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REVIEW

Affect regulation and consumer behavior

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Abstract
This article provides a critical review of what is known about affect regulation in relation to consumption behavior. Based on numerous findings from psychology, communication research, and consumer research, we identify a core set of general principles of affect regulation in consumer behavior. First, we define affect regulation, clarify its relations to the concepts of coping and compensatory consumption, and refine the emerging concept of "displaced coping." We then review the generic strategies used in the regulation of general negative affective states. Next, we synthesize evidence that distinct negative emotions are regulated by emotion-specific strategies, and propose an overarching explanatory principle: the "part-regulation principle." We then review the main strategies used in the regulation of positive affective states. Finally, important contingencies in affect regulation are identified, including the asymmetric regulation of positive versus negative affective states, triggers of downward affect regulation, and key moderators of affect regulation.

KEYWORDS
affect regulation, consumer behavior, coping, mood maintenance, mood management, negative emotions

1 | THE IMPORTANCE OF AFFECT REGULATION IN CONSUMER BEHAVIOR

The life of a consumer is filled with affect: moods, feelings, and emotions (Holbrook & Hirschman, 1982). An important way in which consumer behavior and affect intersect is when a person's consumption behavior—whether drinking a glass of wine, eating junk food, watching television, going shopping, or working out at a gym—is specifically directed at impacting the person's affective state. This is called affect regulation. We contend that much of consumption behavior is in fact affect regulation. Going out with friends to cheer up when one is feeling down, purchasing oneself a new bag to celebrate a recent promotion, watching television to relax after a stressful day, and posting one's wedding photographs on Facebook to prolong one's happiness are all examples of consumption behavior directed at influencing one's affective state in one way or another, that is, consumption-based affect regulation.

Surprisingly, while research on affect in consumer behavior has shown considerable growth in the past 30 years (see Cohen, Pham, & Andrade, 2008, for a review), research on consumption-based affect regulation specifically has remained rather sparse. For instance, a Web of Science search of articles published in the *Journal of Consumer Research* and *Journal of Consumer Psychology* around the topics of "feelings," "emotion," "mood," and "affect" retrieves a total of 779 articles. However, only 16 of these refer to "[mood/affect/emotion] [management/regulation/control]." In addition to being limited, consumer research on affect regulation is relatively fragmented. There is substantial literature on emotion regulation and mood management in various branches of psychology (e.g., social, developmental, neuroscience). However, not all of it is relevant to consumer behavior (e.g., research on emotion regulation through the control of emotional expressions). The purpose of this article is therefore to provide a critical review of what is known about affect regulation as it relates to consumption behavior.

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This review is integrative in that it covers a broad range of literature and findings from both within and outside of consumer research. However, the review is also selective in that we focus on (a) research with clear relevance to consumer behavior, (b) findings that we believe are robust and adequately substantiated, and (c) results that are sufficiently broad in scope to allow meaningful generalizations, consistent with recent proposed guidelines for relevant consumer research (Pham, 2013). Research with a connection to consumer behavior that is merely tangential, findings for which reliability is not established, and empirical results that are very narrow in focus are excluded from this review.

Through this review, we identify important principles of affect regulation in relation to consumer behavior and offer a series of theoretical propositions to synthesize what the evidence shows. We hope that this review article will spark greater interest in consumption-based affect regulation and lay the foundation for a more systematic study of this important but under-researched class of phenomena.

This article is structured as follows. First, we define affect regulation and discuss its relation to concepts such as coping and compensatory consumption. In doing so, we discuss the relatively novel concept of displaced coping. Next, we review findings on the regulation of diffuse negative mood states that do not have strong emotional specificity. We then review findings on the regulation of specific negative emotions, showing that they tend to be regulated differently and in predictable ways. Next, we review evidence that even positive affective states can be regulated. We follow with a review of important contingencies in affect regulation, including the asymmetric regulation of positive versus negative affective states, triggers of downward affect regulation, and key moderators of affect regulation.

2 | WHAT IS AFFECT REGULATION?

2.1 | Defining affect regulation

We define affect regulation as *the conscious attempt to influence the nature of one's affective state through one's behavior or mental activities*. Three components of this definition merit note. First, affect regulation is about the regulation of affective states including mood states and emotional states. Affect regulation thus subsumes psychological concepts such as mood regulation and emotion regulation. However, the concept does not include the mere regulation of external emotional expressions (e.g., trying to smile to look happy at a wedding; trying to refrain from crying at a funeral; see Buck, 1984; Ekman & Friesen, 1975; Goffman, 1959; Hochschild, 1979), because affect regulation relates to the regulation of the affective *states* themselves rather than correlates of these affective states.

A second component of our definition focuses on affect regulation as an attempt to *influence* or impact the nature of one's affective state, not necessarily an attempt to *improve* one's affective state. Though it is true that most instances of affect regulation relate to (a) attempts to improve the hedonic quality of one's affective states, which is known as "upward regulation," affect regulation can also be directed at (b) simply maintaining the quality of one's current affective state, as suggested in the literature on mood maintenance (Isen & Simmonds, 1978; Wegener & Petty, 1994), and (c) less intuitively, sometimes even trying to make one's affective state less pleasant—a process known as "downward regulation" (Cohen & Andrade, 2004; Erber, Wegner, & Therriault, 1996). Therefore, affect regulation subsumes (a) efforts to improve the pleasantness of one's affective state, usually when the present state is unpleasant (e.g., going out with a friend to cheer oneself up); (b) efforts to maintain or preserve one's current affective state, usually when the state is pleasant (e.g., buying a travel souvenir at an airport gift shop at the end of a vacation); and (c) efforts to attenuate the pleasantness of one's affective state or worsen one's affective state (e.g., selectively exposing oneself to infuriating news to motivate oneself to vote in an election).

A third component of our definition is the consciousness of the regulation attempt in affect regulation. Though we do not exclude the theoretical possibility of mechanisms regulating affective states at an unconscious level, in light of our intention to relate affect regulation to consumption behavior, we focus primarily on conscious and volitional attempts to influence one's affective states. Consequently, we do not discuss the psychoanalytic literature on ego defenses, which postulates unconscious regulatory efforts to shield oneself from painful negative feelings arising from unacceptable thoughts or potentially threatening stimuli (Freud, 1926/1959; Paulhus, Fridhandler, & Hayes, 1997). Nor do we cover the literature on automatic processes of emotion control, which examines changes to one's emotional experience without conscious intention and awareness (Bargh & Williams, 2007; Koole & Rothermund, 2011; Mauss, Bunge, & Gross, 2007).

2.2 | Affect regulation and related concepts

Although affect regulation is not restricted to efforts to improve one's negative affective state, such efforts are nevertheless the most common form of affect regulation, as noted previously. It is therefore helpful to relate this form of affect regulation to two other concepts that are prominent in the consumer literature: (a) coping and (b) compensatory consumption. As illustrated in Figure 1, the three concepts overlap in important ways but are nevertheless distinct.

Coping is defined as "the use of cognitive and behavioral strategies to manage the demands of a situation when they are appraised as taxing or exceeding one's resources or to reduce the negative emotions and conflict caused by stress" (*APA Dictionary of Psychology*, VandenBos, 2015; see also Lazarus, 1993, for a similar definition). This concept is therefore more commonly invoked in research on how people respond to ongoing stress and major life stressors (e.g., divorce, poverty, losing a loved one). Two primary kinds of coping strategies are typically distinguished in the literature (Lazarus & Folkman, 1984): (a) problem-focused coping strategies, which refer to efforts directed at addressing the original stressor (e.g., attending a skill-development workshop after losing one's job, changing one's

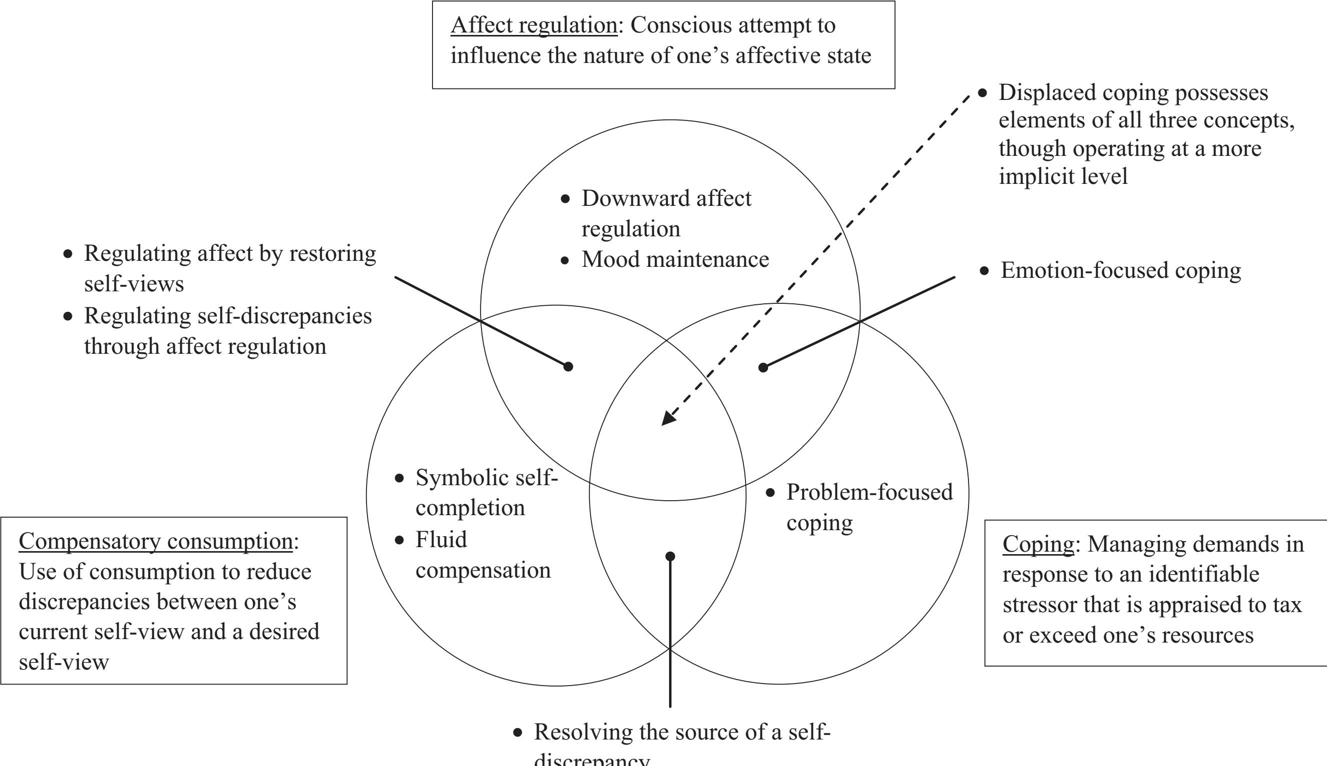

FIGURE 1 Relationships among affect regulation, coping, and compensatory consumption. Symbolic self-completion refers to behaviors that signal mastery in the domain of the self-discrepancy. Fluid compensation refers to behaviors that affirm another aspect of the self in a domain that is distinct from the self-discrepancy (Mandel et al., 2017)

diet after a heart attack); and (b) emotion-focused coping strategies, which refer to efforts directed at lessening the emotional distress brought by the stressful circumstances (e.g., seeking emotional support from family and friends after losing one's job; writing in a diary about one's life experience after a heart attack).

Affect regulation overlaps with emotion-focused coping in that efforts to alleviate one's emotional distress are examples of conscious attempts to influence one's affective state. However, not all affect regulation falls under emotion-focused coping. People may regulate their affective states even in the absence of a specific stressor, and even when their resources are not taxed. Moreover, as alluded to earlier, affect regulation also includes strategies to increase negative affect, dampen positive affect, or augment positive affect, all of which fall outside traditional conceptions of coping (Gross, 1998). Similarly, not all coping behavior constitutes affect regulation. In particular, problem-focused coping need not implicate negative affect regulation. For example, a consumer confronting his dentist after a poorly executed dental surgery resulted in a severe mouth infection does not necessarily do it to make himself feel better but rather to address the source of a problem.

Compensatory consumption refers to the use of consumption-related behavior to reduce self-discrepancies—that is, incongruities between how one currently views the self and how one desires to view the self—that could be related to one's self-concept, comparisons with others, or social identity (Mandel, Rucker, Levav, & Galinsky, 2017). The psychologically aversive nature of self-discrepancies motivates people to engage in self-regulatory efforts to bolster their desired self-views. For example, consumers tend to buy high-status products to feel more powerful when they perceive themselves as powerless (Rucker & Galinsky, 2008). They also tend to acquire functional products, which are associated with problem-solving, to restore their sense of control when they perceive a lack of control over their environment (Chen, Lee, & Yap, 2017).

Compensatory consumption and affect regulation overlap in that self-discrepancies can give rise to negative emotions such as disappointment and anxiety (Higgins, 1987) that may be alleviated through purposeful compensatory consumption. For example, employees who are disappointed by not being promoted may feel better after buying products that symbolically reduce their self-discrepancy (e.g., a tee shirt stating “I'm the Boss”). Indeed, it has been found that sad consumers who compensate for their lack of personal control by shopping tend to experience less sadness after shopping (Rick, Pereira, & Burson, 2014). However, compensatory consumption effects can occur independently of any change in affective states (e.g., Gao, Wheeler, & Shiv, 2009; Rucker & Galinsky, 2008). Therefore, the resolution of self-discrepancies may not necessarily involve affect regulation. For instance, individuals who feel less intelligent than desired tend to prefer products such as news magazines, fountain pens, and digital organizers; that is, products

that give a sense of competence, independent of change in affect (e.g., Gao et al., 2009).

Research offers evidence of a class of phenomena with elements that lie at the combined intersection of affect regulation, coping, and compensatory consumption, although operating at a more implicit level. These phenomena are typically observed among individuals experiencing distinct negative emotional states such as sadness, anger, anxiety, or disgust. As shown by Raghunathan and Pham (1999), such states tend to trigger motives that address the fundamental appraisal underlying the emotional state. For example, sadness, which is typically experienced in response to the loss of a source of reward (e.g., the passing of one's beloved pet; the loss of a favorite possession), tends to trigger a motivation to replace the reward, thereby steering preference toward high-risk/high-reward options (Raghunathan & Pham, 1999) or comforting or luxurious options (Raghunathan, Pham, & Corfman, 2006). In contrast, anxiety, which is typically experienced in response to high uncertainty or a lack of control (e.g., awaiting the results of a cancer test; not knowing if one will be able to catch the last flight of the evening), tends to trigger a motivation to reduce uncertainty and regain control, thereby steering preference toward low-risk/low-reward options (Raghunathan & Pham, 1999) or safety and high-control options (Raghunathan et al., 2006). Similar results have been observed by other researchers (e.g., Dong, Huang, & Wyer, 2013; Lerner, Small, & Loewenstein, 2004).

