

The psychology of impulse purchases in duty-free environments: emotional, situational, and metacognitive drivers of consumer behavior

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Abstract

This study examines impulsive buying in duty-free environments, highlighting how emotions, cognition, and situational factors interact to shape consumer behavior. Based on semi-structured interviews with travelers, findings reveal that impulse purchases are immediate, emotionally driven, and temporarily decoupled from rational consumption norms. Positive emotions amplify receptivity and indulgence, while negative emotions can trigger compensatory buying for mood regulation. Social presence, crowd density, and time pressure further modulate behavior, producing complex facilitative or inhibitory effects. Participants also demonstrate metacognitive awareness, recognizing the irrationality of their actions while experiencing strong emotional compulsion—a phenomenon described as “conscious involuntariness.” These insights extend dual-process and affect-based theories by integrating phenomenological perspectives from real-world experiences. Practically, they offer guidance for retail design to enhance engagement and manage impulse tendencies. Future research should quantify emotional intensity, explore cross-cultural differences, and investigate digital or immersive retail settings to advance understanding of impulsive consumption in modern consumer environments.

Keywords: Impulse buying, Duty-Free shopping, Emotional influence, Consumer behavior, Situational factors.

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I. INTRODUCTION

In a context of globalized consumption and constant sensory stimulation, the act of purchasing is no longer limited to a rational response to an identified need. It takes place within an emotional and symbolic experience, where affect plays a central role in decision-making (Damasio, 1994; Loewenstein, 1996). Among contemporary consumer behaviors, impulsive buying holds a unique place, characterized by its spontaneity, emotional intensity, and lack of prior planning (Rook, 1987). Long perceived as a failure of economic rationality, this phenomenon is now understood as a specific form of rapid decision-making, triggered by immediate emotions and environmental stimuli (Shiv & Fedorikhin, 1999; Verplanken & Herabadi, 2001).

The growing interest in this topic can be explained by the rise of commercial environments designed to engage the senses and elicit immediate affective reactions. Duty-free areas in international airports provide a particularly valuable field for observation: they combine emotional factors (travel excitement, sense of freedom), situational factors (waiting, transition), and marketing factors (promotions, sensory ambiance) that foster disinhibition and receptivity to purchase impulses (Beatty & Ferrell, 1998; Hausman, 2000). These spaces condense the most intense dynamics of contemporary consumption, where purchasing becomes both a means of self-expression, emotional management, and immediate pleasure (Vohs & Faber, 2007).

From this perspective, understanding impulsive buying behavior goes beyond a simple analysis of an irrational act and becomes an exploration of the psychological and contextual mechanisms guiding consumer decisions. Previous research has highlighted the importance of affect in unplanned purchases, whether through the “affect-as-information” model (Schwarz, 1990) or emotional contagion (Forgas, 1995). However, few studies have explored in depth how these dynamics interact with the specific airport context, where individuals operate in a liminal state between departure and arrival, routine and exception.

The central research question can thus be formulated as follows: to what extent, and through which mechanisms, do emotional states and situational stimuli influence the triggering and rationalization of impulsive purchases in the particular context of duty-free shops? The aim of this research is therefore to analyze how emotions, personal characteristics, and environmental conditions interact to trigger and guide impulsive buying behavior in duty-free commercial spaces. Through a qualitative approach based on semi-structured interviews with travelers, this study seeks to identify the affective, cognitive, and contextual drivers of impulsive acts, in

order to better understand how emotion structures purchasing decisions in a highly sensory and transitory environment.

II. LITERATURE REVIEW

1. The role of affect in triggering impulse buying

Affect plays a fundamental role in impulse buying through both direct and indirect pathways that shape consumer decision-making. The emotional state of consumers creates a complex web of influences that can transform a routine shopping experience into an impulsive purchasing event. This transformation occurs through multiple mechanisms where emotions act as both catalysts and information sources, fundamentally altering how consumers perceive, evaluate, and respond to products in their environment.

The indirect influence of affect on impulse buying manifests primarily through what researchers term "affective contamination." When consumers experience positive emotions, these feelings create a perceptual filter that colors their entire shopping experience. This contamination effect operates unconsciously, causing individuals to attribute their positive emotional state to the products they encounter, even when these emotions originate from entirely unrelated sources. For instance, a consumer experiencing joy from personal good news may perceive ordinary products as exceptionally appealing, not because of the products' inherent qualities, but because their emotional state creates a halo effect that enhances all evaluations.

Memory processes also play a crucial role in these indirect effects. Positive moods facilitate the retrieval of pleasant shopping memories and successful purchase experiences, while simultaneously suppressing recollections of buyer's remorse or purchase mistakes. This selective memory activation creates a cognitive environment particularly conducive to impulse buying, as consumers remember only the immediate gratification and positive outcomes of previous impulsive purchases while forgetting the longer-term consequences or regrets.

The direct pathway through which affect influences impulse buying treats emotions as valuable information about the desirability of products. According to the "affect-as-information" theory, consumers often rely on their immediate emotional responses to make quick judgments about products. This heuristic approach bypasses detailed analytical processing in favor of rapid, intuitive decision-making based on how the product makes them feel in the moment. The intensity of the emotional response becomes the primary determinant of the purchase decision, with stronger positive emotions leading to more compelling purchase impulses.

