

Maladaptive Consumption: Definition, Theoretical Framework, and Research Propositions

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ABSTRACT Maladaptive consumption represents potentially uncontrollable and self- and others-harming consumer choices to fulfill a desire for rewarding substances and behaviors. More recently, maladaptive consumption has emerged as a pivotal interest within consumer research, and a deliberation of current developments regarding consumers' misuse of substances and their repetitive engagement in certain behaviors highlights its acute importance. After summarizing both long-standing and emerging types of maladaptive consumption, we review mounting evidence and provide a working definition and an integrative theoretical framework for understanding antecedents, types, explanations, and consequences of maladaptive consumption. Finally, we close with a limited identification of propositions and research themes that suggest avenues for future research.

Almost daily, innumerable consumers make choices that impair their existence in some significant way in the short as well as the long run. Examples include the excessive use of recreational as well as prescription drugs; gambling; engaging in anonymous, frequent, and unsafe sexual encounters; bingeing on alcohol, Netflix, and food; and smoking tobacco. These behaviors have been referred to in prior literature as maladaptive because they interfere “with an individual’s activities of daily living or ability to adjust to and participate in particular settings” (Gray 2013, 1796). Consumer researchers have accorded attention to some but not all of these behaviors. Importantly, the literature is somewhat scattered, and a more systematic stream of investigation is awaited. In particular, two broad research questions on consumer maladaptation necessitate a close look: (1) When do consumers change from engaging in ostensibly normal consumption behaviors to engaging in potentially addictive behaviors, the latter of which can best be described by their uncontrolled nature and repetitive occurrence? (2) Why are consumers inclined to do so, both psychologically and neurophysiologically? While capturing and situating the contributions of recent investigations, we also present both a working definition and an integrative

theoretical framework of maladaptive consumption, and offer a set of micro-level propositions and research themes that can spur further research in this important area.

Beyond our own intellectual interest in this domain, why do we call maladaptive consumption “important”? First, from harmful indulgences to financially risky decisions, the shared experience of virtually every consumer having engaged in maladaptive consumption, in some form and at some point, makes this topic as commonplace as night and day. Second, it comes with nontrivial consequences. The National Institute on Drug Abuse (NIDA) estimates that in the United States, the misuse of tobacco, alcohol, and drugs directly results in \$700 billion a year in additional health-care costs, increased expenses due to crime, and lost productivity. Further, every year, the use of tobacco and alcohol, and illicit as well as prescription drug overdoses are the root causes of 480,000, 90,000, and 70,000 deaths, respectively (NIDA 2020). Importantly, “softer” costs relating to mental health damage, relationship breakdowns, and harmful aggression are yet to be accounted for. Third, despite frequent and varied interventions, maladaptive choices can be hard to manage. For example, the causal effectiveness of Alcoholics Anonymous, a well-known and early community aimed at helping people addicted to

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alcohol, remains controversial (Kaskutas 2009; NPR 2014). Fourth, owing to the foregoing reasons, maladaptation can be complex and hard to manage.

The most recent edition of the Diagnostic and Statistical Manual on Mental Disorders (DSM-5) in its classification of addictions (a highly repetitive and extreme form of maladaptive consumption) includes substance abuse as well as repetitive and pathological engagement in certain behaviors. However, many behaviors that fit the definition of addiction have yet to be recognized for inclusion in future versions of the DSM, such as technology bingeing (e.g., the overuse and misuse of social media, video-gaming, and television and Internet entertainment, as well as the endless interaction with devices), workaholism, overeating and overuse of dietary supplements, obsessive pursuit of beauty (e.g., incurring prohibitive expenses on plastic surgery), sex addiction (including uncontrollable use of pornography and promiscuity), exercise- and wellness-related mania, as well as excessive materialism (e.g., compulsive shopping, kleptomania, the overabundance of possessions, clutter, and hoarding). Recognition of consumer maladaptation seems, therefore, justified on the basis of its pertinent negative individual and societal consequences. For example, specific to materialism and compulsive shopping (e.g., Faber and O'Guinn 1992; Richins 2011), the Federal Reserve reports revolving credit to remain at around US\$1 trillion since 2016 (Federal Reserve 2021), highlighting the fact that American consumers have piled up long-standing, high-interest debt that has yet to be paid off.