What is noteworthy in this class of findings is that the behavioral consequences of the affective states are typically observed with tasks that are objectively unrelated to the source of affect, as if people project their response to the original source of their affective state onto whatever decision or task matches the goals activated by that affective state. Raghunathan et al. (2006) coined the phrase "displaced coping" to describe this pattern of behavior: a problem-focused, coping-like response transposed onto another domain. This class of phenomena is akin to problem-focused coping in that people behave as if they are symbolically addressing the essence of their problem (e.g., the loss of a reward). It is also akin to compensatory consumption in that people behave as if trying to offset some significant discrepancy (e.g., going for high-reward options). Finally, it is akin to affect regulation as well in that people seem to behave as if asking themselves "what would make me feel better?" (Pham, 2009). At the same time, displaced coping is not real problem-focused coping or explicit affect regulation, as it operates on a more implicit or symbolic level. We will review many findings that fall in this category.

2.3 | Problem-focused coping, emotion-focused coping, and displaced coping: some consumer findings

As already described, the regulation of negative affective states intersects with three different forms of coping: problem-focused coping, emotion-focused coping, and displaced coping. Consumer-relevant evidence of the three forms is reviewed next.

2.3.1 | Problem-focused coping

Although affect regulation may not be the primary motive in problem-focused coping, negative affective states may be regulated indirectly when problems are resolved. The consumer described earlier who confronts his dentist after a botched oral surgery may feel better after speaking his mind with the dentist and receiving an apology. In consumer settings, problem-focused coping strategies such as complaining to the provider when angry over a product- or service-related issue are more likely when the situation is seen as changeable, especially if it can be changed by the target of the complaint (Yi & Baumgartner, 2004). For instance, passengers whose flight has been delayed are more likely to complain to the airline employees if the cause of delay is seen as under the airline's control (e.g., late flight-crew arrival) than if it is seen as beyond the airline's control (e.g., severe local weather). Relatedly, proactive forms of coping behavior are more likely when consumers have high perceived self-efficacy (Duhachek, 2005).

Four major types of problem-focused coping strategies have been distinguished in consumer settings (Duhachek, 2005; Yi & Baumgartner, 2004): (a) action-planning strategies such as analyzing the problem, making plans, and doing what needs to be done; (b) confronting strategies such as complaining to the party responsible for the problem and arguing one's case; (c) instrumental-support strategies such as getting advice from others and enlisting a friend's help; and (d) rational-thinking strategies such as trying to step back and examine the situation objectively with one's emotions kept in check.

One domain in which problem-focused coping has been observed is consumer responses to technology (Mick & Fournier, 1998). Technologies often elicit conflicting responses among consumers, such as feeling liberated yet more dependent (e.g., being addicted to one's mobile phone; see Melumad & Pham, 2018), feeling more efficient yet inept (e.g., using new software), or feeling more in control yet overwhelmed (e.g., receiving emails at any time of the day). To deal with the stress brought by new technologies, consumers adopt a variety of problem-focused strategies, such as pretesting the product, buying less sophisticated models, making more careful choices, investing more time in mastering the technology, or instead distancing themselves from the technology (e.g., leaving one's phone out of the bedroom; Mick & Fournier, 1998).

A common problem-focused coping strategy among consumers facing difficult and stressful decisions is the use of a more extensive information search process and the adoption of a more deliberate and systematic decision process. In one study, participants who were asked to make high-stake, emotion-rich decisions about allocating support to children in need acquired more information and reviewed information more by attribute-by-attribute (rather than by alternatives) compared to participants exposed to a less emotional version of the decision task (Luce, Bettman, & Payne, 1997). Similarly, among breast cancer patients, problem-focused coping generally takes the form of seeking out information about breast

cancer, making arrangements for treatment, and adopting a healthier lifestyle (Pavia & Mason, 2004).

2.3.2 | Emotion-focused coping

Consumption-related sources of stress can also induce a variety of emotion-focused coping strategies. Duhachek (2005) distinguishes five types of emotion-focused coping strategies in consumer settings: (a) seeking emotional support from others, (b) acknowledging and expressing one's emotions, (c) avoiding thinking about the situation, (d) positive thinking (e.g., "looking at the bright side"), and (e) denial (e.g., pretending that the problem never happened). Yi and Baumgartner (2004) suggest three additional strategies: (f) behavioral disengagement (e.g., giving up further action), (g) emotional self-control, and (h) acceptance (e.g., trying to get used to the idea that the situation is what it is and cannot be changed).

Emotion-focused strategies are more likely when people perceive that nothing can be done to alter their situation (Lazarus, 1993). For example, mental disengagement is a common coping strategy that consumers employ when they are disappointed by a purchase that fails to meet their expectations and there is no one to blame; acceptance is another common strategy that consumers employ when they regret a purchase for which they only have themselves to blame (Yi & Baumgartner, 2004).

A frequently used emotion-focused coping strategy in consumer settings is simple avoidance. For example, when consumers face a difficult decision trade-off (e.g., a choice between an expensive car with a very good safety record and a more affordable car with a poor safety record), they have a tendency to reduce the emotional difficulty of the decision by choosing a status quo or default option or by deferring the choice, both of which are examples of avoidance strategies. A variety of emotion-focused avoidance strategies have also been observed in consumer responses to technologies that they find overwhelming. These strategies include avoiding information about the product, discontinuing use of the product, or leaving the product unrepaired if it breaks down (Mick & Fournier, 1998). Similarly, after treatment, cancer patients cope with the fear of cancer recurrence by attempting to remove reminders of their illness (e.g., redecorating the space in their home that they particularly associate with their illness). Another common emotion-focused strategy among cancer patients in the initial phase of their illness is the purchase of material goods as a form of emotional escape from the illness (Pavia & Mason, 2004).

Although we discussed problem-focused coping and emotion-focused coping separately for expositional purposes, it is important to note that both types of strategies are not mutually exclusive. Instead, people often use a combination of problem-focused and emotion-focused coping strategies when facing various stressors. In fact, combinations of the two types of strategies were observed in every consumer study mentioned in subsections 2.3.1 and 2.3.2.

2.3.3 | Displaced coping

As mentioned, there is evidence of a third form of coping-like behavior called displaced coping (Raghunathan et al., 2006). Displaced coping resembles problem-focused coping in that people experiencing a certain negative affective state exhibit behavioral tendencies that are structurally similar to those they would exhibit if they were to address the actual source of the affect-inducing problem. However, unlike in actual problem-focused coping, the behavior is not directed at the actual source of negative affect but instead is projected onto an unrelated domain. Displaced coping also resembles emotion-focused coping in that people behave *as if* trying to make themselves feel better (Pham, 2009). However, unlike in emotion-focused coping, people are not necessarily explicitly trying to improve their affective states.

For example, as already mentioned, a fundamental cause of sadness is the loss of something rewarding, whereas a fundamental driver of anxiety is high uncertainty and low control over a situation. When given a choice between a higher-paying but less-secure Job A and a lower-paying but more-secure Job B, participants who were previously induced into an incidental state of sadness were found to lean toward Job A—as if trying to offset the loss underlying their sadness with a rewarding high salary—whereas participants previously induced into an incidental state of anxiety tended to lean toward Job B—as if trying to alleviate the uncertainty underlying their anxiety through higher job security (Raghunathan & Pham, 1999). Parallel effects of sadness versus anxiety have been observed in choices between high-risk/high-reward and low-risk/low-reward gambles (Raghunathan & Pham, 1999), choices between warmth-oriented and control-oriented video games, and choices between comfort-oriented and safety-oriented cars (Raghunathan et al., 2006).

Conceptually related findings were reported by Dong et al. (2013), who observed that compared to control participants, participants who were induced into a state of embarrassment were more likely to express preference for cosmetics and facial products that would restore their skin complexion. In other words, participants appeared to implicitly attempt to repair the "loss of face" associated with their preexisting embarrassment through unrelated products that would symbolically enable them to "save face." In another set of studies, Levav and McGraw (2009) found that participants who were made to feel guilty about the source of extra money that they received as a windfall (e.g., money from an uncle who is ill) tended to spend it on virtuous purchases, such as a textbook, rather than hedonic purchases, such as an ice cream. According to the authors, this is because guilt-induced participants tried to alleviate their guilt by symbolically "laundering" the money with a virtuous purchase. Again, this pattern shows coping-like behavior—trying to alleviate one's guilt through reparative actions—but in a domain (textbook purchase) that is unrelated to the true source of negative affect (the uncle's illness).

Additional results by Raghunathan et al. (2006) clarify the boundaries of displaced coping. In one experiment, in addition to manipulating the type of affective state that participants were induced into

(sadness vs. neutral mood vs. anxiety), the authors manipulated participants' awareness of the actual cause of their affective state (the incidental-mood induction). When the actual source of the affective state was not salient, the results closely replicated the pattern observed in studies described earlier. However, when the actual source of the affective state was made salient, the basic effect dissipated: Anxious and sad participants no longer exhibited different behavioral tendencies. This finding, which is generally consistent with research on affect-as-information (Schwartz & Clore, 1996), indicates that displacement is more likely when people's conscious awareness of the source of their affective state is low.

In a follow-up study, Raghunathan et al. (2006) additionally manipulated the domain similarity between the source of the affective state and the decision to be made. The results showed that when awareness of the source was low, the emotional states impacted the target decision regardless of level of similarity with the source of the affect. However, when awareness of the source was high, the emotional states only impacted the target decision if it was in a domain that was somewhat related to the source of the affect. Similarly, Shen and Wyer (2008) observed that participants who were put in a negative mood were more likely to be interested in learning more about Tai Chi, a health-oriented topic, if the negative-mood induction involved seeing disease-related pictures (which presumably cued health concerns) than if the negative-mood induction involved seeing war-related pictures (which presumably did not cue health concerns). As in Raghunathan et al. (2006), the thematic relatedness between the source of the affect and judgment target was especially important when participants were made aware of the source of their negative affective states.

In summary, displaced coping refers to a distinct class of implicit affect-regulatory behavior that is especially likely when (a) people experience distinct negative affective states associated with strong behavioral tendencies and (b) people are not consciously aware of the actual source of their affective states. If people are aware of this source, a coping-like transfer of response is more likely when there is some subjective similarity between the source of the affect and the transfer domain (Table 1).

3 | THE REGULATION OF GENERALIZED NEGATIVE AFFECTIVE STATES

Two types of affective states need to be distinguished in affect regulation: mood states and emotion states. Mood states are prolonged states of mild-to-moderate intensity that are diffuse and nonspecific in terms of content and target (e.g., being in a rotten mood on a given morning; feeling "blue" on a Sunday; being in a happy mood on vacation). Emotion states are more intense states that are usually shorter-lived and are more specific in terms of content and target object (e.g., being angry at a selfish colleague; feeling proud of winning a tennis tournament; being nervous before a job interview). In this section, we review the main strategies observed in the regulation of diffuse negative mood states that do not have strong emotional specificity. Again, we focus on strategies that are relevant to our understanding of consumer behavior. These strategies tend to fall into two broad categories: behavioral strategies and mental strategies (Table 2).

TABLE 1 Defining affect regulation and related concepts

Proposition 1	Affect regulation can be defined as the conscious attempt to influence the nature of one's affective state through one's behavior or mental activities
Proposition 2	Affect regulation includes (a) efforts to improve the pleasantness of one's affective state, usually when the state is unpleasant; (b) efforts to maintain or preserve one's current affective state, usually when the state is pleasant; and (c) efforts to attenuate the pleasantness of one's affective state or worsen one's affective state
Proposition 3	In consumer behavior there is overlap among affect regulation, coping, and compensatory consumption. However, the three concepts are fundamentally distinct
Proposition 4.1	Problem-focused coping refers to efforts directed at resolving the problem or source of the negative affective state. By addressing the source problem, people may indirectly regulate their affective state
Proposition 4.2	Problem-focused coping is more likely in stressful situations that are changeable and for which people believe in their self-efficacy
Proposition 5.1	Emotion-focused coping refers to efforts directed at alleviating the negative emotional impact of a stressful situation. It is most directly related to affect regulation
Proposition 5.2	Emotion-focused coping is more likely when the person does not think that the stressful situation can be changed
Proposition 6.1	Displaced coping is a distinct form of affect-regulatory behavior whereby a person exhibits problem-focused coping-like behavior transposed to a domain that is objectively unrelated to the actual source of negative affect
Proposition 6.2	Displaced coping is more likely in response to distinct emotional states associated with strong behavioral tendencies with a source the person is not consciously aware of
Proposition 6.3	Domain similarity, even if superficial, between the source of the affective state and the target behavior increases the likelihood of displaced coping

TABLE 2 The regulation of generalized negative affective states

Proposition 7	There exist generic strategies for the regulation of negative affective states in general. Some are behavioral; some are mental
Proposition 8	The main generic behavioral strategies for the regulation of negative affective states are (a) avoidance and withdrawal, and (b) engaging in pleasurable activities
Proposition 9	The pleasurable activities that people engage in for the regulation of general negative affective states often entail some form of consumption
Proposition 10	Popular forms of pleasant consumption in the regulation of general negative affective states include shopping (aka "retail therapy") and various types of media consumption, including music listening and social media
Proposition 11	The main generic mental strategies for the regulation of negative affective states are (a) selective exposure to positive information, (b) self-generation of positive thoughts, and (c) cognitive reappraisal

3.1 | Behavioral strategies

Two types of behavioral strategies are commonly used to up-regulate negative mood states: One type is based on avoidance of the aversive source of affect and general withdrawal; the other type is based on approach to positive alternative sources of affect.

3.1.1 | Avoidance and withdrawal

A common behavioral strategy that people employ to regulate negative moods is withdrawal and avoidance. People often try to address their bad mood by avoiding the thing or person causing the bad mood, or by trying to be alone (Thayer, Newman, & McClain, 1994). They may also reduce or totally abandon their effort to deal with the source of negative affect, a strategy known in the coping literature as behavioral disengagement (Carver, Scheier, & Weintraub, 1989). People in a bad mood are also more likely to withdraw from engaging in any activity in general. For example, depressed individuals tend to have lower interest in taking part in leisure, social, and physically strenuous activities compared to nondepressed individuals (Cunningham, 1988). In consumer research, a clear example of avoidance behavior is the tendency to avoid making decisions that are distressing (Luce, 1998). Consumers would rather stick to the status quo, postpone the decision, or even delegate the decision to someone else rather than face an emotionally difficult decision (Luce, 1998; Steffel & Williams, 2018).