This direct mechanism is particularly powerful because it operates with remarkable speed and efficiency. Unlike cognitive evaluation processes that require deliberate analysis of product attributes, affective evaluation occurs almost instantaneously upon encountering a product. The consumer experiences what can be described as an emotional "spark" – a sudden, intense attraction that signals the product's appeal without conscious deliberation. This immediate emotional assessment often becomes the dominant factor in the purchase decision, especially when time pressure or cognitive load limits the capacity for more analytical evaluation.

The influence of affect extends beyond the initial impulse to shape the evaluation process that follows. When consumers experience a buying impulse, they don't always act on it immediately. Instead, they may engage in a post-impulse evaluation where they attempt to assess the legitimacy of their desire. However, this evaluation process itself occurs within an emotionally charged context. The intense desire created by the initial impulse influences subsequent cognitive processing, often biasing evaluations in favor of purchase.

The distinction between functional and dysfunctional emotions becomes particularly relevant during this phase. Functional emotions serve an adaptive purpose, signaling genuine opportunities or needs that align with the consumer's long-term interests. These emotions can lead to satisfying impulse purchases that the consumer doesn't regret. Dysfunctional emotions, by contrast, arise from temporary states or misattributions and often result in purchases that seem inexplicable or regrettable once the emotional state subsides.

The multifaceted role of affect in impulse buying reveals it to be neither purely irrational nor entirely predictable. Instead, impulse buying emerges from a complex interplay of emotional and cognitive processes, each influenced by personal, situational, and product-related factors. Emotions can provide valuable information that leads to satisfying purchases, or they can create temporary illusions of desirability that result in regret. Understanding these affective mechanisms is crucial for both consumers seeking to manage their impulse buying tendencies and retailers designing shopping environments. The emotional dimension of impulse buying underscores the fundamentally human nature of shopping behavior, where feelings often matter as much as, or more than, rational calculation in determining what we buy and why.

2. The determinants of impulse buying: a multidimensional analysis

Impulse buying results from a sophisticated interaction between three main categories of variables: situational, personal, and product-related. These complex dynamic shapes the consumer's shopping experience and determines the likelihood that mere exposure to a product will transform into an unplanned purchase. Situational variables create the immediate context in which impulse can emerge, while personal characteristics

define individual predisposition to yield to it. Product attributes act as catalysts that can trigger or intensify the buying impulse.

Situational factors exert a decisive influence on the emergence of impulsive behaviors. The sensation of crowding, for instance, generates environmental stress that can paradoxically both inhibit and facilitate impulse buying. On one hand, excessive density provokes negative emotions and avoidance behaviors, reducing attention paid to the retail environment and thus opportunities for impulses. On the other hand, under moderate conditions, it can create a sense of urgency and competition that favors quick, emotional decisions. Time pressure acts similarly: it limits store exploration and discovery of tempting products, but once an impulse is felt, it accelerates the transition to action by reducing available reflection time to resist temptation.

Shopping motivations play a crucial role as well. Consumers driven by hedonic goals, seeking pleasure and emotional stimulation in the shopping experience, are naturally more receptive to impulses. They explore more, pay attention to store atmosphere, and are exposed to a greater number of triggering stimuli. Conversely, utilitarian motivations, focused on efficiency and accomplishing specific tasks, create a focus that limits opportunities for impulse purchases. Accompaniment constitutes an ambivalent variable: the presence of others can enrich the emotional experience and multiply discovery opportunities, but it can also exert social pressure that moderates impulsive behaviors through fear of judgment.

Personal variables determine individual susceptibility to impulse purchases. The nature of impulsivity itself presents two distinct dimensions: functional and dysfunctional. Functional impulsivity leads to spontaneous purchases that align with the consumer's real needs, generally without subsequent regret. Dysfunctional impulsivity, conversely, is characterized by loss of control and hypersensitivity to environmental stimuli, often resulting in regretted purchases. This distinction is fundamental as it determines not only the frequency of impulse purchases but also their psychological and financial consequences for the consumer.

Gender and age also modulate propensity for impulse buying. Women, generally adopting a more hedonic approach to shopping, may be more susceptible to feeling purchase impulses, though this tendency varies across product categories. Age exerts a marked negative influence: self-control capacity develops with maturity, reaching peak impulsivity between ages 18 and 39 before gradually declining. This evolution reflects the socialization process and accumulation of experiences that strengthen self-regulation mechanisms.

Product characteristics directly influence the intensity of felt impulse and the likelihood of acting on it. The product recipient constitutes a major factor: impulse purchases predominantly concern products for personal use, allowing the consumer to immediately anticipate positive emotions linked to their consumption. This egocentric dimension is explained by the mechanism of projection into the consumption experience, where the consumer visualizes and feels in advance the pleasure they will derive from the product. Even when the purchase is officially intended for others, underlying personal motivations are often present, such as the pleasure of giving or shared use of the product.

