	-0.104	0.144

Table 57- Confidence Intervals Bootstrapping (Merged Model)

	Original sample (O)	5.0%	95.0%
Consumer Independence → Personal Fear of Missing Out	-0.177	-0.241	-0.119
Consumer Independence → Social Fear of Missing Out	-0.262	-0.331	-0.202
Consumer Need for Uniqueness → Personal Fear of Missing Out	0.583	0.528	0.636
Consumer Need for Uniqueness → Social Fear of Missing Out	0.508	0.448	0.565
Personal Fear of Missing Out → Subjective Wellbeing	0.134	0.005	0.261
Social Fear of Missing Out → Subjective Wellbeing	0.132	0.006	0.258

Table 58 - Specific Indirect Effects (Merged Model)

	Original sample β (O)	Standard deviation (STDEV)	T statistics (O/STDEV)	p-values
Consumer Independence → Social FoMO → Subjective Wellbeing	-0.035	0.020	1.767	0.039
Consumer Independence → Personal FoMO → Subjective Wellbeing	-0.024	0.015	1.596	0.055
Consumer Need for Uniqueness → Social FoMO → Subjective Wellbeing	0.067	0.039	1.705	0.044
Consumer Need for Uniqueness → Personal FoMO → Subjective Wellbeing	0.078	0.046	1.688	0.046

Table 59- Specific Indirect Effects Confidence Intervals (Merged Model)

	Original sample β (O)	5.0%	95.0%
Consumer Independence → Social FoMO → Subjective Wellbeing	-0.035	-0.067	-0.002
Consumer Independence → Personal FoMO → Subjective Wellbeing	-0.024	-0.049	-0.001
Consumer Need for Uniqueness → Social FoMO → Subjective Wellbeing	0.067	0.003	0.135
Consumer Need for Uniqueness → Personal FoMO → Subjective Wellbeing	0.078	0.003	0.155

Table 60- Specific Indirect Effects Confidence Intervals bias corrected (Merged Model)

	Original sample β (O)	Bias	5.0%	95.0%
Consumer Independence \rightarrow Social FoMO \rightarrow Subjective Wellbeing	-0.035	0.000	- 0.067	-0.002
Consumer Independence \rightarrow Personal FoMO \rightarrow Subjective Wellbeing	-0.024	- 0.001	- 0.049	0.000
Consumer Need for Uniqueness \rightarrow Social FoMO \rightarrow Subjective Wellbeing	0.067	0.001	0.004	0.137
Consumer Need for Uniqueness \rightarrow Personal FoMO \rightarrow Subjective Wellbeing	0.078	0.002	0.000	0.151

Table 61- Total Indirect Effects (Merged Model)

	Original sample β (O)	Standard deviation (STDEV)	T statistics (O/STDEV)	p- values
Consumer Independence \rightarrow Subjective Well-Being	-0.058	0.013	4.584	0.000
Consumer Need for Uniqueness \rightarrow Subjective Well-Being	0.145	0.026	5.535	0.000

Table 62 - Total Indirect Effects Confidence Intervals (Merged Model)

	Original sample (O)	5.0%	95.0%
Consumer Independence \rightarrow Subjective Well-Being	-0.058	-0.080	-0.038
Consumer Need for Uniqueness \rightarrow Subjective Well-Being	0.145	0.105	0.191

Table 63 - Total Indirect Effects Confidence Intervals bias corrected (Merged Model)

	Original sample (O)	Bias	5.0%	95.0%
Consumer Independence → Subjective Well-Being	-0.058	0.000	-0.080	-0.038
Consumer Need for Uniqueness → Subjective Well-Being	0.145	0.002	0.102	0.188

Annex G Mediation Analysis Results

Table 64 - Mediation Analysis Results (Hedonic Model)

Effect	β Indirect Effect	<i>p</i> -value	5%	95%	VAF	Results
Consumer Independence → Social FoMO → Subjective Wellbeing	-0.006 (0.281)	0.024(0.000)	-0.129	-0.020		Partial Mediation
Consumer Independence → Personal FoMO → Subjective Wellbeing	-0.040	0.096	-0.092	0.007		No Mediation
Consumer Need for Uniqueness → Social FoMO → Subjective Wellbeing	0.105(0.007)	0.019(0.470)	0.028	0.195		Full Mediation
Consumer Need for Uniqueness → Personal FoMO → Subjective Wellbeing	0.093	0.087	-0.021	0.201		No Mediation

Table 65- Mediation Analysis Results (Utilitarian Model)

Effect	β Indirect Effect	<i>p</i> -value	5%	95%	VAF	Results
Consumer Independence → Social FoMO → Subjective Wellbeing	-0.015 (-0.014)	0.304(0.436)	-0.061	0.030		No mediation
Consumer Independence → Personal FoMO → Subjective Wellbeing	-0.007	0.328	-0.037	0.010		No Mediation
Consumer Need for Uniqueness → Social FoMO → Subjective Wellbeing	0.032(0.079)	0.293(0.175)	-0.064	0.125		No mediation
Consumer Need for Uniqueness → Personal FoMO → Subjective Wellbeing	0.037	0.278	-0.074	0.131		No Mediation

Annex H - Permutation multigroup analysis (MGA)