3.1.2 | Engaging in pleasurable activities

Another common behavioral strategy for alleviating one's negative mood is engaging in various pleasant activities such as listening to music, practicing a hobby, or playing sports (Thayer et al., 1994). Interestingly, this type of strategy often involves consumption behavior. The best-documented example of such behavior is shopping to make oneself feel better, a phenomenon commonly known as *retail therapy*. Consistent with lay intuition, a correlational study conducted in a mall showed that shoppers who were in a more negative mood at the start of their shopping trip were more likely to make unplanned purchases to treat themselves (Atalay & Meloy, 2011). In a subsequent diary study by the same authors, 62% of participants reported a desire to repair their negative mood as their main reason for buying a product as a treat to themselves, with most of these mood-repair purchases being unplanned.

Another correlational study showed a positive relation between people's propensity to monitor and repair their mood, as a trait, and their enjoyment of shopping for pleasure (Arnold & Reynolds, 2009). Evidence that consumers consciously engage in retail therapy has also been documented in research on self-gifting (Mick, 1996; Mick & DeMoss, 1990; Mick, DeMoss, & Faber, 1992). In one qualitative study, participants were asked to describe the most recent situation in which they acquired a gift for themselves (Mick & DeMoss, 1990). Content analyses revealed that 48% of the participants reported self-gifting in order to cheer themselves up when they felt down, showing that one of the dominant underlying motivations or reasons for this behavior is the regulation of negative affect. According to one study, the most common type of feel-good purchase in affect regulation by far is clothing, followed by cosmetics and fragrances (Gould, 1997).

The preference for pleasurable activities under negative mood is also reflected in consumers' choice of the type and genre of media to watch or listen to (e.g., television programs, movies, music, podcasts). In one study, female undergraduates who were at different stages of their menstrual cycle were asked to choose an evening's worth of television programs that they would like to watch (Meadowcroft & Zillmann, 1987). Participants could choose from three types of programs: comedies, dramas, and game shows. Compared to those who were midway through their cycle, premenstrual and menstrual participants (i.e., those who tend to experience a worse mood) were more likely to choose comedies over other types of programs. Pregnant women show a similar effect during the weeks of their pregnancy when their mood is the most negative (Helregel & Weaver, 1989). Indeed, people concerned about regulating their mood tend to exhibit a preference for comedies over dramas (Caruso & Shafir, 2006).

According to a 2009 study, among college students music listening appears to be the most popular type of media consumption under negative mood, except under states of boredom, in which case television becomes the preferred mood-regulating choice of media option (Greenwood & Long, 2009). For example, participants who

just received negative performance feedback on a test and were in a bad mood as a result spent more time listening to upbeat, joyful music than did participants who received positive feedback and were in a better mood (Knobloch & Zillmann, 2002). Although we are not aware of published studies on this issue, we believe that another popular form of pleasurable consumption has emerged in recent years in the regulation of negative affective states, namely, the consumption of social media and the use of smartphones (Melumad & Pham, 2018).

3.2 | Mental strategies

The regulation of negative affective states can also be achieved through mental (rather than behavioral) means. Three main types of such strategies have been documented: (a) selective exposure to positive information; (b) the self-generation of positive thoughts; and (c) cognitive reappraisal.

3.2.1 | Selective exposure to positive information

People in a bad mood tend to expose themselves to positive rather than negative information. For example, in Raghunathan and Trope (2002), frequent coffee-drinkers were asked to read an essay containing both favorable and unfavorable information about caffeine consumption. Participants who were put in a negative mood prior to reading the essay recalled more favorable than unfavorable information about caffeine consumption, whereas participants who were put in a positive mood did not show this effect. These results suggest that negative-mood participants selectively focused on information that was congenial with their attitude toward coffee. Interestingly, the results further showed that in the negative-mood condition, participants' mood improved after reading the essay, whereas in the positive-mood condition, participants' mood deteriorated. This additional finding suggests that negative-mood participants' focus on positive information was effective in improving the mood state. Related results were obtained by Smith and Petty (1995), who found that negative-mood individuals with high self-esteem who were shown a mixture of both pleasant and unpleasant headlines recalled more pleasant news headlines than did negative-mood individuals with low self-esteem. The authors attribute this finding to high self-esteem encouraging mood-regulatory behavior.

3.2.2 | Self-generation of positive thoughts

In addition to (or instead of) selectively exposing themselves to positive information available in their environment, people may generate positive thoughts of their own as a form of distraction that shields them from their negative thoughts and feelings. For instance, they may think about a future event that they are looking forward to (e.g., a planned vacation), fantasize about pleasant things (e.g., winning a lottery), recall pleasant memories (e.g., a birthday celebration), or reflect on things that make them feel happy (e.g., playing with their children; Parkinson & Totterdell, 1999).

Experimental evidence that negative mood regulation can take the form of selective retrieval of pleasant memories is provided in a series of studies by Parrott and Sabini (1990). In a field study, the researchers found that participants who were in a negative mood due to cloudy weather tended to recall more pleasant autobiographical memories than did participants who were in a positive mood due to sunny weather. Similar results were obtained in another field study where the source of negative versus positive mood was receiving a bad versus good grade on a course assignment, and in more controlled laboratory studies where mood was manipulated through sad versus upbeat music. Consistent with these findings, one of the most common triggers of nostalgia—the fond reminiscing about past and usually pleasant self-relevant memories—is the experience of negative affective states such as being lonely or depressed. Studies on nostalgia indicate that a primary function of nostalgic reminiscing is the positive affect that it induces (Wildschut, Sedikides, Arndt, & Routledge, 2006; see also Bryant, Smart, & King, 2005).

Other findings suggest that people are in fact strategic and forward-looking in building positive memories for future reminiscing in times of emotional need. In a study of college students, 80% of the participants indicated making a conscious effort to store pleasant memories for later recall (Bryant et al., 2005). Strategies used to store these memories included taking photographs, collecting memorabilia, and sharing the memories with others. These findings are consistent with other research showing that consumers are motivated to strategically protect special memories (Zauberman, Ratner, & Kim, 2009).

3.2.3 | Cognitive reappraisal

Another common mental strategy in the regulation of negative states is reappraisal, which refers to a cognitive reinterpretation of the emotion-evoking stimulus in order to reduce its emotional impact (Gross, 1998). According to Lazarus and Folkman (1984), in cognitive reappraisal the stress-inducing situation is reframed as non-threatening and possibly valuable or beneficial. While the specific content of the reappraisal may vary situation by situation, certain forms of reappraisal are common: (a) devaluing the importance of the situational goal to alleviate the distress experienced (e.g., downplaying the value of an Ivy League degree after being rejected from Harvard; Folkman & Moskowitz, 2000); (b) focusing on positive aspects of the situation (e.g., viewing the problem as a learning opportunity; Yi & Baumgartner, 2004); (c) being optimistic about the eventual outcome of the situation (e.g., "It will all turn out OK in the end"; Duhachek, 2005); and (d) making downward social comparisons (e.g., "Others are doing even worse than me"; Aspinwall & Taylor, 1993; Larsen, 2000).

4 | THE REGULATION OF DISTINCT NEGATIVE EMOTIONS

4.1 | The part-regulation principle

Whereas mood states tend to be diffused and general, emotional states tend to be more differentiated and to convey more specific

information about the person's situation and environment (Cohen et al., 2008). In particular, distinct emotional states—such as anger, pride, sadness, hope, guilt, or anxiety—can be distinguished by their unique patterns of cognitive appraisals, which determine the meaning that individuals ascribe to the situation, the quality of their feelings, and the person's action tendencies (Frijda, Kuipers, & ter Schure, 1989; Smith & Ellsworth, 1985). As a result, distinct negative emotional states tend to activate different affect regulation strategies. For example, strategies used for regulating states of sadness are different from those used to regulate states of anger or states of guilt. These different strategies tend to obey an overarching principle that we call the *part-regulation principle*. Specifically, we propose and synthesize evidence that people experiencing distinct negative emotions tend to follow regulation strategies aligned with the tacit goals implied by the appraisal dimensions (the "part") that best define the aversive experience. This principle makes more specific predictions than a pure hedonic principle of regulation, which simply predicts that people in aversive states always seek pleasant stimuli and experiences, and has guided much research on mood management (e.g., Cialdini, Darby, & Vincent, 1973; Zillman, 1988). Emotion-specific regulation strategies consistent with the part-regulation principle also differ from the more generic strategies involved in the regulation of generalized negative mood states reviewed in the preceding section (Table 3).

4.2 | The regulation of sadness

The distinctive feature of the appraisal-generated meaning structure of sadness-like emotions is the loss or absence of a valued reward (Lazarus, 1991; Ortony, Clore, & Collins, 1988; Roseman, 1984). As a result, the experience of sadness tends to trigger a motivation for rewarding

TABLE 3 The regulation of distinct negative emotions

Proposition 12.1	The regulation of distinct negative emotions adheres to a part-regulation principle, whereby people experiencing distinct negative emotions follow regulation strategies aligned with the tacit goals implied by the appraisal dimensions that best define the aversive experience
Proposition 12.2	Therefore, unlike general negative affective states, which tend to be regulated through generic strategies, distinct negative emotions tend to be regulated through emotion-specific strategies
Proposition 13	The main strategies in the regulation of sadness are (a) seeking alternative sources of reward; (b) indulgent eating; (c) self-image enhancement; (d) preventing further loss; and (e) regaining control
Proposition 14	The main strategies in the regulation of fear and anxiety are (a) self-protection and affiliation; (b) avoidance; and (c) reducing uncertainty, avoiding risk, and seeking control
Proposition 15	The main strategies in the regulation of anger are (a) confrontative coping; and (b) removing the aversive stimulation, even if only psychologically
Proposition 16	The main strategies in the regulation of guilt are (a) reparative action; and (b) self-image enhancement
Proposition 17	The main strategies in the regulation of shame and embarrassment are (a) avoiding social contact; and (b) restoring a positive public image
Proposition 18	The main strategy in the regulation of disgust is stimulus avoidance, including symbolic avoidance
Proposition 19	The main strategies in the regulation of experienced regret are (a) undoing and reversing; (b) learning from the situation in preparation for the future; and (c) reappraisal
Proposition 20	Anticipated regret is regulated differently from experienced regret and tends to involve more proactive strategies
Proposition 21	The main strategies in the regulation of aversive high-arousal states such as stress and anger are (a) the consumption of tension- and mood-regulating substances (e.g., alcohol); (b) physical exercise; (c) self-exposure to calming stimuli; and (d) smartphone use
Proposition 22	The main strategies in the regulation of aversive low-arousal states such as boredom and fatigue are (a) the consumption of stimulating substances (e.g., caffeine); (b) physical exercise; and (c) the consumption of stimulating media content

stimuli to compensate for the person's feeling of loss, thereby helping them "feel better." As mentioned in the discussion of displaced coping, the compensation of loss can occur with means that are unrelated to the original source of sadness, especially when the original source cannot be controlled or when the source is not mentally salient. This general strategy for regulating sadness takes on different forms.

4.2.1 | Seeking alternative sources of reward

A common strategy in the regulation of sadness is the pursuit of alternative sources of reward, which can be of different types. For instance, the studies by Raghunathan and Pham (1999) that were discussed earlier showed that compared to anxious or neutral-mood individuals, sad individuals tend to favor lower-probability/higher-payoff gambles over higher-probability/lower-payoff gambles, and higher-paying, less-secure jobs over lower-paying, more-secure jobs. In other words, sadness encourages a desire for monetary rewards. Sadness has also been found to stimulate a preference for comfort and luxury in a car choice (Raghunathan et al., 2006)—a finding broadly consistent with studies showing that self-gifting behavior is especially likely when feeling down (Mick & DeMoss, 1990; Mick et al., 1992). Various studies also show an increased willingness to pay for various goods under states of sadness (Cryder, Lerner, Gross, & Dahl, 2008; Garg, Williams, & Lerner, 2018; Lerner et al., 2004), suggesting a strong motivation for acquiring possessions under sadness.

Additional results by Raghunathan et al. (2006) show that sadness also increases a desire for social and emotional sources of reward. Compared to anxious and neutral-mood individuals, sad individuals were more likely to prefer a computer game called "Hi Chimpee!" in which they would interact with and take care of a cute and loving monkey, over a game called "Master of the Universe" in which they would get to control an empire and build a civilization. Sad individuals were also more likely to want to go out with an old friend despite having to study for an examination and were more willing to try a new drug that would improve their physical appearance. Other findings show that compared to happy and neutral participants, sad participants were more likely to select teammates based on their socioemotionally rewarding qualities (Forgas, 1991).

4.2.2 | Indulgent eating

A special case of reward-seeking that is particularly relevant to consumer behavior is indulgent eating. Numerous studies show that sad individuals are especially attracted to high-calorie foods that are rich in carbohydrates, fat, and sugar and are rewarding to eat (Andrade & Cohen, 2007; Chua, Touyz, & Hill, 2004; Gardner, Wansink, Kim, & Park, 2014; Garg & Lerner, 2013; Willner et al., 1998). For instance, sad consumers tend to rate indulgent foods (e.g., cookies, candy bars, and potato chips) more positively than nutritious foods (e.g., granola bars, rice cakes, and apples), whereas happy consumers tend to display the reverse pattern (Gardner et al., 2014). Sad individuals also show increased consumption of various indulgent foods such as buttered popcorn, M&Ms chocolates, and cookies (Andrade, 2005; Chua et al., 2004; Garg & Lerner, 2013; Garg, Wansink, & Inman, 2007; Tice, Bratslavsky, & Baumeister, 2001). Psychopharmacological studies additionally suggest that depressed individuals crave not just any type of food, but food that the brain finds rewarding in particular (e.g., food with high sugar content; Willner et al., 1998). Consistent with these experimental findings, a field study shows that on the Mondays following a Sunday National Football League (NFL) game, consumption of saturated fat and food caloric intake increases in cities where the local football team lost relative to cities without a football team, cities whose team did not play that Sunday, and cities whose team won (Cornil & Chandon, 2013).

4.2.3 | Self-image enhancement

Behavior that enhances one's self-image can help compensate for the sense of loss that accompanies states of sadness. One way this strategy of boosting self-image can be implemented is through downward social comparisons (e.g., "She doesn't make as much money as I do"; "Our kid went to a better college than theirs"). This strategy appears to be especially effective among low-self-esteem individuals. Sad individuals with low self-esteem tend to experience improvements in their affective state after engaging in downward social comparison (Aspinwall & Taylor, 1993).