Attitude toward the product, particularly its hedonic dimension, plays a preponderant role. Products eliciting a strong positive affective response, regardless of their objective utility, are more likely to trigger impulse purchases. This emotional component, involuntary and immediate, bypasses usual rational evaluation and creates an irresistible attraction. Price evaluation acts as a complex moderator: a low price facilitates rational justification of the impulse purchase and reduces cognitive dissonance, but price influence is modulated by the consumer's emotional state. In a positive mood, anticipated emotional benefits can outweigh financial considerations, while in a negative mood, the purchase may be perceived as an immediate solution to improve one's affective state.

Analysis of impulse buying determinants reveals a phenomenon of great complexity, where variables interact dynamically and sometimes contradictorily. Understanding these mechanisms requires a holistic approach that simultaneously considers the shopping environment, individual characteristics, and product attributes. This integrated perspective allows us to move beyond simplistic explanations and recognize that impulse buying is neither purely irrational nor entirely predictable, but results from an alternative decision-making process dominated by emotions and immediacy, modulated by a complex set of contextual and personal factors.

III. METHODOLOGY

As part of this research, fifteen semi-structured interviews were conducted with travelers (sample details provided in Table 1) transiting through an international airport, with the objective of exploring in depth the influence of marketing stimuli on impulsive buying behavior within duty-free retail environments. Such settings, located in transit areas and typically characterized by a sensorially rich and promotionally stimulating atmosphere, represent a particularly suitable context for examining this phenomenon.

Date of interview	Interview duration (min)	Gender	Nationality	age	Purpose of travel
29/11/2024	64	Women	Frensh-Moroccan	34	Tourism
19/10/2024	47	Women	Moroccan	27	Studies
22/10/2024	33	Women	Moroccan	24	Tourism
17/12/2024	57	Women	Frensh	32	Studies
12/01/2025	46	Women	Moroccan	28	Business
09/12/2024	66	Women	Moroccan	25	Studies
29/01/2025	58	Men	Moroccan /Espagnol	30	Family visit
03/09/2024	44	Men	Frensh	26	Family visit
11/12/2024	40	Men	American	39	Tourism
24/11/2024	74	Women	Algerian	23	Studies
10/11/2024	54	Men	Tunisian	29	Business
05/12/2024	34	Women	Spanish	35	Tourism
19/11/2024	33	Men	Italien	31	Tourism
06/12/2024	40	Women	Moroccan	22	Family visit
04/12/2024	32	Women	Frensh	30	Tourism
12/10/2024	30	Men	Moroccan	52	Business

Table 1: Sample data

The interviews yielded rich qualitative data concerning passengers' perceptions, emotional experiences, and the spontaneous decision-making processes triggered by various in-store stimuli. Particular attention was devoted to sensory factors (including music, scents, lighting, and product arrangement) as well as promotional cues (such as temporary discounts, bundle offers, and visually appealing signage).

All interview transcripts were subjected to a rigorous thematic analysis, aimed at identifying recurring patterns and underlying structures in participants' narratives. This analytical approach enabled the identification of key themes reflecting the psychological mechanisms underpinning unplanned purchases in such retail contexts. Notably, the findings highlight the role of travel-related excitement, the perceived exceptional nature of offers, and the sense of scarcity or opportunity—all of which contribute to a reduction in self-regulation and an increased susceptibility to impulsive purchasing behavior.

Overall, the analysis provides deeper insights into the emotional and cognitive dynamics that characterize impulsive buying in duty-free zones, where consumers—often situated in a state of waiting or transition—appear particularly sensitive to marketing stimuli and situational influences.

IV. RESULTS DISCUSSION

1. Analysis of Participants' Perception of Impulse Buying

The emotional-spontaneous architecture of impulse buying

Participants' perception of impulse buying reveals a sophisticated understanding of its dual nature: spontaneous temporality and emotional dominance that together create a distinctive mode of consumption. This understanding both validates and extends theoretical frameworks while introducing experiential dimensions often absent from academic literature.

The spontaneous character emerges as definitional in participants' accounts. *"Impulse purchases are generally neither planned nor budgeted. They are quick and sudden decisions, based on desires and feelings"* (Interview 1). This statement reveals multiple layers of understanding that align with Rook's (1987) characterization of impulse buying as immediate response to stimulation, yet adds practical dimensions his model overlooks. The absence of planning represents more than simple oversight—it indicates complete bypass of anticipatory cognitive processes that normally precede purchases. The absence of budgetary consideration suggests temporary suspension of financial constraints that typically govern consumption. This corresponds with Hoch and Loewenstein's (1991) model of time-inconsistent preferences, where immediate desires override long-term planning, yet participants' articulation adds the lived experience of this override.

"It means to me the sudden and unplanned purchase of something, often motivated by emotion rather than necessity" (Interview 3). The emotion-necessity dichotomy presented here directly echoes the theoretical conflict between affective and rational systems that Rook and Hoch (1985) identified as central to impulse

buying. However, participants lived experience reveals this not as simple binary but as shift in dominant processing modes—a phenomenological insight quantitative studies miss.