Table 66 - MICOM Step 2

	Original correlation	Correlation permutation mean	5.0%	Permutation p value
Consumer Independence	0.997	0.997	0.990	0.411
Consumer Need for Uniqueness	0.996	0.999	0.996	0.051
Personal Fear of Missing Out	0.999	1.000	0.999	0.112
Social Fear of Missing Out	1.000	1.000	1.000	0.711
Subjective Wellbeing	0.996	0.996	0.988	0.294

Table 67 - MICOM Step 3 - Part 1

	Mean - Original difference (Hedonic Group) - (Utilitarian Group)	Mean - Permutation mean difference (Hedonic Group) - (Utilitarian Group)	5.0%	95.0%	Permutation <i>p</i> -value
Consumer Independence	-0.265	0.001	-0.151	0.153	0.001
Consumer Need for Uniqueness	0.732	-0.001	-0.152	0.152	0.000
Personal Fear of Missing Out	0.514	-0.001	-0.155	0.156	0.000
Social Fear of Missing Out	0.459	-0.002	-0.156	0.151	0.000
Subjective Wellbeing	0.090	0.000	-0.156	0.157	0.169

Table 68 - MICOM Step 3 - Part 2

	Variance - Original difference (Hedonic Group) - (Utilitarian Group)	Variance - Permutation mean difference (Hedonic Group) - (Utilitarian Group)	5.0%	95.0%	Permutation <i>p</i> -value
Consumer Independence	0.003	0.000	-	0.285	0.493
Consumer Need for Uniqueness	0.105	-0.001	-	0.173	0.161

Personal Fear of Missing Out	0.254	-0.002	-	0.186	0.173	0.008
Social Fear of Missing Out	0.633	-0.005	-	0.242	0.229	0.000
Subjective Wellbeing	0.131	0.003	-	0.218	0.218	0.163

Annex I – Scales and items

Variable	Items
Consumer Need for Uniqueness	<p>I often combine jewellery/reusable water bottle with other possessions in such a way that I create a personal image for myself that can't be duplicated.</p> <p>I often try to find a more interesting version of a run of-the-mill piece of jewellery/reusable water bottle because I enjoy being original.</p> <p>I actively seek to develop my personal uniqueness by buying a special piece of jewellery/ reusable water bottle.</p> <p>Having an eye for a piece of jewellery/ reusable water bottle that is interesting and unusual assists me in establishing a distinctive image.</p> <p>When it comes to jewellery/ reusable water bottle and the situation in which I use them, I have often broken customs and rules.</p> <p>I have often violated the understood rules of my social group regarding what piece of jewellery/ reusable water bottle to buy or own.</p> <p>I have often gone against the understood rules of my social group regarding when and how a piece of jewellery/ reusable water bottle is properly used.</p> <p>I enjoy challenging the prevailing taste of people I know by buying a piece of jewellery they would not seem to accept.</p> <p>When a piece of jewellery/ reusable water bottle I own becomes popular among the general population I begin using it less.</p> <p>I often try to avoid a piece of jewellery/ reusable water bottle that I know is bought by the general population.</p>

Consumer Independence

I buy the piece of jewellery/ reusable water bottle that is best for me without worry of what others will think.

When it comes to purchasing a piece of jewellery/ reusable water bottle I just do my own thing.

I do not care if the piece of jewellery/ reusable water bottle I buy conforms to the expectations of others.

I buy the piece of jewellery/ reusable water bottle that I like whether others agree or not.

When I am buying a piece of jewellery/ reusable water bottle, my personal preferences and tastes are more important to me than the opinion of others.

Personal Fear of Missing Out

I feel anxious when I do not experience using the piece of jewellery/ reusable water bottle.

I believe I am falling behind compared with others when I don't buy a piece of jewellery/ reusable water bottle.

I feel anxious because I know something important, or fun must happen when I don't buy the piece of jewellery/ reusable water bottle.

I feel sad if I am not capable of buying the piece of jewellery/ reusable water bottle due to constraints of other things.

I feel regretful for not buying the piece of jewellery/ reusable water bottle.

Social Fear of Missing Out

I think my social group view me as unimportant when I don't buy the piece of jewellery/ reusable water bottle.

I think I do not fit in social groups when I don't buy the piece of jewellery/ reusable water bottle.

I think I am excluded by my social group when I don't buy the piece of jewellery/ reusable water bottle.

I feel ignored/forgotten by my social groups when I don't buy the piece of jewellery/ reusable water bottle.

Subjective Well-Being

In most ways my life is close to my ideal.

The conditions of my life are excellent.

I feel I have the important things I want in my life.

If I could live my life over, I would change almost nothing.

Gender

Female

Male

Other

Age	Under 18
	18-24
	25-34
	35-44
	45 or older
Current Occupation	Student
	Employed full-time
	Employed part-time
	Unemployed
	Retired
Education	Less than high school
	High school degree or equivalent
	Bachelor's degree
	Master's degree
	Doctorate (Ph.D. or equivalent)
Monthly Income	Less than € 1,000
	€ 1,001 - € 1,400
	€ 1,401 - € 1,800
	€ 1,801 - € 2,200
	More than € 2,200
Attitude Towards Color Blue	I like the blue color
	The blue color is nice
	I love the blue color
	I hope to buy a car in blue color