Another way in which this strategy is implemented is through helping and other forms of prosocial behavior that temporarily boost the person's self-esteem. Numerous studies have shown an increased propensity to help others under states of sadness or sorrow (Cialdini & Kenrick, 1976; Cialdini et al., 1987; Manucia, Baumann, & Cialdini, 1984). According to Cialdini and colleagues, a prime reason for the strong relation between states of sadness and altruism is that sad individuals are trying to make themselves feel better by helping others, a proposition known as the negative-state-relief hypothesis (Schaller & Cialdini, 1990). Consistent with this hypothesis, and more generally with a sadness-regulation interpretation, it has been found that the relation between sadness and helping tends to dissipate if people do not think that their mood can be improved (Manucia et al., 1984) and among young children who have yet to be socialized about the emotional benefits of helping others (Cialdini & Kenrick, 1976).

The proposition that helping serves as a substitute for self-reward for sad individuals is further supported by the finding that sad participants who were given an opportunity to behave altruistically were subsequently less likely to engage in self-gratification than sad participants who did not receive such an opportunity (Baumann, Cialdini, & Kendrick, 1981). Similarly, the relationship between a loss by one's favorite sports team or athlete and unhealthy eating tends to dissipate among people who spontaneously engage in self-affirmation (Cornil & Chandon, 2013), further supporting the notion that feeling good about oneself helps alleviate one's sadness.

4.2.4 | Preventing further loss

Given that sadness is characterized by a strong sense of loss, another strategy in the regulation of sadness is avoiding further losses to prevent the emotional state from worsening (Salerno, Laran, & Janiszewski,

2014). For example, although sadness tends to increase the consumption of unhealthy food such as popcorn, sad participants who were reminded of the unhealthiness of popcorn were found to eat less popcorn than neutral-mood participants who were not reminded (Garg et al., 2007). In other words, when the idea of consuming popcorn had the potential of making participants feel worse, sad participants regulated their sadness by eating less than a control group did. Similar results were observed by Salerno et al. (2014), who found that sad consumers who were indirectly primed about the potential long-term harm from indulging in snacks subsequently consumed less snacks than those who were exposed to a neutral prime.

4.2.5 | Regaining control

Although the main appraisal component of sadness is a loss of reward, another appraisal component is a lack of control over the situation (Smith & Ellsworth, 1985). Therefore, a secondary strategy for the regulation of sadness is trying to restore some sense of control. In accord with this proposition, Garg and Lerner (2013) found that whereas in a baseline condition, sadness increased the consumption of M&Ms compared to a neutral-mood state (consistent with previous results), this effect dissipated when participants had the opportunity to choose which gift they would receive for their participation. Apparently, having an opportunity to choose helped participants regain a sense of control, thereby alleviating the need to make themselves feel better by eating more M&Ms. Similarly, Rick et al. (2014) found that sad consumers tend to experience decreased levels of sadness after making various product choices, suggesting that such choices have therapeutic effects. Additional results show that these effects are due to a sense of control that real choices enable. We believe, however, that under states of sadness, the motivation for control is not as strong as the motivation for reward. In the Raghunathan et al. (2006) computer-game study discussed earlier, sad participants tended to prefer a game that was emotionally rewarding over one that provided a sense of mastery.

4.3 | The regulation of fear and anxiety

Fear and anxiety are closely related emotions: They are both high-arousal aversive states in response to some threat (Öhman, 2008). Whereas fear is a response to immediate danger and, as such, has an identifiable eliciting stimulus (e.g., the fear sparked by a home intruder in the middle of night), anxiety is an anticipatory response to a threat that is less well defined (e.g., the anxiety of a child about to go on his or her first sleepaway camp). The two nevertheless share key appraisals of perceived threat, high outcome uncertainty, and low control over one's situation (Frijda et al., 1989; Smith & Ellsworth, 1985). As a result, both fear and anxiety tend to trigger regulation strategies that involve self-protection, avoidance, and the reduction of uncertainty.

4.3.1 | Self-protection and affiliation

The perception of threat, whether clear as in fear or more diffused as in anxiety, triggers a strong motivation and readiness to protect oneself (Frijda et al., 1989). A common strategy for self-protection is affiliation with others ("safety in numbers"). For example, participants who expected to be administered painful electric shocks were much more likely to choose to wait in the company of others than to wait alone (Sarnoff & Zimbardo, 1961). Consistent with this behavior pattern, Griskevicius et al. (2009) found that fearful participants were more persuaded by a museum ad using a social-proof appeal (e.g., "Visited by over one million people each year") than by the same ad using a scarcity appeal ("Stand out from the crowd") or a version of the ad with neither type of appeal. Again, this is presumably because states of fear trigger a spontaneous preference for joining others, rather than standing out. Similarly, participants who watched scenes from a horror movie reported more attachment to a brand of sparkling water that was left on their desk as they were watching the movie scenes than did participants who watched movie scenes eliciting different emotions (sadness, happiness, and excitement; Dunn & Hoegg, 2014). Apparently, the experience of fear—but not other emotions—helped create a symbolic bond between the participants and the brand with which they shared the fearful experience.

4.3.2 | Avoidance

Another common strategy in the regulation of fear and anxiety is avoidance. Studies in clinical psychology report that people with specific fears and anxieties have an initial state of spontaneous vigilance toward fear- and anxiety-inducing stimuli, followed by a more controlled stage of conscious attentional avoidance of these stimuli (Amir, Foa, & Coles, 1998; Rinck & Becker, 2006; Terburg, Aarts, & van Honk, 2012). A related avoidance strategy is the suppression of thoughts about the source of fear or anxiety (Wegner & Zanakos, 1994). More specific to consumer behavior, research shows a positive association between anxiety and perceptions of not being able to change the situation and the use of avoidant coping strategies such as taking one's mind off the situation, distracting oneself by doing other things, or simply denying the existence of the situation (Duhachek, 2005). In another study, consumers experiencing fear reported greater subsequent use of avoidant coping strategies than consumers experiencing anger, and consumers experiencing a neutral emotion (Duhachek & Oakley, 2007). Lastly, consumers often report coping with their anxiety about technological products by using avoidant strategies such as refusing or delaying the purchase of a technological product prior to its acquisition, and neglecting or distancing oneself from the product following its acquisition (Mick & Fournier, 1998).

4.3.3 | Reducing uncertainty, avoiding risk, and seeking control

Fear-like emotional states, such as anxiety, trigger a strong motivation to reduce uncertainty and avoid risk. For example, as already mentioned, compared to sad or neutral-mood individuals, anxious individuals were found to prefer (a) higher-probability/

lower-payoff (lower-risk/lower-reward) gambles over lower-probability/higher-payoff (higher-risk/higher-reward) gambles, (b) lower-paying, more-secure jobs over higher-paying, less-secure jobs, (c) a very safe car over a luxurious car, and (d) staying at home to study rather than going out with an old friend on the eve of an examination (Raghunathan & Pham, 1999; Raghunathan et al., 2006). Interestingly, these effects tended to dissipate when the decision was made for someone else (Raghunathan & Pham, 1999), which is consistent with the notion that these effects are driven by self-regulatory goals.

Fear and anxiety also trigger a motivation to regain a sense of control and mastery. For example, participants made anxious by the threat of painful electric shocks displayed stronger preference for options that reinforced their illusion of control than did participants who did not face such a threat (Friedland, Keinan, & Regev, 1992). Similarly, in the Raghunathan et al. (2006) video-game study, compared to sad and neutral-mood participants, anxious participants tended to prefer the game called "Master of the Universe," which promised a sense of control and mastery, over the game called "Hello Chimpee!" which was described as emotionally comforting. Finally, consumers who feel anxious about new technologies often report trying to master the product (i.e., dominate it by thoroughly learning how to use it) as a coping strategy (Mick & Fournier, 1998).

4.4 | The regulation of anger

The main appraisal underlying anger is the presence of some aversive stimulation that is typically attributed to someone else, accompanied by a subjective feeling of high legitimacy (Lazarus, 1991; Roseman, 1984). Unique to anger is an action tendency that is antagonistic and commonly manifests in aggressive behavior (Frijda et al., 1989). The distinct appraisal meaning of anger, combined with its particular action tendency, activates rather unique regulatory strategies.

4.4.1 | Confrontative coping

A common regulatory behavior among angry consumers who feel wronged is to confront the party perceived to be responsible to attempt to alter the situation. Consumers who are angry over a product- or service-related problem are more likely to engage in aggressive efforts to get the responsible agent to rectify the problem—for example, displaying outward displeasure to customer service representatives in order to have products replaced or charge reimbursed (Bougie, Pieters, & Zeelenberg, 2003; Yi & Baumgartner, 2004). Confrontative behavior is more likely when the consumer can attribute the blame to the product or service provider. For example, consumers who blamed a restaurant for serving bad food were angrier, felt more deserving of an apology and a waiver of dining charges, and were more willing to hurt the restaurant's business than were consumers who saw the bad experience as beyond the restaurant's control (Folkes, 1984).

4.4.2 | Removing the aversive stimulation, including psychologically

Another common strategy for regulating one's anger is to get rid of the aversive stimulus that elicited the anger (e.g., moving a frustrating obstacle out of the way; throwing a malfunctioning product in the garbage). Interestingly, this strategy can be carried out psychologically, rather than physically, through various forms of consumption that remove the aversive stimulus from consciousness. In one study, participants who were provoked by disparaging comments made by an experimenter were given the opportunity to watch three types of television programs—a comedy, an action drama, and a game show (Zillmann, Hezel, & Medoff, 1980). Compared to control participants, participants who were provoked spent more time watching game shows, which are presumably more absorbing and distracting than the other forms of television programs. In another study, participants who were provoked by a hostile experimenter were shown one of several videos that differed in their distraction potential and aggressive content (Bryant & Zillmann, 1977). After watching the video, participants were given an opportunity to retaliate against the hostile experimenter. Those who watched the highly absorbing but nonaggressive video content (e.g., a game show) exhibited lower levels of anger and retaliatory behavior than participants who watched less distracting video content or aggressive video content.

Another means of mental removal of the aversive stimulus is the consumption of alcohol, which provides distraction by reducing self-awareness (Hull, Levenson, Young, & Sher, 1983). In one study, provoked participants were given or not given a chance to retaliate before they took part in an unrelated alcohol taste test (Marlatt, Kosturn, & Lang, 1975). Participants not given the opportunity to retaliate drank more alcohol than participants who were given such an opportunity. This is presumably because the former group needed some means to mentally get rid of the aversive stimulation, whereas the latter group did not, as they were able to take revenge on the provoker.

4.5 | The regulation of guilt

Guilt is a self-conscious emotion defined by the threatening appraisal of one's behavior failing to meet important personal or social standards (Tangney, Stuewig, & Mashek, 2007). People tend to feel guilty when they behave in a manner that has negative consequences for someone else and are concerned about how the behavior impacts the well-being of that individual (Tangney, 1991).

4.5.1 | Reparative action

Guilt triggers a strong motivation to take reparative action, especially toward the victim of the guilt-inducing behavior (Baumeister, Stillwell, & Heatherton, 1994; Tangney et al., 2007). A classic example is the strong urge that many adulterers have to confess their

marital infidelity to their spouse (Lawson, 1988). In Chile, there is a strong correlation between how guilty nonindigenous respondents feel about the country's historical treatment of indigenous minorities and these respondents' support for reparative actions (Brown, González, Zagefka, Manzi, & Čehajić, 2008).

In a consumer context, it was found that consumers who failed to purchase anything from a friendly salesperson tended to feel guilty toward this salesperson, and as a result planned on spending more money in the future with the same salesperson (Dahl, Honea, & Manchanda, 2005). The motivation to take reparative action when one feels guilty underlies the well-known "door-in-the-face" influence technique (Cialdini et al., 1975) in which the influencer first makes a large request (e.g., "Can you sign up to volunteer every Saturday at our soup kitchen?") that the respondent usually turns down, feeling somewhat guilty for declining to carry out this favor. The influencer then follows with a smaller request (e.g., "Could you at least contribute a little by donating some food?"), which the respondent tends to accept in order to alleviate his or her guilt (O'Keefe & Figgé, 1999).

4.5.2 | Self-image enhancement

Guilt also triggers a motivation to use various means to help restore one's perceived self-worth after failing to meet some important standards. One such means is to help others, even if they are unrelated to the source of one's guilt. There is ample evidence of increased prosocial behavior among people who feel guilty. In one study, participants who were induced with guilt by being led to believe that they had broken an experimenter's camera were subsequently more likely to help a passerby who had dropped her groceries compared to participants who were not induced with guilt (Regan, Williams, & Sparling, 1972). In another study, participants made to feel guilty using a similar manipulation were more likely to donate to a charity whose request stressed the obligatory aspect of donating ("you owe it to the children") compared to participants who were not guilty (Cunningham, Steinberg, & Grev, 1980).

People may also enhance their self-image by behaving in a virtuous way. Guilt can therefore be regulated through acts of moral cleansing. A well-known study shows that reminders of one's immoral behavior, which likely activate feelings of guilt, tend to increase self-cleansing behavior (e.g., using antiseptic wipes) as a symbolic means of "washing away one's sins" and restoring one's moral self (Zhong & Liljenquist, 2006). A follow-up study by the same researchers showed that after washing themselves, guilty individuals became less likely to help others, compared to guilty individuals who did not wash themselves. This finding suggests that the symbolic act of washing oneself reduces the need to alleviate one's guilt by acting in a prosocial or virtuous way. Reminders of one's immoral behavior have also been found to lower people's tendency to cheat and increase people's perceptions of being virtuous in their everyday lives (Jordan, Mullen, & Murnighan, 2011). Similarly, consumers who receive money obtained through public harm subsequently prefer spending it on virtuous, utilitarian products rather than frivolous, hedonic products (Levav & McGraw, 2009). Interestingly, the largest mosque in Lahore, Pakistan, is located close to the city's red-light district, which is anecdotally consistent with the connection between guilt and moral cleansing behavior (Kirmani, 2015).

Finally, recent research suggests that guilty individuals may additionally enhance their self-worth by striving for success. Guilty consumers were shown to be more willing to acquire self-improvement products (e.g., a mobile application that facilitates fitness performance) because guilt heightened their desire to be successful (Allard & White, 2015). Importantly, guilt increased willingness to pay (WTP) for self-improvement products in particular. For products that were merely mood-enhancing, guilt did not increase WTP more than other negative emotions did, consistent with the part-regulation principle.