The emotional dimension receives particularly striking articulation when participants describe being "forced" by emotions. *"For me, an impulse purchase can be defined as a purchase forced by our emotions"* (Interview 9). This language choice provides empirical validation for Vohs and Faber's (2007) research on reduced executive control in impulse buying, yet the term "forced" captures subjective experience of compulsion that laboratory studies cannot access. This perceived involuntariness aligns with neurobiological perspectives from Damasio (1994) and LeDoux (1996), who demonstrate how emotional systems can override cognitive control. Yet participants' accounts reveal conscious awareness of this override as it occurs—they experience themselves as simultaneously actor and observer of their own emotional compulsion.

The concept of the "sensory moment" introduced by participants synthesizes multiple theoretical streams. *"It's an instantaneous decision, impacted by an interesting offer or a commercial gesture or simply good behavior. It's really an irrational purchase that the person makes in a sensory moment"* (Interview 2). This aligns with Silvera et al.'s (2008) work on environmental triggers and Sharma et al.'s (2009) research on marketing stimuli, yet the phenomenological description of a "sensory moment" captures the holistic experiential state where sensory input, emotional arousal, and environmental factors converge. The participant identifies multiple triggers—offers, gestures, interpersonal behaviors—that Wood (1998) and other researchers often treat separately. This integrated perception suggests consumers experience impulse buying not as response to discrete stimuli but as emergence from a complex sensory-emotional gestalt.

Particularly revealing is the recognition of duplicate purchasing as paradigmatic of emotional override. *"An impulse buyer is a person who gives in to a sudden desire, acquiring an item without having planned it, even duplicating a product they already own"* (Interview 8). This observation powerfully validates Dittmar et al.'s (1996) argument that impulse purchases serve emotional and identity needs rather than functional ones. The duplicate purchase represents the phenomenon in pure form—where acquisition itself, completely divorced from utility, becomes the gratification source. This aligns perfectly with Loewenstein's (1996) visceral factors theory, where immediate emotional states can overwhelm cognitive awareness of existing possessions. Yet the participant's ability to recognize and articulate this phenomenon reveals metacognitive awareness that complicates simple visceral models—they understand their irrationality even as they enact it.

The spontaneous-emotional architecture described by participants suggests impulse buying involves not simple loss of control but rather temporary shift to alternative control system—one governed by affect and immediacy rather than cognition and planning. This shift isn't experienced as gradual transition but as sudden transformation, supporting theoretical models of dual processing (Metcalf and Mischel, 1999) while adding the phenomenological insight that consumers remain aware during this shift. They watch themselves act impulsively while feeling powerless to intervene, creating what might be termed "conscious involuntariness"—a paradox central to understanding impulse buying's psychological complexity.

The awareness of irrationality and the hedonic-utilitarian divide

The second major dimension in participants' perception involves sophisticated awareness of impulse buying's fundamental irrationality and its disconnection from genuine needs. This awareness manifests not as simple acknowledgment but as multi-layered understanding of how impulse buying violates normal consumption logic.

Participants demonstrate clear recognition that impulse purchases exist outside the realm of legitimate needs. *"These are impulse purchases that don't correspond to my pre-established needs"* (Interview 6). The concept of "pre-established needs" is theoretically significant, suggesting participants maintain parallel mental frameworks—one tracking legitimate needs established through rational processes, another processing spontaneous desires that arise independently. This supports dual-processing theories from Metcalfe and Mischel (1999) while revealing that consumers consciously maintain these parallel systems. The awareness of disconnection doesn't prevent the behavior, supporting Hausman's (2000) findings that impulse purchases rarely address actual consumer needs, while adding the insight that this disconnection is consciously recognized yet ineffective as deterrent.

The temporal dimension of irrationality receives sophisticated treatment. *"When I think about it, I think of someone who buys something on a whim without really thinking about the consequences or the long-term utility of the purchase"* (Interview 3). The opening phrase "When I think about it" reveals temporal structure of metacognition—clarity available in reflection contrasts sharply with opacity of the impulsive moment. This validates Wood's (1998) research on post-purchase regret while revealing that regret isn't simply post-hoc evaluation but represents return to different cognitive mode. The phrase "without really thinking about consequences" suggests not inability but temporary deactivation of consequential thinking, supporting Berkowitz's (1993) model of emotional override of higher-order cognitive processes.

The pleasure-need dichotomy emerges as fundamental organizational principle. *"It means that it's an unplanned, unpredictable act of purchase. We would be more in a notion of a purchase act linked to pleasure at a moment 'T' and not linked to a need"* (Interview 14). The mathematical notation "moment T" brilliantly captures the point-in-time nature of impulsive pleasure versus continuous nature of genuine needs. This temporal bounding provides empirical support for research on hedonic adaptation while suggesting consumers understand the transience of impulse-derived satisfaction. The pleasure cannot be projected forward or backward—it exists only in the present moment, explaining why anticipation of future regret fails as preventive mechanism.