MALADAPTIVE CONSUMPTION: A DEFINITION

Early consumer research assessed maladaptive consumption by surveying members of a self-help consumer group referred to as problem buyers (O'Guinn and Faber 1989) and comparing addicted and nonaddicted drug users (Hirschman 1992). These exploratory inquiries have provided an important theoretical lens to what has since been referred to as compulsive consumption (O'Guinn and Faber 1989; Hirschman 1992). While progress toward a richer understanding of maladaptation has been made in several different domains including overeating and its health consequences, such as overweight and obesity (e.g., Redden and Haws 2013; Reimann, MacInnis, and Bechara 2016; Williamson, Block, and Keller 2016; Moore, Wilkie, and Desrochers 2017); smoking among adolescent consumers (e.g., Pechmann et al. 2003; Zhao and Pechmann 2007); materialism, stress, and compulsiveness (Ruvio, Somer, and Rindfleisch 2014); hoarding (Cross, Leizerovici, and Pirouz 2018); and indulgence (e.g., Mukhopadhyay and Johar

2009; Flores et al. 2019; Wiggin, Reimann, and Jain 2019), an integrative theoretical framework of maladaptive consumption has been missing from the consumer literature. This gap is surprising, especially given long-standing calls for a "greater [theoretical and problem-oriented] focus on maladaptive consumer behavior and its remediation" (Petty and Cacioppo 1996, 1) and the observation that the promotion and sale of products high in maladaptive potency is an unsustainable marketing practice for firms. Indeed, the cases of products ranging from cigarettes (e.g., Philip Morris) via sugary sodas (e.g., Coca-Cola and Pepsi) to pharmaceuticals (e.g., Purdue Pharma) demonstrate that consumer maladaptation can lead to government regulation, civil and criminal litigation, massive shifts in marketing strategy, and even firm bankruptcy.

Furthermore, while extant work has highlighted the possible existence of a temporal process that leads consumers from normal behaviors to addictions via maladaptive consumption (Wittmann and Paulus 2009; Pirouz, Nguyen, and Martin 2012; Martin, Mason, and Scott 2015), a formal definition of maladaptive consumption has been lacking, likely because of the complexities surrounding maladaptive behavior's various manifestations. The *Merriam-Webster* dictionary defines the term *maladaptive* as being "marked by poor or inadequate adaptation," with maladaptation referring to people's deficient adjustment to environmental conditions and situations (*Merriam-Webster*, s.v. "maladaptive," <https://www.merriam-webster.com/dictionary/maladaptive>). Based on the sparse prior consumer research and this dictionary definition, we define maladaptive consumption as *self- and others-harming, uncontrollable consumer choices aimed at fulfilling a desire for rewarding experiences (through the use of substances, money, material goods, and information) in response to an external or internal trigger cue to which the decision maker cannot acclimate to*. Stemming from this characterization, maladaptive consumption can be seen as formative of longer-term addiction, because the rewarding nature of certain substances, money, material goods, and information fosters repetition and may result in habituation and routinization. In terms of consequences, the process from the triggers via habitualized and routinized consumption to addiction represents a downward spiral toward the destruction of one's mental and physical health, economic strength, and social status. This process can be explained by the notion that certain types of maladaptive consumption (especially but not only substance-related types) are so chemically potent in their rewarding nature that they can override or even hijack consumers' willpower, which is required for normal operation (Bechara 2005);

hence, the inability of consumers to refrain from maladaptive consumption and their continuation on a downward spiral.

MALADAPTIVE CONSUMPTION: AN INTEGRATIVE THEORETICAL FRAMEWORK

Figure 1 depicts our framework of maladaptive consumption and has three elements. The first of these element “antecedents” refers to its predictors and drivers, both external and internal to the consumer. The middle element of our framework bifurcates maladaptive consumption into substance-related and behavioral types, the latter of which may not necessarily involve consumption of any gaseous, liquid, or solid substance. This bifurcation enables more micro-level insights into the different types of maladaptive consumption, which can be useful not only in terms of understanding its different forms but also to explore their differences as well as similarities. This element also identifies underlying explanations for such consumption, both emotional (e.g., anxiety: Vogel and Pechmann 2021; shame and guilt: Chang, Reimann, and Jain 2021) and physiological (Clithero, Karmarkar, and Hsu 2021; Turel and Bechara 2021). Finally, the third element relates to maladaptive consumption’s consequences: economic, health, and social. We next elaborate on each of these elements, highlighting a key proposition specific to that element at the start of each elaboration.