4.6 | The regulation of shame and embarrassment

Another self-conscious emotion, shame is typically triggered by a serious failure or moral transgression (Tangney & Tracy, 2012). Unlike in guilt, where the focus of moral appraisal is the person's behavior ("I should not have done this"), in shame the object of moral appraisal is the entire self ("I am a total failure"; Lewis, 1971). Relative to shame, embarrassment is a milder self-conscious emotion typically experienced in response to public violations of social convention (e.g., social faux pas, tripping in public, addressing someone by the wrong name; Keltner & Buswell, 1997; Tangney & Tracy, 2012). While differing in intensity, shame and embarrassment are both characterized by an intense consciousness of how others would view one's defective self (Tangney & Tracy, 2012). As a result, the two states elicit largely similar regulation strategies.

4.6.1 | Avoiding social contact

Concern about others' negative evaluations tends to heighten people's desire to disappear from public exposure under states of shame or embarrassment. Participants who had performed either an embarrassing task (sucking on a pacifier) or a non-embarrassing task (feeling a rubber figure by hand) were asked to describe their task experience to an audience (Brown, 1970). They could choose among different formats for sharing their experience that varied in degrees of exposure to the audience (e.g., speaking directly to the audience while being video-recorded, making an audiotape recording, writing a statement). Choosing a format with greater exposure entailed a higher compensation. Compared to non-embarrassed participants, embarrassed participants were more likely to choose a format that reduced exposure to the audience even though it meant receiving a smaller compensation, but only when the audience would not be aware of participants' intentions to hide their embarrassment.

Consistent with these results, consumers imagining the purchase of an embarrassing product (an OTC medication for incontinence) in a physical store (i.e., in a public setting) reported a higher desire to escape the situation and avoid social contact than did consumers imagining making the same purchase online (in a private setting; Krishna, Herd, & Aydınoğlu, 2015). In other studies, neutral-mood

participants and participants made to feel embarrassed were asked to evaluate two sweater designs, one with a large, conspicuous Nike logo and one with a smaller Nike logo (Song, Huang, & Li, 2017). Compared to neutral-mood participants, embarrassed participants with low self-esteem tended to prefer the less conspicuous design, presumably to avoid attracting attention to themselves. Similarly, compared to neutral-mood participants, participants who were made to feel embarrassed tended to prefer sunglasses that were larger and had a darker tint, presumably because larger and darker sunglasses enabled them to hide their face (Dong et al., 2013).

4.6.2 | Restoring positive image

A more proactive strategy for regulating shame and embarrassment is to try to restore one's public image. In the Dong et al. (2013) study just mentioned, compared to non-embarrassed participants, embarrassed participants showed greater interest in cosmetics and facial moisturizers—that is, products that presumably made them look better and thus enhanced their self-image and helped them "save face." Interestingly, this strategy appeared to be more effective in reducing participants' felt embarrassment than the strategy of hiding behind dark glasses. However, this strategy may be more suited for individuals who have high self-esteem. In the previously mentioned Song et al. (2017) study, whereas low-self-esteem embarrassed participants tended to prefer the less conspicuous sweater design, high-self-esteem embarrassed participants tended to prefer the more conspicuous sweater design, presumably because they saw the large logo as a means to attract attention to themselves and restore their self-image.

4.7 | The regulation of disgust

Disgust is a visceral negative emotion that one experiences in response to things that one finds repulsive. Typical triggers of disgust include rotten food, bodily waste, visible signs of disease, cockroaches, and mutilated bodies. Disgust can also be elicited by severe moral transgressions such as rape, incest, and parental betrayal (Schnall, Haidt, Clore, & Jordan, 2008; Wheatley & Haidt, 2005). Disgust is characterized by physiological sensations of nausea in addition to feelings of revulsion. The main appraisal meaning of disgust is the proximity to a stimulus that is a potential source of pathogens and physical contamination, especially in case of oral ingestion (Rozin, Haidt, & McCauley, 2016). The disgust response evolved as a protection mechanism against disease-causing organisms (Tybur, Lieberman, Kurzban, & DeScioli, 2013). As a result, disgust is associated with a strong action tendency to reject, expel, or keep one's distance from the repulsive stimulus (Frijda et al., 1989; Lazarus, 1991). Not surprisingly, disgust is typically regulated through attempts to avoid, reject, or dispose of the repulsive object.

In a classic series of studies by Rozin, Millman, and Nemeroff (1986), participants expressed much lower intention to taste a piece of chocolate fudge that was shaped to look like dog excrement than to taste identical fudge shaped in the form of a disk or a muffin. Similarly, participants were much less willing to hold in their mouth a clean piece of rubber that looked like vomit than a clean rubber sink stopper of roughly the same size. Participants' willingness to drink a glass of apple juice decreased dramatically if a sterilized dead cockroach had been briefly dipped in the juice. Other studies show that compared to vegetarians who avoid eating meat for health-related reasons, vegetarians who avoid eating meat for moral reasons (e.g., a concern for the welfare of animals) experience greater disgust toward meat products, and as a result express stronger objection to eating meat (Rozin, Markwith, & Stoess, 1997). Further evidence of the strong avoidance response elicited by disgust comes from marketing studies showing that advertisements that promote avoidance of harmful behaviors (e.g., using illegal drugs, excessive exposure to sun) are more effective if they include disgust-eliciting content (Morales, Wu, & Fitzsimons, 2012).

Disgust-related avoidance can be observed even if the source of disgust is actually unrelated to the object under consideration. For example, when primed with uncertainty, which tends to make people more attuned to their feelings, participants who recently described a past experience in which they felt disgusted reported a lower WTP for a beverage than did participants who described a typical day in their lives (Faraji-Rad & Pham, 2017). In other words, under elevated uncertainty, incidental feelings of disgust caused an avoidance response that carried over to an object that was in fact unrelated to the original source of disgust—a pattern that we previously identified as displaced coping. It has been found that moral disgust similarly decreases the consumption of unrelated products (Chan, Van Boven, Andrade, & Ariely, 2014), which confirms the notion that moral disgust has similar effects as physical disgust. Lerner et al. (2004) further found that participants who were made to feel disgusted through an unrelated task subsequently exhibited lower WTP for products that they could acquire, again reflecting a motivation to avoid. In addition, disgusted participants set lower prices for products that they could sell, consistent with a motivation to expulse.

The strong avoidance elicited by disgust extends to objects that are merely touched by the repulsive source, as if a simple contact with a source of disgust resulted in a genuine contamination of the object. For example, people express much lower willingness to wear a blouse that has been cleaned if it previously belonged to someone they dislike than if it came from the rack of a used clothing store (Rozin et al., 1986). Similarly, in a consumer context, participants who saw a box of cookies touching a package of feminine napkins in a shopping cart were subsequently less willing to try the cookies than were participants who saw the same box of cookies not being touched by the package of napkins (Morales & Fitzsimons, 2007). In these studies, participants responded as if offensive properties of the aversive stimulus (the disliked person; the hygienic napkins) were transferred onto the target object (the blouse; the cookies) by mere contact—in spite of the fact that there was no logical possibility of contamination (the blouse was cleaned; the products in the shopping carts were packaged).

The disgust-driven aversion to symbolic contamination has important implications for retail settings, where it was found that the mere knowledge or belief that another consumer has touched a product decreases evaluations and purchase intentions for that product (Argo, Dahl, & Morales, 2006). In sum, the regulation of disgust involves a strong tendency to avoid and reject any object that is perceived to have some connection with the repulsive stimulus.

4.8 | The regulation of regret

The defining appraisal of experiences of regret is the realization that one's outcome would have been better if one had acted or decided differently (Zeelenberg & Pieters, 2007). Regret, therefore, involves counterfactual thinking wherein a present reality is compared to an unrealized alternative state of the world that might have happened had the person acted or behaved differently (e.g., regretting dropping out of college; Zeelenberg et al., 1998). Regret can arise from action, in which case the counterfactual is inaction or some undoing of the action (e.g., "I should not have married X"; "I should not have bought that expensive Ferragamo bag"); or it can arise from inaction, in which case the counterfactual is action (e.g., "I wish we had children when we were young"; "I wish I had bought that bag when it was on sale"; see Gilovich & Medvec, 1995). Regret often involves self-blame for causing the outcome and a strong desire to undo the current situation (Zeelenberg & Pieters, 2007).

4.8.1 | Undoing and reversing

To the extent that the outcome is modifiable, regretful individuals may attempt to undo the situation or reverse the previous decision. For example, in a study of women who underwent sterilization, the younger the women were when they originally had the procedure, the more likely they were to subsequently regret it, and the more motivated they were to seek to reverse the procedure (Curtis, Mohllajee, & Peterson, 2006). In another study, participants were asked to make a choice between two investment brokers, Broker A with a stronger track record and Broker B with a weaker track record. Of course, almost all participants chose Broker A. Subsequently, participants were informed that their investment value had recently either increased by 15% or decreased by 15%. Compared to participants whose investment performed well, participants whose investment value recently dropped reported strong regret and were more likely to switch to Broker B with a poorer track record (Ratner & Herbst, 2005). Studies have generally found that consumers who experience regret about their decision to use a service provider tend to switch to another service provider, or terminate this service altogether (Zeelenberg & Pieters, 1999, 2004). It is theorized that attempts to undo or reverse regretted decisions are more likely in regret from action than in regret from inaction. In other words, we may be more likely to divorce someone we regret marrying than to marry someone we regret not marrying (Gilovich & Medvec, 1995).

4.8.2 | Learning from the situation in preparation for the future

When the regret-evoking situation cannot be changed, people may try to apply what they learned from the current situation in preparation for similar future situations. Indeed, a major function of regret is to motivate adjustment for the future (Lecci, Okun, & Karoly, 1994). In a series of experiments, children of different ages were asked to make a choice (O'Connor, McCormack, & Feeney, 2014). The attractiveness of the unchosen option was manipulated to vary the subjective "quality" of the decision in terms of revealed outcomes. In the baseline condition, the unchosen option was as attractive as the chosen option, whereas in the regret condition the unchosen option was much more attractive, thereby suggesting a "bad" decision. The results show that regret from a poor decision was much more common among 9-year-olds than among 5-year-olds, with 7-year-olds in between. Moreover, experiencing regret after the first decision was a strong predictor of whether a child would adaptively switch his decision when presented with the same decision the following day. Overall, these results show that decision regret is acquired developmentally and helps improve one's decisions over time.

It has also been found that regret from passing on an opportunity (inaction regret) tends to motivate people to seize the next opportunity. In one study, undergraduates who were told that a campus bookstore sale that they missed would be unlikely to occur again experienced more regret than those who were told that a similar sale would be held the following week. As a result, the former group expressed stronger intentions than the latter group to attend a similar sale in the future (Patrick, Lancellotti, & Demello, 2009). In another study, participants who experienced regret about missing out on indulging in their distant past were more likely to choose chocolates over cash as their reward for participating in the study (Keinan & Kivetz, 2008).

4.8.3 | Reappraisal

When the situation cannot be undone, regretful individuals may try to come to terms with the outcome by reappraising the situation for which they carry some responsibility. For example, consumers who experience regret from purchasing products that turned out to be inferior tend to cope by reinterpreting this situation in a positive light (e.g., "I learned what my preferences are"; Yi & Baumgartner, 2004). Regretful individuals may also reappraise the situation by absolving themselves of responsibility for the regretted decision. For example, they might justify their decision (e.g., "If I knew then what I know now, I would have chosen differently, but I did not know this") or attribute blame for their decision to someone else (e.g., "The salesperson should have known better as the expert"; Zeelenberg & Pieters, 2007). Finally, reappraisals may take the form of devaluing the forgone alternative. A consumer who is not enjoying her chosen vacation in Paris may tell herself that had she gone to London

instead, it probably would have been raining anyway. However, this devaluation strategy is unlikely if the forgone alternative is blatantly superior to the chosen alternative (Van Dijk & Zeelenberg, 2005).

4.8.4 | The regulation of anticipated regret

Whereas the previously mentioned strategies relate to the regulation of regret from past actions and decisions, people may also act to preempt anticipated regret from materializing in the future. People exhibit a strong aversion to anticipated regret, especially when they expect to receive outcome feedback on the rejected alternatives (Zeelenberg, 1999). The anticipation of future regret appears to be a strong motivator of behavior. For example, people who anticipate regret if they do not exercise sufficiently are more likely to act on their intention to exercise (Abraham & Sheeran, 2003). Similarly, people who anticipate regret if they fail to participate in a national lottery are more likely to participate (Sheeran & Orbell, 1999).

One strategy that consumers use to avoid future regret is to buy better-known, higher-priced brands rather than lesser-known, lower-priced brands. This is because consumers are more likely to blame themselves if they choose a lesser-known, cheaper brand that turns out to be very poor than if they choose a better-known, more expensive brand that turns out not to be significantly superior (Simonson, 1992). More generally, consumers may prevent future regret by exercising greater care in their decisions (e.g., collecting more information, spending more time) or by ensuring that the outcome can be reversed (e.g., buying extra warranty coverage; ensuring that a purchase can be returned; Reb, 2008; Zeelenberg & Pieters, 2007). Finally, consumers may cope with anticipated regret from difficult decisions by having someone else make the decision for them, which helps diffuse their decision responsibility (Steffel & Williams, 2018).

4.9 | The regulation of one's arousal

Affective states are characterized not just by their appraisal-generated meaning structure but also by their level of arousal (Russell, 1980). For example, anger, anxiety, and joy are characterized by high levels of arousal, whereas sadness, boredom, and relaxation are characterized by low levels of arousal. When consumers find their current level of arousal unpleasant, they tend to regulate their arousal to a more pleasant level (Di Muro & Murray, 2012). This regulation can take two different forms: (a) a reduction of the level of arousal, as in stress and tension release, or (b) an increase of the level of arousal, as in positive stimulation. Both of these are generally consistent with the part-regulation principle.

4.9.1 | Stress and tension release

Certain high-arousal states such as stress and anger are clearly unpleasant. As a result, consumers use a variety of strategies and means to reduce the level of arousal and tension that accompanies these states. A widespread strategy is the consumption of various tension- and mood-regulating substances such as smoking cigarettes, drinking alcohol, and taking certain drugs (Thayer et al., 1994). In a study on drinking problems, Cooper, Frone, Russell, and Mudar (1995) interviewed large representative samples of adolescents and adults in order to examine their alcohol consumption in response to negative emotions. The authors found that one of the most significant predictors of alcohol use and drinking problems, especially among adolescents, was respondents' expectations of tension release through alcohol.

Another common strategy for reducing tension and alleviating stress is exercising. Interpretive consumer research has shown that "working out" is frequently employed as a mood-regulation strategy (Kacen, 1994). Interviewees reported that exercising not only distracted them from their negative mood, it also allowed them to release their negative tension. In a survey of 300 adult respondents covering a broad range of demographics and occupations, about 44% reported using exercise as a means of reducing tension (Thayer et al., 1994). These respondents found exercising to be one of the most effective strategies for tension reduction. There is robust clinical evidence that physical exercise indeed improves people's resistance to stress (Salmon, 2001).