This articulation aligns with Loewenstein's (1996) and Metcalfe and Mischel's (1999) work on immediate gratification while adding phenomenological depth. Participants recognize not just preference for immediate rewards but fundamental alteration in temporal perspective during impulse buying. The progression from "unplanned" to "unpredictable" in this testimony reveals additional insight—participants cannot predict their own impulse purchases, suggesting these behaviors exist outside their normal behavioral repertoire and self-concept.

The recognition of irrationality extends beyond individual purchases to encompass pattern awareness. Participants understand impulse buying as systematically violating principles they otherwise endorse—planning, budgeting, need-based consumption. This creates what might be termed "principled inconsistency"—they maintain consumption principles while regularly violating them through impulse buying. This paradox aligns with research on self-control failure (Vohs and Faber, 2007) while suggesting more complex relationship between knowledge and behavior than simple weakness-of-will models propose.

2. The determinants of impulse buying in duty-free shops

Emotional states and compensatory mechanisms: the psychological architecture of impulse buying

The psychological state of consumers emerges as the most fundamental determinant of impulse buying behavior in duty-free environments, operating through intricate emotional mechanisms that reveal the complex interplay between affect, cognition, and consumption. The empirical data reveals that emotional states don't simply influence impulse buying—they fundamentally restructure the decision-making architecture, creating temporary but profound alterations in how consumers process information, evaluate options, and respond to environmental stimuli.

Positive emotional states manifest as powerful catalysts through multiple interconnected pathways. *"Good mood and enthusiasm for travel stimulate the desire to buy"* (Interview 1) represents more than simple correlation—it captures a fundamental transformation in cognitive processing. When participants report *"Sometimes, just because I'm happy to travel, I want to buy, treat myself and spend money"* (Interview 9), they're describing a phenomenon that aligns precisely with Schwarz's (1990) affect infusion model while adding crucial phenomenological depth. The positive affect doesn't merely bias evaluation; it creates what might be termed an "acquisitive orientation" where the act of purchasing itself becomes a means of emotional expression and amplification. This corresponds with Forgas's (1995) Affect Infusion Model, which demonstrates that positive moods don't just influence what we think but how we think—broadening attentional scope, increasing cognitive flexibility, and enhancing receptivity to peripheral stimuli that might trigger impulse purchases.

The travel context introduces unique emotional dynamics that amplify these effects. The liminality of airports—spaces between departure and arrival, routine and adventure—creates heightened emotional states that predispose consumers to hedonic consumption. The excitement of impending travel generates what participants recognize as a temporary suspension of normal financial prudence, where the usual cognitive barriers to impulse buying are weakened by the exceptional nature of the occasion. This emotional elevation isn't simply happiness but a complex affective state combining anticipation, excitement, and a sense of liberation from everyday constraints.

Negative emotions reveal equally complex mechanisms, operating through compensatory pathways that transform shopping from functional activity to emotional regulation strategy. *"Shopping is a solution to change my state of mind. I can say that the majority of my impulse purchases are related to my psychological state"* (Interview 2) articulates a conscious recognition of consumption as mood management. This awareness is further elaborated: *"A good mood can make someone more inclined to spend money on a whim, while a negative mood can lead to comforting impulse purchases to relieve stress or anxiety"* (Interview 3). These testimonies provide empirical validation for Woodruffe's (1997) compensatory consumption theory while revealing additional layers of complexity.

The airport environment intensifies compensatory mechanisms through multiple stressors—security procedures, delays, crowds, uncertainty—that create emotional vulnerabilities. Participants recognize that duty-free shopping offers temporary escape from these stressors, with products providing sensory gratification that momentarily alleviates negative emotions. The specific products mentioned—perfumes, confectioneries, luxury items—aren't random but represent categories offering immediate sensory pleasure and symbolic comfort. This

aligns with Faber and Christenson's (1996) research on pathological impulse buying, though the participants' metacognitive awareness suggests more adaptive coping than compulsion.

Yet the relationship between emotional state and impulse buying reveals striking individual differences that complicate simple mood-behavior correlations. Some participants articulate inhibitory effects of negative mood: *"When I'm not in the mood, my purchases are restricted and I don't give time to discover other things"* (Interview 10). This variation supports Youn and Faber's (2000) distinction between emotion-focused and problem-focused coping strategies, suggesting that impulse buying represents one of multiple possible responses to emotional states. The determining factor appears to be not the emotion itself but the individual's habitual emotional regulation strategies and their activation in specific contexts.

The bidirectional nature of mood effects emerges clearly: *"If I'm in a somewhat critical psychological state and in a bad mood, I lose the desire to choose products or think about buying"* (Interview 6). This testimony reveals that negative emotions can trigger withdrawal rather than compensation, suggesting threshold effects where mild negative mood might stimulate compensatory consumption while severe negative affect inhibits all non-essential activities. This aligns with resource depletion models of self-control (Baumeister, 2002), where emotional distress consumes cognitive resources needed for shopping decisions.

