

# The effect of incidental emotions on self-control: an examination using a need-based choice model

Shruti Koley

School of Business, Portland State University, Portland, Oregon, USA

## Abstract

**Purpose** – The purpose of this paper is to develop a framework that examines the effects of incidental emotions on choices in self-control dilemmas. The framework predicts that the effect of emotions depends on the hedonic and non-hedonic needs they activate and the extent to which emotional consumers expect the virtuous and gratifying options in the choice dilemma to facilitate these needs (i.e. their instrumentality toward the activated needs). The framework helps develop propositions for the self-control effects of six commonly experienced emotions: happiness, sadness, pride, guilt, anger and anxiety.

**Design/methodology/approach** – The author uses a choice model to develop a conceptual framework that predicts the effects of incidental emotions on self-control.

**Findings** – The choice model identifies four processes through which emotions affect self-control choices: (1) emotions decrease self-control by activating hedonic needs, while (2) they increase self-control by activating non-hedonic needs. Decreasing (increasing) the instrumentality of the gratifying (virtuous) option toward these hedonic (3) and non-hedonic needs (4) increases self-control.

**Research limitations/implications** – The choice model applies only to the effects of incidental emotions.

**Practical implications** – The framework predicts the effects of incidental emotion on self-control, including in consumption contexts, such as impulsive spending or unhealthy eating. The model provides strategies for enhancing self-control among emotional consumers.

**Originality/value** – This paper is the first to conceptualize an overarching framework that proposes broad mechanisms through which all emotions affect self-control. It yields novel predictions about the effects of various incidental emotions.

**Keywords** Emotions, Incidental emotions, Self-control, Choice model, Healthy eating, Financial savings

**Paper type** Conceptual paper

Consumers try to act consistently with their long-term goals. For instance, they try to save enough money, reduce debt, eat healthily and exercise more. However, they often face dilemmas when tempted to choose an immediately gratifying option (e.g. unhealthy eating, procrastination, impulse buying) over virtuous options that benefit long-term goals (e.g. healthy eating, working, saving money). Selecting the virtuous option over an immediately gratifying temptation reflects self-control, whereas yielding to the gratifying option while anticipating regret constitutes a self-control failure, which undermines consumers' long-term goals, such as health, academic advancement or financial stability (Baumeister, 2002; Hoch and Loewenstein, 1991; Loewenstein, 1996; Vosgerau *et al.*, 2020). Thus, because self-control failures lead to a wide range of adverse outcomes, prior research has extensively examined how consumers make choices in self-control dilemmas and factors that shape them (Baumeister, 2002; Vosgerau *et al.*, 2020).

Self-control can be influenced by factors related to or unrelated to the self-control choice (i.e. incidental). For instance, a related factor, such as previous success at exerting self-control, can license consumers to subsequently indulge in gratifying behaviors (Carver, 1979; Khan and Dhar, 2006; Zemack-Rugar and Corus, 2018). Similarly, unrelated or incidental factors, such as consumers' emotions triggered by unrelated events (Atalay and Meloy, 2011; Fishbach and Labroo, 2007; Gardner *et al.*, 2014; Schmeichel and Inzlicht, 2013), perceived busyness (Kim *et al.*, 2019), environmental orderliness (Li *et al.*, 2020) and perceived self-control success in other unrelated domains (Tuk *et al.*, 2015) can also affect self-control.

Among these incidental factors, consumers' emotions tend to have a frequent and widespread effect on self-control (Schmeichel and Inzlicht, 2013; Tice and Bratslavsky, 2000; Wyer *et al.*, 2019). For instance, feeling distressed after

The current issue and full text archive of this journal is available on Emerald Insight at: <https://www.emerald.com/insight/0736-3761.htm>



Journal of Consumer Marketing  
Emerald Publishing Limited [ISSN 0736-3761]  
[DOI 10.1108/JCM-10-2024-7271]

© Shruti Koley. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at <http://creativecommons.org/licences/by/4.0/>