Another strategy is through exposure to calming stimuli and consumption of various products—besides alcohol, tobacco, and medical drugs—that are psychologically relaxing. A large industry—from aroma candles, soothing music, relaxation videos, massage places, yoga studios, to books on meditation techniques—has flourished around promises of tension release and relaxation (see Pham, Hung, & Gorn, 2011). Studies show that such promises do indeed appeal to consumers under stress. For example, Bryant and Zillmann (1984) found that participants induced into a state of stress tended to watch more relaxing television programs (e.g., underwater nature scenes) than did participants induced into a state of boredom. Similarly, Di Muro and Murray (2012) found that participants induced into a negative mood with high arousal level were more likely to choose an iced tea (a low-arousal product) over an energy drink (a high-arousal product). Recent studies show that a new form of stress and tension release is the use of one's mobile phones. Mobile phones appear to function as comfort objects that people naturally turn to, especially when stressed and anxious—a proposition Melumad and Pham (2018) call the "adult pacifier hypothesis." Consistent with this hypothesis, Melumad and Pham (2018) show that consumers' use of mobile phones increases under stress and that the use of one's mobile phone helps alleviate a person's stress better than the use of comparable electronic devices such as a laptop.

4.9.2 | Seeking stimulation

Certain low-arousal states such as boredom and physical and mental fatigue are also unpleasant. It is therefore common among consumers to attempt to regulate such states through some form of stimulation. Classic examples would be the consumption of caffeine (coffee, tea, soda, energy drinks), tobacco, and drug stimulants (e.g., cocaine, amphetamines). In the earlier-mentioned research, Di Muro and Murray (2012) found that low-arousal participants who were in a negative mood were indeed more likely to choose an energy drink

over an iced tea. It is therefore not surprising that very large industries—some of them illegal—have developed around the marketing of various stimulants.

Another source of stimulation and energy is physical exercise. In Thayer et al.'s (1994) previously mentioned survey, about 28% of the respondents indicated using exercise as a means to enhance their energy levels when feeling tired, rather than releasing tension. Just as exercise was perceived to be highly successful at reducing tension, it was also perceived to be highly successful at raising energy levels. In a field experiment conducted over 12 days, participants were randomly assigned to either eating a candy bar or walking briskly for 10 min on different days. Participants' levels of energy and tiredness were assessed before and after the two activities (Thayer, 1987). Compared to eating the candy bar, brisk walking was associated with increased levels of energy and reduced tiredness for as much as 2 hr.

Low-arousal states can also be offset through exposure to stimulating media content (Zillman, 1988). Consistent with this proposition, bored participants tended to watch more exciting television programs (e.g., adventure drama) than did stressed participants (Bryant & Zillmann, 1984). Moreover, bored participants experienced increased heart rates and reported greater levels of enjoyment after watching the more exciting television programs, suggesting that their behavioral inclination was effective in regulating their affective state. Based on an introspective analysis, Gould (1991) made a parallel prediction that consumers experiencing a low state of sexual arousal may try to accentuate their sexual energy by watching pornography or consuming aphrodisiacs.

Sleepy individuals seeking to maintain a state of wakefulness tend to stimulate themselves by choosing more variety (Huang, Liang, Weinberg, & Gorn, 2018). In a field study, people were found to purchase a greater variety of candy bars during a shift to daylight saving time (which shortens the night, thus increasing sleep deprivation) than when there was no time change. It was additionally found that morning-type participants, who tend to be more energetic in the morning, chose more variety of candy bars in the evening than in the morning, whereas evening-type participants, who tend to be more energetic later in the day, chose more variety of candy bars in the morning than in the evening.

An important determinant of consumers' desire for stimulation besides a low level of arousal and energy is their optimal level of stimulation or arousal (Zuckerman, 1971). Whereas typical low-arousal consumers might be content with mundane forms of stimulation such as drinking coffee or exercising, individuals whose optimal levels of stimulation are higher may prefer more intense activities such as listening to rock music, taking part in extreme sports, gambling, or even experimenting with drugs (Zuckerman, 1971).

5 | THE REGULATION OF POSITIVE AFFECTIVE STATES

People do not just up-regulate negative affective states, they also attempt to maintain or prolong their positive affective states (Andrade, 2005; Labroo & Mukhopadhyay, 2009; Wegener & Petty, 1994)—a proposition originally known as the (positive) mood maintenance hypothesis (Isen & Simmonds, 1978). However, as elaborated on in section 6.1, the evidence of actual efforts to prolong and maintain positive affective states is not as unequivocal and consistent as the evidence in support of the upward regulation of negative affective states. Part of the difficulty with the existing evidence is that it is not always clear whether a given behavior observed under a positive affective state indeed reflects a conscious or at least tacit attempt to regulate the affective state, or is merely the by-product of some other, possibly more automatic processes (Schaller & Cialdini, 1990), such as distorted perceptions, differential thought accessibility, and social norms (Bower, 1981; Isen, Shalker, Clark, & Karp, 1978). With this caveat in mind, we now review evidence of efforts to maintain or prolong positive affective states. These efforts can be broken down into behavioral strategies and mental strategies (Table 4).

5.1 | Behavioral strategies

5.1.1 | Self-indulgence

A number of studies show a general pattern of increased self-indulgence under positive mood that could be interpreted as consistent with a mood-maintenance motive. For example, in an

TABLE 4 The regulation of positive affective states

Proposition 23	People do not just up-regulate negative affective states, they also attempt to maintain or prolong their positive affective states
Proposition 24	There exist generic strategies for the regulation of positive affective states in general. Some are behavioral; some are mental
Proposition 25	The main generic behavioral strategies for the regulation of positive affective states are (a) self-indulgence, including food consumption and impulse buying; (b) disinhibition and "just having fun"; (c) selective consumption of pleasant media content, including social media; (d) self-image enhancement; and (e) social sharing
Proposition 26	The main generic mental strategies for the regulation of positive affective states are (a) selective processing of positive as opposed to negative information; (b) savoring the moment; and (c) the self-generation of positive thoughts

early study, elementary school children who were led to believe that they had succeeded in an achievement task—and were therefore presumably in a good mood—were found to reward themselves more than children who were led to believe that they had failed the task and children in a control group (Mischel, Coates, & Raskoff, 1968).

One form of self-indulgence often associated with positive mood is food consumption. Several studies show an increase in food consumption, especially of unhealthy food, under positive affective states. In laboratory experiments, participants induced into a positive mood ate more snacks (e.g., M&Ms, peanuts, biscuits) during an apparent taste test compared to neutral-mood participants (Evers, Adriaanse, de Ridder, & de Witt Huberts, 2013). In a follow-up, week-long study, participants were asked to keep a daily food diary recording every instance of eating something unhealthy between meals. For each entry, they were asked to additionally report how they were feeling right before snacking. Episodes of unhealthy snacking were much more likely to be preceded by positive emotions than by negative emotions. Bongers, Jansen, Havermans, Roefs, and Nederkoorn (2013) found a similar increase in food consumption under positive mood compared to a neutral mood, but unlike in Evers et al. (2013), this effect was found only among participants prone to emotional eating. Related results were obtained by Labroo and Mukhopadhyay (2009), who found that a positive mood increased the likelihood that participants would choose a chocolate bar over an apple as a snack. However, this effect held only among participants who were led to think of their mood state as fleeting—a contingency consistent with the notion that positive-mood participants chose the chocolate bar as a means to prolong their mood, which they saw as fleeting.

However, in the Garg et al. (2007) studies reviewed earlier, happy participants were found to consume *lower* amounts of unhealthy snacks (popcorn and M&Ms) than sad and neutral participants, which is inconsistent with the pattern of positive-mood-induced indulgent eating observed in the studies we just mentioned. According to Garg et al. (2007), positive-mood participants in their studies may have been concerned about consuming unhealthy snacks and therefore avoided them in order to protect their mood. In addition, it should be noted that the findings of increased indulgent eating under positive mood are not inconsistent with the findings of increased indulgent eating under negative mood, especially sad mood, reviewed in Section 4.2.2. In fact, in all the studies we just discussed (Bongers et al., 2013; Evers et al., 2013; Garg et al., 2007; Labroo & Mukhopadhyay, 2009), there was also evidence of increased indulgent consumption under negative affective states, relative to neutral states. Therefore, it appears that both positive mood and negative mood, especially sad mood, can increase food indulgence.

Another form of indulgence is impulse buying, which many consumers find self-gratifying. It thus provides a natural means of extending a positive affective state. In an exploratory study of 155 consumers who were asked about the last time they bought something "on impulse," almost all respondents (94%) indicated that the impulse was a response to a positive affective state (Rook & Gardner, 1993). The median amount spent on impulse by positive-mood buyers was $131, whereas the amount spent by negative-mood (retail-therapy) buyers was $50. In a field experiment, shopping experience and buying behavior were compared between two stores, one with a pleasant atmosphere (freshly renovated, nice layout, bright colors) and one with a less pleasant atmosphere (old, confusing layout, dim colors). Shoppers in the pleasant store experienced an improvement in their mood, whereas shoppers in the unpleasant store experienced a decline in their mood (Spies, Hesse, & Loesch, 1997). Among shoppers in the pleasant store, positive mood in turn led to higher expenditures on spontaneous purchases, especially on items that the shoppers liked. Shoppers who were in a good mood because of the pleasantness of the store were therefore more likely to engage in impulse buying and indulge themselves. As noted previously, popular feel-good purchases in affect regulation include clothing, followed by cosmetics and fragrances (Gould, 1997).

5.1.2 | Disinhibition and "just having fun"

Besides indulging in food, people in positive moods appear to be eager to let themselves go, act in a more carefree manner, and just "have fun." A prominent way in which this regulatory orientation manifests is in the consumption of alcohol when people are in a positive mood (Cooper et al., 1995). It is well established that one of the primary motivations for alcohol consumption is the enhancement of one's positive feelings (Cooper, 1994). Studies show that positive moods and the priming of positive affective concepts increase the positive-feeling-enhancement motivation to consume alcohol (Birch et al., 2004; Stewart, Hall, Wilkie, & Birch, 2002). It is therefore not surprising that college students drink substantially more alcohol during vacation periods and national holidays compared to regular school days (Del Boca, Darkes, Greenbaum, & Goldman, 2004). Of course, the enhancement of positive affect is not the only motivation behind alcohol consumption. According to Cooper (1994), the other main motivations are the ability to socialize, social conformity, and, as discussed before, the up-regulation of negative affect.

Another way in which positive-mood individuals appear to let themselves loose and just have fun is through moderate risk-taking and gambling. In a classic study, participants in a positive mood were found to place higher bets in a game of roulette than participants in a neutral mood, but only when the risk of losing was low or medium (Isen & Patrick, 1983). When the risk of losing was high, positive-mood participants tended to place lower bets than those in a neutral mood. Similar results were obtained in a subsequent study by Isen and Geva (1987), which found that compared to neutral-mood participants, participants in a positive mood were more risk-seeking when the stakes of the gamble were low, but more risk-averse when the stakes were high. Isen and her colleagues interpreted these findings as exemplary of the effects of positive mood on decision making under risk and consistent with a mood maintenance hypothesis: A positive mood motivated participants to take more risk as a means to prolong the mood, but if there was a chance that the mood could be ruined by a loss, then positive-mood participants became more risk-averse in order to protect their mood.

Our interpretation of these results, while broadly consistent with this original explanation, is slightly different. We suspect that these behavioral tendencies are not specific to decisions under risk but instead reflect a broader tendency to be playful and have fun when in a good mood, not unlike when people drink alcohol. Consistent with our playfulness interpretation, Arkes, Herren, and Isen (1988) observed that positive mood increased participants' willingness to play various lotteries, regardless of the lotteries' prizes and probabilities. The authors noted that this finding was in line with their observation that lottery ticket sales in their region typically increased following a win by the local football team. In contrast, in another study the authors found that in decisions framed in terms of buying insurance, positive-mood participants were more risk-averse. Overall, these findings suggest that it is not risk *per se* that positive-mood individuals seek to approach or avoid, but rather opportunities to play and have fun, as with common lotteries.

5.1.3 | Selective consumption of pleasant media content

A third strategy that people appear to use to prolong positive affective states is to selectively consume media content that they expect to be pleasant (e.g., funny YouTube videos; television comedies). In one study, participants induced into a happy, sad, or neutral mood were asked to rank different videotapes in terms of how much they would like to watch them later in the session (Wegener & Petty, 1994). Compared to sad participants and neutral-mood participants, happy-mood participants provided higher ranks to videos that were described as "happy." Videos described as "interesting" or "useful" did not appeal as much to happy-mood participants. In a subsequent study, Wegener, Petty, and Smith (1995) found that happy-mood participants had a deeper level of processing of a news article if they expected that the article would make them feel happy than if they expected the article would make them feel sad. Wegener and Petty (1994) explained similar findings in terms of a variant of the mood maintenance hypothesis, called the hedonic contingency hypothesis. According to this hypothesis, compared to negative-mood individuals, positive-mood individuals should be more likely to scrutinize the hedonic impact of stimuli, because fewer stimuli are likely to be rewarding enough to enable them to maintain their positive mood states. Handley, Lassiter, Nickell, and Herchenroeder (2004) obtained similar results in a study using video titles containing neutral words that had been previously nonconsciously associated with either positive or negative valence. Again, happy participants provided higher ranks to videos that were associated with positive valence than did sad participants and neutral-mood participants. However, other results suggest that any form of mood regulation—not just efforts to maintain positive moods—tends to encourage a preference for movies expected to elicit positive affect (Caruso & Shafir, 2006). According to a 2009 survey, the preferred form of media consumption when in a positive mood—at least among college students—was listening to music, which came substantially ahead of television (Greenwood & Long, 2009). As mentioned earlier, we believe that in recent years new forms of media consumption have emerged in affect regulation, namely, social media and mobile phone use (Melumad & Pham, 2018).

5.1.4 | Self-image enhancement

Just as sad people may try to feel good about themselves by helping others, people who are already in a positive affective state may do the same in order to prolong their positive state. In a classic study, participants who found a dime left in a telephone booth (and thus were presumably in a good mood) were more likely to help a stranger pick up documents that she had dropped on the floor, compared to participants who did not find a dime in the telephone booth (Isen & Levin, 1972). In a subsequent study, participants who found a dime in the telephone booth were more likely to mail a letter that was apparently left behind by accident than were participants who did not find a dime (Levin & Isen, 1975). A meta-analysis by Carlson, Charlin, and Miller (1988) shows that the relationship between positive mood and helping is substantial, with an average effect size of $d = 0.54$. This analysis additionally shows that the relationship between positive mood and helping increases with the pleasantness of the helping task. This pattern is consistent with a mood-maintenance explanation in that positive-mood individuals concerned with maintenance should logically help only to the extent that the helping task contributes positively to their current mood. Similar results were obtained in a consumer study in which participants who were in a good mood, neutral mood, or bad mood after watching a video were compared in terms of their willingness to complete a survey in exchange for a free beverage (Andrade, 2005). Compared to neutral-mood participants, participants in a positive mood were more willing to complete the survey if it was short, and presumably unlikely to disrupt their positive mood, but less willing to complete the survey if it was long, and therefore likely to disrupt their positive mood.