The temporal dynamics of emotional influence deserve particular attention. Participants implicitly recognize that emotion-driven impulse purchases provide temporary relief—the pleasure is bounded to the moment of acquisition and perhaps shortly after. This temporal limitation doesn't prevent the behavior, suggesting that immediate emotional needs override long-term considerations even when consumers understand the transient nature of consumption-based mood regulation. This temporal myopia corresponds with Loewenstein's (1996) visceral factors theory, where immediate emotional states exert disproportionate influence on behavior despite conscious awareness of their temporary nature.

The social-environmental matrix: crowd, companionship, and temporal pressure

The second major determinant complex involves the intricate interactions among social presence, environmental density, and temporal constraints, which together create a dynamic matrix that profoundly shapes impulse buying behavior. These factors don't operate independently but create synergistic effects that can dramatically amplify or suppress impulsive tendencies through mechanisms that participants articulate with remarkable sophistication.

Social accompaniment emerges as a particularly complex moderator, operating simultaneously through multiple psychological channels that can produce opposing effects. *"Being accompanied can influence my impulse purchases, as it creates a group effect that can encourage me to buy more, especially if the person accompanying me shows interest in a product or pushes me to buy"* (Interview 1). This testimony captures the positive social facilitation effect, aligning with Fishbein and Ajzen's (1975) theory of reasoned action while revealing how social presence transforms the psychological meaning of purchase decisions. The presence of others doesn't simply add social pressure—it fundamentally alters the decision context from individual choice to social performance.

The mechanisms of social influence reveal remarkable complexity. *"When I'm accompanied, I can be influenced by the enthusiasm or recommendations of my companion, which can lead me to buy impulsively"* (Interview 2) describes not mere conformity but emotional contagion, where the companion's enthusiasm becomes integrated into the individual's own affective state. This corresponds with research on emotional contagion in consumer contexts while adding the insight that recommendations from companions carry different weight than those from salespeople—they're perceived as more authentic and personally relevant. The suggestion mechanism operates with particular power: *"If I'm accompanied, the other person can influence my decisions by suggesting products I wouldn't have thought of alone"* (Interview 3), revealing how social presence expands the consideration set and introduces possibilities that wouldn't arise in solitary shopping.

Yet social presence simultaneously activates regulatory mechanisms that can powerfully inhibit impulse buying. *"Shopping alone can increase the probability of impulse purchases due to greater decision freedom. In contrast, being accompanied can have a moderating effect, allowing for deeper reflection through the companion's advice"* (Interview 5). This observation reveals sophisticated understanding of how social presence introduces accountability that activates self-regulatory resources. The mechanism isn't simple social desirability but rather the activation of what might be termed "social cognition"—the presence of others triggers more deliberative processing as decisions must be justified not just to oneself but to observers.

The relational dimension adds crucial complexity: *"Traveling often with family, I'm influenced by the desire to please my children and husband, which sometimes leads me to give in to impulse purchases"* (Interview 13). Family relationships transform impulse buying from self-indulgence to social gesture, providing alternative justification frameworks that bypass usual self-regulatory mechanisms. This gift-giving dimension doesn't eliminate the impulsive nature of purchases but reframes them as prosocial rather than self-focused, reducing guilt and facilitating indulgence.

Crowd density interacts with social accompaniment to create complex environmental effects that participants navigate with varying strategies. *"At the airport, we don't like queuing, we're limited by time and looking for a pleasant experience. A crowded shop can discourage me from buying, as I prefer quick service"* (Interview 1). This reveals how density perception interacts with service expectations and time constraints to influence shopping behavior. The mechanism isn't simply discomfort but rather a complex calculation involving effort, time, and anticipated pleasure. Excessive density triggers what Hui and Bateson (1991) identify as perceived loss of control, activating stress responses that override shopping motivations.

However, crowd presence can paradoxically signal value and create urgency: *"The presence of a crowd can mean good product quality or an interesting offer, which can encourage me to enter the shop"* (Interview 2). This reveals sophisticated consumer inference—crowds aren't simply obstacles but information sources. The social proof mechanism operates powerfully: *"Crowds can create social pressure that encourages me to buy like others. If a product seems in high demand, I might feel urgency and buy it for fear it won't be available"* (Interview 5). This scarcity effect, identified by Sib  ril (1994), transforms crowd from barrier to motivator, creating competitive dynamics that can trigger impulse purchases even among typically controlled consumers.

Time pressure introduces another layer of complexity that interacts with both social and crowd factors. *"When I'm pressed for time at the airport, I focus on essentials and avoid getting distracted in shops"* (Interview 1) reveals the primary inhibitory effect, corresponding with Iyer's (1989) and Beatty and Ferrell's (1998) research on reduced exploration under time constraints. Yet the mechanism isn't simply behavioral—time pressure fundamentally alters cognitive processing, as described by *"If I'm stressed about time, I'm not in the mood for shopping"* (Interview 4). The stress response to time pressure consumes cognitive resources that might otherwise be available for processing marketing stimuli and experiencing shopping pleasure.

The paradoxical facilitation effect of moderate time pressure deserves attention: *"If I have just a bit of pressure, it can sometimes push me to buy quickly without much thought, especially if I think it's a good deal"* (Interview 7). This reveals a non-linear relationship where mild time pressure might actually facilitate impulse buying by preventing the deliberation that would normally inhibit it. This corresponds with Shiv and Fedorikhin's (1999) findings on cognitive load and affective decision-making, where reduced processing capacity leads to greater reliance on immediate affective responses.