Antecedents to Maladaptive Consumption

Maladaptive consumption and, eventually, its downward spiral toward addiction, is set off by the occurrence and reoccurrence of stressors in the consumers’ milieu—internal as well as external. External stressors at home (e.g., high expectations of family members) and at work (e.g., constant pressure to deliver high performance in a highly competitive environment) may be difficult to adapt to, resulting in coping through maladaptive consumption. Internal stressors are at both the state level (e.g., anxiety or shame, following an external stressor, or the memory of a traumatic event) and the dispositional (trait) level such that chronic propensities could guide consumers toward maladaptive behaviors. Capturing a confluence of some of these stressors, Chang, Reimann, and Jain (2021) show that high performance related to perfectionism can lead to maladaptive behaviors. Perfectionists, in addition to having high standards for their performance, are also more prone to be self-critical. Both these aspects of perfectionism can be exacerbated in high-stress, high-performance environments resulting in maladaptive choices. This negative impact of perfectionism is more pronounced if consumers are focused on the discrepancy between their self-determined standards and their actual performance instead of striving toward high standards in general (Chang, Reimann, and Jain 2021).

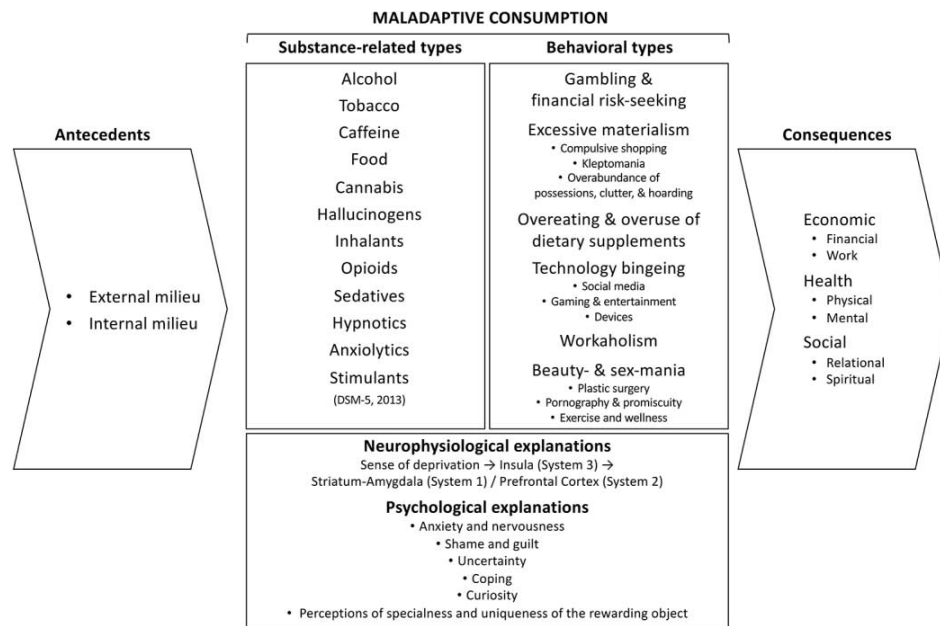


Figure 1. Maladaptive consumption: an integrative theoretical framework.

Types and Explanations of Maladaptive Consumption

To offset the negative emotional impact of these external and internal stressors and in response to a sense of deprivation (the latter of which may become more salient from stressor-induced exhaustion), consumers seek rewarding substances and engage in rewarding behaviors. One highly rewarding behavioral type of maladaptive consumption pertains to money, which possesses commensurate rewarding potency compared with certain food objects (Reimann, Bechara, and MacInnis 2015; Reimann, MacInnis, and Bechara 2016). Recent research shows that consumers make riskier financial decisions when they anthropomorphize (vs. objectify) their monetary luck (Kulow, Kramer, and Bentley 2021), possibly because humanizing luck provides additional levels of reward stemming from positive social relationships. Consumers who repeatedly engage in risky financial decision making (e.g., gamblers) are particularly prone to this effect (Kulow, Kramer, and Bentley 2021).