It should be noted, however, that some other findings raise questions about the mood maintenance hypothesis as a general explanation for the increased helping typically observed under positive affective states. For example, in a well-known study by Manucia et al. (1984), the researchers found increased helping among positive-mood participants regardless of whether participants expected their mood to be changeable. Under a mood-maintenance explanation, positive mood should have increased helping only to the extent that helping could have an effect on participants' mood. This finding and others have led Schaller and Cialdini (1990) to argue that the increase in helping typically observed among positive-mood individuals is not actually the product of conscious mood regulation, but rather the result of more automatic processes.

Besides helping others, positive-mood individuals may also boost their self-image by engaging in betterment activities that help provide a sense of personal growth and development (e.g., finishing a work project; acquiring new skills; practicing an instrument). In a diary study, student participants were asked to detail everything they did the previous day, including their use of different positive mood-regulation strategies (Livingstone &

Srivastava, 2012). More than 60% of the episodes described involved betterment activities as a means to generate, maintain, or intensify positive affect. Examples included using one's talent to accomplish something, completing something one has been putting off, working on a hobby, and engaging in religious activity.

5.1.5 | Social sharing

Another approach for prolonging one's pleasant affective state is to share one's positive experiences with others, a strategy that has been greatly facilitated by the development of social media platforms such as Facebook. Studies show that communicating and celebrating positive events with others increases one's positive affect above and beyond the impact of the positive event itself (Gable, Reis, Impett, & Asher, 2004; Langston, 1994; Reis et al., 2010). These studies document three main mechanisms explaining the phenomenon. First, sharing a positive event with someone else helps prolong people's positive affect by allowing them to relive the event and strengthen their memory of it. Second, sharing a positive event with others and receiving positive feedback from them further elevates the personal significance of this event. Finally, sharing happy news with someone who really cares about us and shows a genuine happiness for us provides rewarding feedback that reinforces the relationship.

5.2 | Mental Strategies

The regulation of positive affective states also involves mental strategies, including (a) a selective processing of positive information at the expense of negative information; (b) an attentional focus on and savoring of one's positive experience; and (c) a self-generation of positive thoughts.

5.2.1 | Selective processing of positive versus negative information

It has been suggested that the motivation to preserve a positive mood encourages a preferential attention to and greater willingness to process positive over negative information, since the latter could disrupt the positive mood (Isen, 1987). Consistent with this proposition, it was found that college students who had received positive feedback on a supposed intelligence test—and were therefore presumably in a good mood—were much more willing to review positive information about themselves than negative information (Mischel, Ebbesen, Zeiss, & Raskoff, 1973). Similarly, participants who had found or not found a dime left in a telephone booth were assessed in terms of their willingness to read a number of statements that were described as either positive-mood-inducing or negative-mood-inducing. Compared to participants who had not found a dime, those who had found a dime (and were presumably in a better mood) read more positive statements and fewer negative statements (Isen & Simmonds, 1978). Using a more controlled experimental paradigm to assess attentional bias, Tamir and Robinson (2007) found that positive mood states increased selective attention to words that were rich in high-arousal positive affect (e.g., "reward," "victory," "love") relative to words that were neutral (e.g., "document," "history," "table").

Overall, there is some evidence suggesting that positive mood encourages selective processing of positive information at the expense of negative information, which would appear to support a mood maintenance hypothesis. However, it should be noted that this evidence is not very strong. In fact, there is also substantial evidence of positive mood having the opposite effect of encouraging the processing of negative information (Aspinwall, 1998). For example, several studies documented a greater willingness to review negative information under positive mood than under negative mood, provided that this information is helpful (Raghunathan & Trope, 2002; Trope & Neter, 1994; Trope & Pomerantz, 1998). According to these authors, positive mood can serve as a protective buffer against negative information, enabling positive-mood individuals to bear the hedonic costs of acquiring negative information that is useful.

5.2.2 | Savoring the moment

Positive affective states can be extended by directing attention to one's pleasant experience and savoring the moment (Bryant & Veroff, 2007). Being mindful of one's sensations, perceptions, thoughts, feelings, and behaviors during a positive experience enables one to generate, intensify, and prolong enjoyment of the experience (Bryant, Chadwick, & Kluwe, 2011). For example, foodies at a Michelin star restaurant may accentuate their pleasure by immersing themselves in the experience and concentrating on the tastes, textures, scents, and visual presentation of the food. People who are more inclined to savor positive life events tend to experience happiness more intensely and frequently in their lives (Bryant, 2003; Jose, Lim, & Bryant, 2012; Quoidbach, Berry, Hansenne, & Mikolajczak, 2010). For example, it was found that students' proneness to savor the moment was a substantial predictor of their subsequent enjoyment of a Christmas vacation (Bryant, 2003).

5.2.3 | Self-generation of positive thoughts

Just as individuals in a negative mood may recall positive memories to up-regulate their mood, individuals in a positive mood may do the same to maintain or prolong their mood. People often reminisce about pleasant memories as a means to experience positive affect (Bryant, 2003; Bryant et al., 2005; Quoidbach et al., 2010). Although this strategy is more frequently used to up-regulate negative moods, it is occasionally used among positive-mood individuals as well (Bryant et al., 2005). This strategy has been found to be effective at lifting people's mood. Participants in a field experiment were randomly assigned to either reminisce about pleasant memories or think about current concerns, twice a day over the course of a week (Bryant et al., 2005). Compared to the control participants, participants who reminisced about pleasant memories twice a day reported a significant increase in happiness over the week.

TABLE 5 Search results for negative and positive affect regulation terms in academic articles

	Negative affect regulation		Positive affect regulation	
Search terms	Web of science	Google scholar	Web of science	Google scholar
"__Affect regulation"	29	796	26	580
"__Mood regulation"	137	3,260	4	97
"__Emotion regulation"	39	1,450	56	1,450
Total	205	5,506	86	2,127

Although this strategy has yet to be documented as a positive-mood-maintenance strategy, there is evidence that people may also regulate their mood states by imagining possible future experiences that are pleasant (e.g., spending a romantic weekend away; discovering a beautiful waterfall)—a strategy that has been called positive mental time travel (Quoidbach et al., 2010). In one study, over a period of 2 weeks, participants were asked once a day to imagine four positive events that could plausibly happen to them the following day (e.g., receiving a sweet SMS from an ex-boyfriend). Compared to control participants, participants who completed this positive imagination task once a day experienced a significant increase in happiness over the 2-week period (Quoidbach, Wood, & Hansenne, 2009).

6 | CONTINGENCIES OF AFFECT REGULATION

The general principles of affect regulation reviewed in the preceding sections need to be complemented by several important qualifications about (a) the asymmetry in the regulation of negative versus positive affect; (b) critical moderators of affect regulation; and (c) the possibility of downward regulation of affect.

6.1 | Asymmetry in the regulation of negative and positive affect

As documented by this review, there is evidence of both efforts to alleviate negative affective states and effort to maintain and prolong positive affective states. However, it is our overall assessment that the evidence in support of positive mood maintenance and other efforts to prolong positive affective states is not as strong and consistent as the evidence of upward regulation of negative affective states. In line with this assessment, recent searches on Web of Science and Google Scholar for academic articles on affect regulation reveal more than twice as many articles about the regulation of negative affective states as articles addressing the regulation of positive affective states. As summarized in Table 5, searches of articles using the phrases "negative affect regulation," "negative mood regulation," and "negative emotion regulation" retrieved a total of 205 articles on Web of Science and 5,606 articles on Google Scholar. In comparison, searches of articles using the phrases "positive affect regulation," "positive mood regulation," and "positive emotion regulation" retrieved 86 articles on Web of Science and 2,127 articles on Google Scholar. Of course, the number of research articles on a given phenomenon is not a direct indicator of its substantive significance. Still, these bibliographic results are consistent with our observation that evidence of individuals repairing negative affective states is much more prevalent than is evidence of individuals maintaining or extending positive affective states.

Empirical studies that allow a more direct comparison of the relative prevalence of negative-affect-alleviation efforts and positive-affect-maintenance efforts tend to confirm the asymmetry. In studies examining antecedents of certain affect-regulatory behaviors, people tend to report the behaviors more frequently in relation to the alleviation of negative states than in relation to the maintenance of positive affective states. In a study in which consumers were asked to describe their most recent self-gifting experience, 48% reported doing so to cheer themselves up when they felt down, and only 13% reported doing so to maintain a good mood (Mick & DeMoss, 1990). Similarly, in a study investigating typical situations in which people reminisced about pleasant memories, 36% of the participants reported reminiscing when they experienced negative affect, and only 10% reported reminiscing when they experienced positive affect (Bryant et al., 2005). A more recent cross-cultural study of college students' emotion regulation strategies in response to a negative event also reveals stronger efforts to down-regulate negative emotions than to up-regulate positive emotions (Miyamoto, Ma, & Petermann, 2014).

Further support for our assessment can be found in studies where both positive and negative affective states were manipulated in addition to a neutral mood. For instance, in Forgas's (1991) previously mentioned study it was found that compared to neutral-mood participants, sad-mood participants were more likely to select a teammate based on the person's socioemotional and interpersonal qualities, which can be interpreted as an attempt to seek alternative sources of reward—a common strategy in the regulation of sadness (see Section 4.1.1). In contrast, positive-mood participants did not exhibit a similar effect, suggesting that they did not seek the potentially mood-preserving benefits of a socially rewarding teammate. In another experiment, participants who were induced in a sad, happy, or neutral mood were given an opportunity to help a confederate by making some phone calls (Manucia et al., 1984). Half of the participants were led to believe that a placebo drug that they had just been administered would freeze their mood temporarily—thereby eliminating the incentive to regulate their mood; the other half were not led to expect any mood-related side effects of the drug. Compared

to neutral-mood participants, sad-mood participants were more likely to help, but only if they did not expect that their mood was temporarily fixed by the drug. If they expected that their mood was temporarily fixed because of the drug, sad participants did not help more than neutral-mood participants. This contingency suggests that the observed increase in helping among sad-mood participants was the result of a conscious attempt to improve the sad mood when it was not presumed to be fixed. In contrast, among positive-mood participants there was an increase in helping (relative to the neutral-mood condition) regardless of whether they expected their mood to be fixed or labile. The absence of contingency in the positive-mood condition is not consistent with the notion that positive mood increases helping as a result of an intentional effort to prolong the positive mood state.

Although our assessment is preliminary and deserves further investigation, we believe that the asymmetry in propensity to up-regulate positive and negative affective states is broadly consistent with the stronger impact that bad events generally have compared to good events (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001). From an evolutionary perspective, it is adaptive to be more attuned to negative stimuli and situations that could threaten one's survival than to positive stimuli and situations that merely signal the possibility of favorable outcomes. Not surprisingly, people use many more strategies to escape bad moods than to bring on good moods (Baumeister et al., 2001).

6.2 | Beyond the hedonic principle: the downward regulation of affective states

The affect regulation strategies reviewed thus far all respect a simple hedonic principle: When feeling bad, try to feel better; and when feeling good, try to remain in that pleasant state. However, individuals may regulate their affective states for reasons *other* than hedonic aspirations. Certain situational considerations may supersede people's hedonic tendency to strive for positive states, thereby causing them to down-regulate affective states (Table 6).

One set of considerations that can override hedonic aspirations in affect regulation are *feeling rules:* socially shared guidelines about how people are expected to feel in a given situation (Hochschild, 1979). For instance, most people believe that they should feel happy on their wedding day, that they should feel depressed when a relative passes away, or that they should contain their anger when in a professional setting. Feeling rules thus provide alternative standards—apart from hedonic aspirations—against which people can assess their current affective states and direct their regulation efforts. If feeling rules indicate that positive affective states are inappropriate in a given situation (e.g., when attending a funeral), people may down-regulate their positive affective states to render these states more suitable to the situation. Similarly, if feeling rules indicate that negative affective states are inappropriate (e.g., when attending a friend's wedding), people may up-regulate their negative affective states to render these states more acceptable.

In one study, participants who were induced in a good mood or a bad mood were asked to rate how much they would like to read different articles with titles implying cheerful, neutral, or depressing stories (Erber et al., 1996). If participants expected to have to interact with another person, happy participants tended to select depressing stories, whereas sad participants tended to select cheerful stories. Hence, both happy and sad participants appeared to attempt to neutralize their preexisting moods in anticipation of a social interaction with a presumably neutral-mood person. In a similar study, female participants were who provoked by an experimenter and expected

TABLE 6 Contingencies in affect regulation

Proposition 27	The motivation to alleviate negative affective states is more prevalent and powerful than is the motivation to prolong positive affective states
Proposition 28	Affect-regulation efforts may deviate from a hedonic principle when situational considerations supersede the person's hedonic aspirations
Proposition 29	Three types of situational considerations may supersede hedonic aspirations in guiding affect-regulation efforts: (a) conformance with feeling rules; (b) a desire to align with a certain social identity; and (c) a need to adopt an emotional state conducive to task performance
Proposition 30	Affect regulation is more likely when the current affective state and the desired affective state are salient
Proposition 31	Affect regulation is more likely when people expect their regulation efforts to be successful
Proposition 32	Affect regulation is more likely among high-self-esteem individuals than among low-self-esteem individuals
Proposition 33	Affect regulation is more likely among women than among men
Proposition 34	Affect regulation is more likely among older adults than among younger adults
Proposition 35	Affect regulation is more likely among people from individualistic cultures than among people from collectivistic cultures
Proposition 36	Affect regulation is more likely among people with a high need to feel better (NFB) than among people with a low need to feel better

to subsequently have to evaluate this experimenter spent more time reading positive news articles than did those who did not expect to have to evaluate the experimenter (Knobloch-Westerwick & Alter, 2006). This is presumably because women participants found it inappropriate to display some form of aggression, and therefore, they attempted to dissipate their anger before rendering the expected evaluation of the offending experimenter.