Received 15 October 2024  
Revised 9 April 2025  
21 January 2026  
Accepted 25 April 2026

watching a movie (Cryder *et al.*, 2008), or while experiencing poor weather (Govind *et al.*, 2020), or air pollution (Kim and Trusov, 2025) can worsen consumers' self-control, as manifested by an increase in retail therapy spending or unhealthy eating (Andrade, 2005; Atalay and Meloy, 2011; Fedorikhin and Patrick, 2010; Garg *et al.*, 2007). Similarly, sunshine-induced positive mood can also increase spending on durable goods (Agarwal *et al.*, 2020). Thus, given the ubiquity of consumers' emotional experiences and their spillover effects on unrelated self-control decisions, this research develops a framework that helps understand these effects and reconcile contrasting results, such as when emotions with the same valence have varying effects on self-control

A vast body of work has examined the effects of incidental emotions on self-control (see Table 1). It, however, focuses on the effects of individual, discrete incidental emotions or the dimensions underlying them, such as valence and arousal. Hence, there is a need for an overarching framework that can build on these disparate findings to identify a broad set of mechanisms that explain how the characteristics of emotions and self-control choice options guide emotions' effects on self-control. In this research, we develop such a conceptual

framework. We propose a need-based model of choice, building on the goal-based choice model (van Osselaer and Janiszewski, 2012), as emotions' impact on self-control varies by activated needs (Keltner and Gross, 1999; Lench *et al.*, 2015) and how well the choice options in a self-control dilemma facilitate them.

Rather than viewing self-control as a choice between a gratifying option that provides an immediate benefit and a virtuous option that provides a long-term benefit, the model suggests that both these options can facilitate hedonic needs, such as the need for pleasure or comfort and non-hedonic needs, such as the need for security and control. Therefore, knowing whether an emotional consumer is likely to select a virtuous option in a self-control dilemma requires not only an understanding of the consumers' hedonic needs (Baumeister, 2002) but also of their other temporarily accessible non-hedonic needs, and the extent to which the virtuous and gratifying options facilitate them. Based on this principle, we propose four broad processes that explain when emotions enhance or impair self-control. Applying the model, we predict how six commonly experienced emotions – sadness, happiness, pride, guilt, anxiety and anger – incidentally influence self-control and what