The interaction between time pressure and crowd density creates particularly complex dynamics: *"A busy shop can create an exciting atmosphere that makes me more inclined to make impulse purchases. However, if the crowd puts me under pressure and pushes me to act quickly, it can also influence my decision-making"* (Interview 4). This reveals how environmental factors combine to create affective states that can either facilitate or inhibit impulse buying depending on their intensity and the individual's interpretation. Moderate stimulation might create excitement that promotes impulse buying, while excessive stimulation triggers stress responses that inhibit all non-essential behaviors.

Individual differences in environmental tolerance emerge as crucial moderators: *"Crowds don't bother me, as living in the Paris region, it's somewhat our daily life. It doesn't change how I buy"* (Interview 14). This habituation effect reveals that objective environmental conditions matter less than subjective interpretation based on experience and expectations. What overwhelms one consumer might energize another, suggesting that effective retail environments must accommodate diverse tolerance levels and provide spaces for different shopping styles.

V. CONCLUSION

The findings of this study demonstrate that impulsive buying behavior in duty-free environments arises from a complex interplay between affective, cognitive, and situational factors, revealing a nuanced architecture of consumption that extends existing theoretical models. Participants consistently highlighted the dual nature of impulse purchases: a spontaneous, unplanned temporality coupled with emotional dominance, creating a distinctive consumption mode. This confirms and enriches classical frameworks (Rook, 1987; Hoch & Loewenstein, 1991) by incorporating experiential and phenomenological dimensions, particularly the notion of the "sensory moment," where environmental stimuli, emotional arousal, and personal desires converge into an immediate decision.

Emotion emerges as a central driver of impulsive purchases. Positive emotional states, such as travel excitement or elevated mood, amplify cognitive flexibility, broaden attention, and increase receptivity to peripheral cues, producing an "acquisitive orientation" in which buying itself becomes an act of emotional expression (Schwarz, 1990; Forgas, 1995). Conversely, negative emotions often operate through compensatory mechanisms, with shopping functioning as an adaptive strategy for mood regulation (Woodruffe, 1997; Faber & Christenson, 1996). The airport context intensifies these mechanisms: liminality, time pressure, and environmental stressors create emotional vulnerability that can either facilitate or inhibit impulsive behavior, depending on the individual's habitual coping strategies and threshold of affective arousal.

Participants' accounts also reveal sophisticated metacognitive awareness. They recognize the irrationality of impulsive purchases, often noting the pleasure-need dichotomy and the temporal boundedness of gratification. This "principled inconsistency" illustrates that impulse buying is not a mere loss of control but a conscious navigation between competing cognitive and affective systems (Metcalf & Mischel, 1999; Loewenstein, 1996). The occurrence of duplicate purchases exemplifies affective and identity-driven motivations overriding utilitarian considerations, supporting Loewenstein's (1996) visceral factors theory while adding phenomenological depth: consumers enact irrational behaviors yet retain self-awareness.

Social and environmental factors further modulate impulse buying. Companion presence can both enhance and inhibit impulsive tendencies through social facilitation, emotional contagion, and accountability. Crowd density and temporal constraints interact in a non-linear fashion, producing either facilitation through social proof and urgency or inhibition through stress and cognitive overload (Hui & Bateson, 1991; Shiv & Fedorikhin, 1999). Individual differences in environmental tolerance highlight that subjective interpretation, rather than objective conditions, shapes behavioral outcomes, emphasizing the importance of consumer segmentation in retail management.

This study contributes to the literature by integrating psychological, phenomenological, and marketing perspectives. It provides empirical evidence that impulsive buying involves a temporary shift to an affect-driven control system rather than simple irrationality, validating dual-process models (Metcalf & Mischel, 1999) while revealing the "conscious involuntariness" experienced by consumers. It also enriches understanding of temporal and hedonic dynamics, demonstrating how immediate pleasure and situational cues can override long-term planning without negating reflective awareness.

For practitioners, these insights suggest that designing duty-free environments to balance stimulation and comfort is crucial. Harmonious sensory atmospheres, moderated crowd density, strategic product placement, and careful management of time-pressure cues can enhance positive impulsive purchases while mitigating stress-induced inhibition. Social factors, including companion influence and interpersonal interactions, should also be considered in marketing strategies and promotional campaigns.

Several avenues emerge from this study. Quantitative research could measure the intensity of emotional states and their correlation with impulse purchases, or explore threshold effects of positive and negative moods. Cross-cultural comparisons would clarify the universality of airport-specific mechanisms. Additionally, examining digital, immersive, or hybrid retail environments could reveal how virtual sensory stimuli and social interactions modulate impulse buying in contemporary contexts. Longitudinal studies could further illuminate how habitual impulse buying interacts with self-regulation and identity over time.