Besides conforming to situational feeling rules, people may also be inclined to embrace emotional states that are seen as supportive of desired social identities (Coleman & Williams, 2013). For example, people tend to perceive anger as appropriate for an athlete because an athlete's identity revolves around overcoming obstacles. On the other hand, sadness may be seen as more fitting for a volunteer because a volunteer's identity presumes empathy and sympathy. In a series of experiments, participants who had a particular social identity (e.g., athlete, volunteer, environmentalist) primed beforehand were more likely to engage in consumption activities that induced emotions consistent with the primed identity (Coleman & Williams, 2013).

Besides regulating in accordance to feeling rules or desired social identities, people may additionally regulate their affective states in a direction that they think will enable them to succeed in the task at hand. For example, participants who anticipated having to complete a task requiring impulse control tended to select sad music if they were in a happy preexisting mood and to select happy music if they were in a sad preexisting mood. This is presumably because a neutral mood is perceived to be more conducive of impulse control than is a positive mood or a negative mood (Cohen & Andrade, 2004). In another study, the same authors found that negative-mood participants tended to avoid happy music if they expected to perform an analytical task but preferred happy music if they expected to perform a creativity task. This is presumably because people have the intuition that being in a happy mood is conducive to creativity but not to analytical thinking.

People can also try to make themselves more angry in preparation for tasks in which confrontation would be helpful (e.g., when calling a company to complain about a defective product). In a series of studies, participants who were going to confront someone later (e.g., playing a shooting game, chasing a tenant for rent) preferred engaging in anger-inducing activities (e.g., recalling angry incidents, listening to angry music) to engaging in activities that induced neutral states, or other emotions (Tamir & Ford, 2012; Tamir, Mitchell, & Gross, 2008). This effect was attenuated when the subsequent task was non-confrontational, suggesting that participants were intentionally trying to make themselves angry to prepare for the confrontational task. Interestingly, performance in the confrontational task indeed improved when participants engaged in anger-inducing activities, suggesting that the strategy was effective. Other studies suggest that people may occasionally try to amplify their worry in preparation for tasks that are cognitively demanding (e.g., taking a test, giving a speech; Tamir, 2005; Tamir, Chiu, & Gross, 2007). Again, performance on the demanding task does appear to improve as the result of the self-inflicted worry, suggesting that this downward-regulation strategy may also be effective.

6.3 | Moderators of affect regulation

Finally, it is important to recognize that the degree to which individuals engage in affect regulation depends on a number of situational and individual-difference factors, most of which have been studied in relation to the regulation of negative affective states.

6.3.1 | Salience of the current and desired affective states

Given that, in general, self-regulation is typically triggered by awareness of a discrepancy between a current state and a desired state (Carver & Scheier, 1982, 1990), an important determinant of whether people engage in affect regulation is the salience of the discrepancy between the person's current affective state and his or her desired affective state, which in turn depends on how conscious the person is of his or her current affective state and how manifest the desired affective state is. Consistent with this proposition, Cohen and Andrade (2004) unsurprisingly observed more deliberate affect regulation among participants in a negative affective state (for whom the current state was presumably salient) than among participants in a more neutral state (for whom the current state was presumably less salient). Other studies show that people are more sensitive to the hedonic quality of movies that they can choose to watch when their current mood state is made salient to them than when it is not made salient (Caruso & Shafir, 2006). This is presumably because being reminded of one's current mood state encourages people to consider the mood-regulating implications of the movies they can watch, whether for negative-mood relief or for positive-mood maintenance. Similarly, McFarland and Buehler (1998) found that the tendency to retrieve pleasant memories when in a negative mood—a common affect-regulation strategy—is more pronounced when people are encouraged to reflect on their mood than when people are distracted from focusing on their mood. The tendency is also more pronounced among "sensitizers" (people who are prone to attend to their negative feelings) than among "repressors" (people who are prone to deny their emotional reactions to negative events; McFarland & Buehler, 1997).

6.3.2 | Expectancies about affect regulation

The engagement of general self-regulation does not depend solely on the recognition of a discrepancy between a current state and a desired state, it also hinges on the expectancy of success in self-regulation (Carver & Scheier, 1982, 1990). One dimension of these expectancies is the perceived changeability of the current affective state. As noted in the previous sections, several studies demonstrate that people tend not to engage in affect-regulatory behavior when they are led to believe that their mood state is not changeable (Labroo & Mukhopadhyay, 2009; Manucia et al., 1984).

There are also individual differences in people's expectancies about their ability to alleviate their negative moods. Some individuals are more confident than others in their ability to improve their

negative mood states (Catanzaro & Mearns, 1990). In one study, sad individuals with high mood-regulation expectancies were more likely to seek immediate gratification than were sad individuals with low expectancies (Tice et al., 2001). These individual differences tend to be reinforced over time because people with low expectancies exert less effort to regulate their moods, thus confirming their expectations of their inability to alleviate their negative moods, whereas individuals with high expectancies are more proactive in regulating their moods, thus confirming their expectations of being able to improve their moods. This would explain why people who have high mood-regulation expectancies show fewer symptoms of depression than do people who have low expectancies (Catanzaro & Mearns, 1990).

Another driver of people's expectancies in affect regulation is their beliefs about the affect-regulating properties of possible actions. For example, people who tend to believe that chocolate is mood-lifting (mostly women) are more likely to consume chocolate to regulate their negative mood compared to people who are less prone to this particular belief (mostly men; Andrade, 2005). Similarly, the stronger one's expectancies about the tension-reducing capability of alcohol, the greater the tendency to consume alcohol as a means to cope with negative affect (Cooper et al., 1995).

6.3.3 | Self-esteem

People's propensity to affect-regulate further varies as a function of several individual-difference variables besides the heterogeneity in mood-regulation expectancies. A reliable differentiator is self-esteem. High-self-esteem (HSE) individuals are more likely to attempt to repair their negative moods and to prolong their positive moods than low-self-esteem (LSE) individuals are. In a diary study, after experiencing a failure in their lives, fewer LSE respondents reported engaging in activities intended to improve their mood than HSE respondents did. Similarly, after being induced in a sad mood, fewer LSE participants chose to watch a comedy video over other videos than HSE participants did (Heimpel, Wood, Marshall, & Brown, 2002). In a previously discussed study, only HSE participants were found to recall more pleasant memories—a standard way to feel better—under a negative mood than under a neutral mood. LSE participants instead recalled more unpleasant memories under a negative mood than under a neutral mood (Smith & Petty, 1995).

Low-self-esteem individuals' lower propensity to regulate their negative affective states does not appear to be due to differences in understanding of mood-repair strategies (Heimpel et al., 2002). Instead, LSE individuals seem more inclined to view negative affective states as typical and believe that they do not deserve to feel better (Wood, Heimpel, Manwell, & Whittington, 2009). The belief that they do not deserve to feel better would explain why after experiencing something that makes them feel good about themselves, LSE individuals also tend to dampen their positive feelings, whereas HSE individuals tend to try to prolong and enhance their positive feelings (Wood, Heimpel, & Michela, 2003).

6.3.4 | Demographic and cultural predictors

In general, women seem to be more prone to engage in negative mood repair and affect regulation than men are. For example, it was observed that compared to women in a positive mood, women in a negative mood were more likely to select magazine articles that featured good news, consistent with mood-repair efforts. Men, in contrast, did not show this effect (Biswas, Riffe, & Zillmann, 1994). In another study, female participants made more effort to control their anger at an offensive experimenter than male participants did (Knobloch-Westerwick & Alter, 2006). In a large survey of San Francisco Bay area residents, women were more likely than men to report using different emotion regulation strategies in response to depressive states (Nolen-Hoeksema & Aldao, 2011). A meta-analytic review of sex differences in coping confirms that women are more likely than men to engage in various coping strategies (Tamres, Janicki, & Helgeson, 2002).

These findings may be partially attributed to women's generally lower tolerance of negative affective states, which likely increases their motivation to engage in negative affect regulation (Chen & Pham, 2018; Simons & Gaher, 2005). Men and women additionally differ in their preferences for specific affect-regulation strategies. For example, women are more likely to seek relief from their negative affective states by consuming fattening foods (Andrade, 2005; Grunberg & Straub, 1992) and shopping (Thayer et al., 1994).

People seem to develop stronger tendencies to regulate their negative affective states as they grow older. Eye-tracking studies show that when in a negative mood, older individuals avoid looking at negative stimuli (e.g., angry faces) and focus instead on positive stimuli (e.g., happy faces), whereas younger individuals are more prone to look at the negative stimuli (Isaacowitz, Toner, Goren, & Wilson, 2008). Older individuals' propensity to focus on positive stimuli and avoid negative stimuli is most evident among those with strong attentional control, resulting in more successful mood regulation (Isaacowitz, Toner, & Neupert, 2009). Similarly, an experience-sampling study revealed a greater prevalence of motivation to dampen negative affect and maintain positive affect among older adults than among younger adults, who were more inclined to sustain negative affective states (Riediger, Schmiedek, Wagner, & Lindenberger, 2009). The results further showed that older adults experienced greater well-being than younger adults did. This pattern of results is consistent with socioemotional selectivity theory (Carstensen, Isaacowitz, & Charles, 1999), which posits that as people age and face a shrinking life horizon, they learn to prioritize hedonic emotional goals over other goals.

There also appears to be some cultural differences in affect regulation. A cross-national survey uncovered more frequent reports of engagement in activities meant to alleviate bad moods or maintain good moods in Finland and Denmark, two countries associated with an individualistic culture, than in China, a country associated with a collectivistic culture (Luomala, Kumar, Worm, & Singh, 2004). Parallel results were obtained in studies of differences in emotion regulation between European American and East

Asian students. These studies show that following negative personal events (e.g., failing a test), East Asians are less likely to try to dampen their negative emotions or boost their positive emotions than European Americans are (Miyamoto et al., 2014). Compared to European Americans, East Asians are also more likely to dampen and not savor their positive emotions following a positive personal event (Miyamoto & Ma, 2011).

These cultural differences seem to arise because individualistic cultures tend to put more emphasis on how to control and change one's circumstances, whereas collectivistic cultures tend to put more emphasis on how to adapt to one's circumstances. In addition, collectivist cultures have greater tolerance of contradiction (Peng & Nisbett, 1999). As a result, compared to Westerners, Easterners tend to be more accepting of negative emotions and more cautious of positive emotions, and thus, Easterners are less motivated to improve their emotional states (Miyamoto et al., 2014).

6.3.5 | The need to feel better

A final important moderator of affect regulation is the degree to which people have a need to feel better when experiencing negative affective states. Contrary to popular beliefs that everybody needs to feel better when feeling bad, Chen and Pham (2018) recently uncovered marked individual differences in people's need to feel better (NFB) in response to negative affective experiences. Some people experience a strong overall urge to escape their negative affective states, but others do not. Trait differences in overall NFB originate in heterogeneity along three lower-order motivational inclinations. The first dimension is heterogeneity in aversion to being in a negative affective state: Negative affective states are more aversive to some individuals than to others. The second dimension is heterogeneity in the tendency to derive pleasure from being in a negative affective state: Some people actually enjoy being in a negative affective state. The final dimension of heterogeneity lies in people's motivation to understand the cause of their negative affective states: Some people are not motivated to escape their negative affective states because they value the information conveyed by these states. Each of these motivational inclinations contributes independently to a person's overall NFB. A person with high NFB has a high aversion to negative affect, derives little pleasure from negative affect, and/or has a low motivation to understand the causes of the negative affect. Conversely, a person with low NFB has a low aversion to negative affect, derives pleasure from negative affect, and/or has a high motivation to understand the causes of the negative affect. Chen and Pham (2018) showed that people with high (but not low) NFB are more likely to engage in mood repair via selective exposure to positive information when they are induced with negative moods.

7 | CONCLUSION

Although the consumer literature on affect regulation has been relatively sparse, it is important to recognize that much of consumption is directed at the regulation of consumers' affective states. Our review was intended to enhance the current understanding of consumption-based affect regulation by integrating relevant research from psychology, communication research, and consumer research, and synthetizing numerous findings from these relatively fragmented literatures into a manageable set of theoretical propositions. We hope that this review and set of theoretical propositions help lay the foundation for a more systematic study of consumption-based affect-regulatory phenomena.

We define affect regulation as the conscious attempt to influence the nature of one's affective state through one's behavior or mental activities. Affect regulation is therefore distinct from the mere regulation of emotional expression. Affect regulation does overlap, however, with the concepts of coping and compensatory consumption, yet is distinct from these two concepts. Another concept related to affect regulation is the emerging notion of displaced coping, which reflects a more implicit form of affect regulation.

Although affect regulation includes efforts to both alleviate negative affective states and sustain positive affective states, the regulation of negative affective states is more common than the regulation of positive affect. Strategies used in the up-regulation (alleviation) of negative affective states depend on whether the negative affective state is diffuse and "mood-like," or more acute and "emotion-like." Diffuse negative affective states tend to be regulated by generic behavioral and mental strategies, whereas acute, emotion-like states tend to be regulated through emotion-specific strategies. Although distinct, these emotion-specific strategies tend to respect an overarching *part-regulation* principle: Specifically, distinct negative emotions trigger regulatory orientations aligned with the tacit goals implied by the appraisal dimensions that best define the aversive experience. As a result, distinct regulation strategies tend to be used for the regulation of states of sadness, fear and anxiety, anger, guilt, shame and embarrassment, disgust, and regret.

Many strategies adopted for the regulation of negative affective states involve forms of consumption. Some of the most common ones include shopping ("retail therapy"), food indulgence (e.g., fattening food and sweets), various forms of media consumption (e.g., music listening, television watching, and more recently, social media), consumption of various substances (e.g., alcohol, cigarettes, other drugs), exercising, and confrontation of providers of faulty products and services.

Positive affective states sometimes trigger a motivation to maintain and prolong these states. Common strategies for positive-affect maintenance or reinforcement include behavioral strategies such as self-indulgence, disinhibition (which was previously interpreted as risk-taking in past literature), and social sharing; and mental strategies such as savoring the moment and the self-generation of positive thoughts.

Our review also highlights that individuals may regulate their affective states for reasons other than hedonic aspirations. Certain considerations may supersede people's hedonic tendency to strive for positive states, thereby causing them to down-regulate affective states. Such

considerations include feeling rules (i.e., normative expectations about how people should feel in a given situation), a desire to affirm a certain social identity, and emotional preparation for task performance.

Finally, our review identifies important moderators of the pursuit of affect regulation. These include situational factors such as the salience of the current and desired affective states, and expectations of success in affect regulation. These additionally include individual-difference factors such as the person's gender, age, culture, self-esteem, and general need to feel better when feeling bad.

To conclude, affect regulation and consumption behavior intersect in significant ways. So much of people's lives as consumers revolves around the management of how they feel that there is much to be learned, both about consumer behavior and about affect regulation, by further understanding their intersection.

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