Besides gambling and financial risk-seeking, tangible objects often represent highly rewarding objects (Reimann and Lane 2017). As such, an excessive pursuit of material object acquisition referred to as materialism can serve as a source for consumers to reward themselves, leading them to compulsively shop in a way that resembles addictive patterns (Rindfleisch, Burroughs, and Denton 1997; Andreassen et al. 2015). In addition, deprivation from a material object, such as forgoing the use of an item, makes the item perceived to be more special (Rifkin and Berger 2021), and possibly more rewarding. Such deprivation can transform ordinary objects into perceived treasures, powering the accumulation of clutter and the overpossession of material goods (Rifkin and Berger 2021).

Gaming, social media, and entertainment represent another source of reward that is now instantaneously available to consumers, and their rise and easy accessibility have led to problematic technology use. Misuse of technology is reflected in observations that consumers' self-assessment of their technology use is not necessarily reflected in their actual technology use (Raghubir, Menon, and Ling 2021; Zimmermann 2021). For example, while certain software applications were designed to help consumers control their smartphone use and actually do enhance knowledge about one's screen time, they seem unsuccessful at reducing actual usage (Zimmermann 2021).

Sexual promiscuity as a maladaptive rewarding experience has not been previously explored in the consumer literature. To address this gap, van Esch and Cui (2021) investigate trait promiscuity and its relationship to the retail shopping check-

out mode. They find that retail checkouts enabled by artificial intelligence stimulate higher purchase intent for low-promiscuous consumers, an effect driven by change-seeking motivations for this segment of consumers.

Highly prevalent substance-related maladaptive consumption includes tobacco and alcohol. Vogel and Pechmann (2021) show that smoking is likely rooted in the inability of consumers to optimally respond to a particular environmental context, leading them to experience negative affect (anxiety), which in turn leads to repeated tobacco consumption. Galoni, Goldsmith, and Hershfield (2021) study the relationship between two maladaptive behaviors, drinking to the point of intoxication, and criminal behaviors. The authors investigate whether a consumer who commits a crime while being intoxicated would be judged more severely by third-party observers because of double maladaptation and show that the type of crime committed affects whether intoxication alleviates versus worsens observer censure.

These different types of maladaptive consumption seem to be rooted in a common neurophysiological system that includes deprivation, reward, and the lack of willpower to resist maladaptive consumption. In general, consumption is associated with the release of dopamine, a neurochemical associated with both the anticipation and the actual experience of foods as well as nonfoods, and is generally seen as a rewarding experience (e.g., Wise and Rompre 1989; Knutson et al. 2007; Reimann, MacInnis, and Bechara 2016). This process, shown to be most prevalent and robust across different types of maladaptive consumption, involves the striatum (said to process the anticipation and experience of reward) as well as the amygdala, a system that provides signals from external and internal cues to the striatum (Everitt and Robbins 2005; Turel and Bechara 2021). However, if consumers are unable to inhibit their desire for more reward (i.e., the inhibitory function of willpower that is ascribed to areas of the prefrontal cortex; Dias, Robbins, and Roberts 1997; Miller and Cohen 2001), the stage for the occurrence of maladaptive consumption is set. Turel and Bechara (2021) introduce a third system to this interaction of the striatal-amygdala system and the prefrontal system to highlight a three-way system including the anticipation and experience of rewarding marketing cues (the impulsive system or "system 1"), willpower, self-control, and inhibition (the reflective system or "system 2"), and interoceptive awareness ("system 3"). This third component is attributed to the involvement of the insula, which translates interoceptive signals of withdrawal and deprivation received from the body (e.g., a sensation of hunger after withdrawal and deprivation from food)

into subjective feelings of urges, yearning, and cravings (Naqvi and Bechara 2009; Reimann et al. 2012; Wiggan et al. 2019; Turel and Bechara 2021).