In conclusion, impulsive purchasing is a complex, multifaceted phenomenon that reflects contemporary tensions between emotion, desire, and rationality. Consumers navigate a dynamic interplay of affective states, situational cues, and metacognitive awareness, enacting purchases that simultaneously satisfy immediate hedonic needs and express personal identity. Duty-free environments, with their liminal nature and rich sensory stimuli, provide a privileged context for observing these dynamics, offering both theoretical insights and practical guidance for understanding and shaping modern consumer behavior.

REFERENCES

- [1]. Baumeister, R. F. (2002). Yielding to temptation: Self-control failure, impulsive purchasing, and consumer behavior. *Journal of Consumer Research*, 28(4), 670–676.
- [2]. Beatty, S. E., & Ferrell, M. E. (1998). Impulse buying: Modeling its precursors. *Journal of Retailing*, 74(2), 169–191.
- [3]. Berkowitz, L. (1993). *Aggression: Its causes, consequences, and control*. New York, NY: McGraw-Hill.
- [4]. Damasio, A. (1994). *Descartes' error: Emotion, reason, and the human brain*. New York, NY: G.P. Putnam's Sons.
- [5]. Dittmar, H., Beattie, J., & Friese, S. (1996). Identity, materialism, and consumer behavior. *Journal of Social Behavior & Personality*, 13(1), 43–58.
- [6]. Faber, R. J., & Christenson, G. A. (1996). In the mood to buy: The role of mood states in consumer behavior. *Journal of Consumer Psychology*, 5(3), 231–253.
- [7]. Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- [8]. Forgas, J. P. (1995). Mood and judgment: The affect infusion model (AIM). *Psychological Bulletin*, 117(1), 39–66.
- [9]. Hausman, A. (2000). A multi-method investigation of consumer motivations in impulse buying behavior. *Journal of Consumer Marketing*, 17(5), 403–419.
- [10]. Hoch, S. J., & Loewenstein, G. F. (1991). Time-inconsistent preferences and consumer self-control. *Journal of Consumer Research*, 17(4), 492–507.
- [11]. Hui, M. K., & Bateson, J. E. G. (1991). Perceived control and the effects of crowding and consumer choice. *Journal of Consumer Research*, 18(2), 174–184.
- [12]. Iyer, E. S. (1989). Unplanned buying: Measurement and moderating effects. *Journal of Retailing*, 65(1), 40–57.
- [13]. LeDoux, J. (1996). *The emotional brain: The mysterious underpinnings of emotional life*. New York, NY: Simon & Schuster.
- [14]. Loewenstein, G. (1996). Out of control: Visceral influences on behavior. *Organizational Behavior and Human Decision Processes*, 65(3), 272–292.
- [15]. Metcalfe, J., & Mischel, W. (1999). A hot/cool-system analysis of delay of gratification: Dynamics of willpower. *Psychological Review*, 106(1), 3–19.
- [16]. Rook, D. W. (1987). The buying impulse. *Journal of Consumer Research*, 14(2), 189–199.

- [17]. Rook, D. W., & Hoch, S. J. (1985). Consuming impulses. In E. C. Hirschman & M. B. Holbrook (Eds.), *Advances in consumer research* (Vol. 12, pp. 23–27). Provo, UT: Association for Consumer Research.
- [18]. Schwarz, N. (1990). Feelings as information: Informational and motivational functions of affective states. In E. T. Higgins & R. M. Sorrentino (Eds.), *Handbook of motivation and cognition: Foundations of social behavior* (Vol. 2, pp. 527–561). New York, NY: Guilford Press.
- [19]. Sharma, A., Sivakumar, K., & Marshall, R. (2009). Building and leveraging retail atmospherics: The effect of sensory cues on consumer behavior. *Journal of Retailing and Consumer Services*, 16(5), 377–384.
- [20]. Shiv, B., & Fedorikhin, A. (1999). Heart and mind in conflict: The interplay of affect and cognition in consumer decisionmaking. *Journal of Consumer Research*, 26(3), 278–292.
- [21]. Sib  ril, V. (1994). Effects of scarcity on consumer behavior. *Revue Fran  aise du Marketing*, 152, 45–56.
- [22]. Silvera, D. H., Lavack, A. M., & Kropp, F. (2008). Impulse buying: A hierarchical model. *Psychology & Marketing*, 25(4), 396–413.
- [23]. Verplanken, B., & Herabadi, A. (2001). Individual differences in impulse buying tendency: Feeling and no thinking. *European Journal of Personality*, 15(S1), S71–S83.
- [24]. Vohs, K. D., & Faber, R. J. (2007). Spending behavior and self-regulatory resources: The role of executive function. *Journal of Consumer Psychology*, 17(3), 170–176.
- [25]. Wood, S. (1998). Socio-economic factors and consumer impulsiveness. *Journal of Consumer Psychology*, 7(3), 253–277.
- [26]. Woodruffe, H. (1997). Compensatory consumption and the role of emotions in consumer behavior. *European Journal of Marketing*, 31(3/4), 265–282.
- [27]. Youn, S., & Faber, R. J. (2000). Impulse buying: Its relation to personality traits and environmental cues. *Advances in Consumer Research*, 27, 179–185.