This neurophysiological system can be linked to specific types of negative affect that explain the relationship between antecedents and consequences of maladaptive consumption. The amygdala has been argued to be central for processing emotional events that occur in response to changes in the environment (Bechara and Damasio 2005; Reimann and Bechara 2010). A powerful discrete emotion that has been argued to possibly explain the link between antecedents and outcomes of maladaptive consumption is anxiety. Vogel and Pechmann (2021) study Twitter posts of members of online support groups for quitting smoking, and find greater expressions of negative emotions, specifically anxiety, to be related to nonabstinence from smoking. Although not studied directly, the work of Vogel and Pechmann (2021) implies that anxiety-inducing stressors may represent antecedents to smoking. Other discrete emotions that were found to be associated with the relationship between antecedents and outcomes of maladaptive consumption include shame and guilt. Chang, Reimann, and Jain (2021) show that shame arises after perfectionist consumers experience a discrepancy between high standards, which they have set for themselves, and their actual performance. Hence, maladaptation seems to occur not only in response to external stimuli from the environment but also because of internal cues such as those from memories, knowledge, and cognition.

Consequences of Maladaptive Consumption

Maladaptation is broadly reflected in harmful outcomes, economically, health-related, and socially. Indeed, consumers with maladaptive decision-making in their daily lives are likely to have trouble in maintaining social relationships and upholding stable financial and job outcomes (Wong, Xue, and Bechara 2011). Each of the different types of maladaptive consumption share comorbidities as well as consequence profiles. Economic harm (including productivity and job loss) could arise from compulsive shopping or from the pursuit of expensive sexual activities (including watching pornography at work), food bingeing, gambling, and other forms of substance abuse as well as behavioral maladaptation. Consumers can also experience mild to grave physical as well as mental health issues and even death in the extreme, when they engage in the types of maladaptive consumption outlined in figure 1. Finally, damage to and eventual loss of social relationships are a none-too-rare consequence of maladaptive consumption (Mesch 2006), as is spiritual strug-

gle (Grubbs et al. 2017) that routinely results from compulsive abuse of substances and engagement in maladaptive behaviors.

PROPOSITIONS AND RESEARCH THEMES ON MALADAPTIVE CONSUMPTION

We have proposed a tentative definition and an integrative framework for maladaptive consumption and have reviewed recent literature on specific types of maladaptive consumption and possible explanations in light of that framework. However, there are research domains that may not be captured by our framework and warrant future investigation. For this reason, we have generated a list of potential research themes, summarized below. In addition, our own curiosity has led us to offer a list of propositions informed by recent research on maladaptive consumption, summarized below. These propositions pertain to both external and internal trigger cues that lead consumers to maladapt, the commensurability of different types of maladaptive consumption, and a three-way psychological and physiological system that forms an explanatory basis of why and how maladaptation occurs. It is clear that there is a slew of interesting research areas that remain to be explored within the important domain of maladaptive consumption.

PROPOSITIONS FOR MALADAPTIVE CONSUMPTION

Environmental Context

- Inappropriate adjustment to environmental context increases maladaptive consumption.
- Environmental context includes cues external (social) as well as internal to the consumers. Internal cues stem from traits, memory, knowledge, emotions, and cognition.

Types of Maladaptive Consumption

- Maladaptive consumption is manifested in substances, money, material goods, and behaviors which share comparable rewarding properties.
- Maladaptive consumption types are commensurable.

Tripartite Psychological and Physiological System

- The establishment of habits and routines increases the likelihood for an oversensitive interoceptive awareness.

- Oversensitivity of consumers' interoceptive awareness of their state of deprivation leads to higher levels of maladaptive consumption.
- An increase in negative affect in response to environmental context leads to higher levels of maladaptive consumption.
- Over-utilizing rewarding substances, money, material goods, and behaviors leads to a decrease in inhibition and, in turn, increases the likelihood of maladaptive consumption.
- Maladaptive consumption manifests in socially, emotionally, financially, and physiologically risky choice.

TOPICS FOR FUTURE RESEARCH ON MALADAPTIVE CONSUMPTION

- Specifying the environmental conditions under which consumption is likely to be misadjusted and non-acclimatized vis-à-vis the context.
- Specifying the environmental conditions that determine the relative strength of maladaptive consumption.
- Contrasting external and internal cues and determining their maladaptive characteristics and impacts.
- Assessing the degree of negative affect before and during maladaptive consumption.
- Specifying the degree of interoceptive awareness and its association with maladaptive consumption.
- Specifying the degree of dopaminergic reward and its association with maladaptive consumption.
- Specifying the degree of disinhibition and its association with maladaptive consumption.
- Specifying traits more prone to lead to maladaptive consumption than others.

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