**Table 1** How incidental emotions affect self-control: a review of research

| Emotion investigated         | Description of major findings                                                                                                                                                                                                                                                                                      | Article                                                   |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
| <b>Stress</b>                | Stress triggers a need for control, motivating consumers to save more money                                                                                                                                                                                                                                        | Durante and Laran, 2016                                   |
| <b>Sadness and guilt</b>     | Sadness induces a cortisol increase, which fuels a desire for sugar, a link not observed with guilt                                                                                                                                                                                                                | Lefebvre <i>et al.</i> , 2019                             |
| <b>Sadness and disgust</b>   | Sadness, unlike disgust, fosters impatience, thus increasing the choice for immediate, smaller monetary rewards over delayed, larger rewards                                                                                                                                                                       | Lerner <i>et al.</i> , 2013                               |
| <b>Sadness</b>               | Sad consumers are more likely to consume indulgent foods                                                                                                                                                                                                                                                           | Garg <i>et al.</i> , 2007                                 |
| <b>Happiness</b>             | Positive (negative) moods promote the adoption (rejection) of accessible goals. Thus, if the self-improvement goal is accessible, happiness (vs neutral or unhappiness) increases self-control. Conversely, if the mood management goal is accessible, happiness increases pleasure-seeking and hurts self-control | Fishbach and Labroo, 2007                                 |
| <b>Sadness</b>               | If the hedonic eating goal is salient, sadness triggers a shift away from seeking pleasure toward the counterbalancing goal of preventing future losses, leading to increased self-control (i.e. lower unhealthy eating)                                                                                           | Salerno <i>et al.</i> , 2014                              |
| <b>Sadness</b>               | Sadness makes consumers feel helpless, thereby decreasing their self-control (e.g. leading them to eat more unhealthy foods)                                                                                                                                                                                       | Garg and Lerner, 2013                                     |
| <b>High arousal emotions</b> | Positive moods don't always increase self-control. Coupled with heightened arousal (e.g. excitement), they deplete cognitive resources required to resist temptation, lowering self-control                                                                                                                        | Fedorikhin and Patrick, 2010                              |
| <b>Pride</b>                 | A bifurcated effect of pride on self-control is observed: when pride increases self-awareness, it promotes long-term goal pursuit and self-control, whereas when construed as a signal of achievement, it licenses gratification                                                                                   | Wilcox <i>et al.</i> , 2011; Salerno <i>et al.</i> , 2015 |
| <b>Negative emotion</b>      | The aversive nature of negative emotions activates the hedonic need, weakening impulse control                                                                                                                                                                                                                     | Tice <i>et al.</i> , 2001                                 |
| <b>Hope</b>                  | Positive, future-focused emotions, such as hope, are more likely than present-focused emotions, such as pride or happiness, to activate the desire to achieve long-term goals and enhance self-control                                                                                                             | Winterich and Haws, 2011                                  |
| <b>Guilt and shame</b>       | Guilt's tendency to focus on gains means framing self-control as beneficial is more effective than framing indulgence as harmful. Conversely, shame's tendency to focus on losses makes it more effective to frame gratification as harmful than to frame self-control as beneficial                               | Duhachek <i>et al.</i> , 2012                             |
| <b>Guilt</b>                 | Guilt, unlike sadness, envy, shame and embarrassment, triggers a desire for self-improvement, thus strengthening self-control                                                                                                                                                                                      | Allard and White, 2015; Zemack-Rugar <i>et al.</i> , 2007 |
| <b>Bad mood</b>              | Individuals experiencing bad moods are more prone to seeking emotional comfort through unplanned consumption of treats (i.e. retail therapy)                                                                                                                                                                       | Atalay and Meloy, 2011                                    |
| <b>Nostalgia</b>             | Feeling nostalgic (vs neutral) increases consumers' perception of social support, in turn increasing their self-control resources and, consequently, healthy eating                                                                                                                                                | Lasaleta <i>et al.</i> , 2021                             |
| <b>Anger</b>                 | Angry consumers are more likely to exert self-control when it is framed as offering dominance benefits rather than other benefits (e.g. exercising to get stronger rather than to prevent disease)                                                                                                                 | Koley and Warren, 2025                                    |

businesses and policymakers can do to enhance self-control among consumers experiencing these emotions.

### Choice model of Self-Control

The literature, which has conceptualized self-control dilemmas as a trade-off between immediate pleasure and long-term benefits, overlooks critical components of the choice dilemma. While gratifying options provide immediate hedonic benefits, and virtuous options provide long-term goal-related benefits, these benefits can, in turn, satisfy different higher-order needs. For instance, hedonic benefits provided by gratifying options can facilitate hedonic needs for pleasure, physical comfort or cognitive ease. Similarly, long-term benefits, such as losing weight or saving money, can facilitate needs for security, autonomy, power, etc.

Because consumers choose the option most instrumental to their needs, they should be more likely to show self-control when the virtuous option aligns better with their needs than the gratifying option (Van Osselaer *et al.*, 2005). Therefore, we conceptualize choice in a self-control dilemma as a function of consumers' active needs and the extent to which the gratifying and virtuous options are instrumental to them (Van Osselaer *et al.*, 2005). Formally, a consumer selects the virtuous option (V) in a self-control dilemma when the sum of the activation of his or her needs ( $N_1, N_2, \dots, N_n$ ) multiplied by the instrumentality of the virtuous option to satisfy each of these needs ( $VB_1, VB_2, \dots, VB_n$ ) is greater than the sum of the activation of the consumer's needs multiplied by the instrumentality of the gratifying option to satisfy each of these needs ( $GB_1, GB_2, \dots, GB_n$ ; see Figure 1(a):

$$\sum_n (N_n * VB_n) > \sum_n (N_n * GB_n) \quad (1)$$

Consider the following example: John is deciding between buying expensive sunglasses (G) or saving money (V). The choice represents a typical self-control dilemma because John's desire for immediate pleasure (i.e. a hedonic need,  $N_1$ ) increases the likelihood of buying the stylish sunglasses, as they would make John feel good (i.e.  $GB_1 > VB_1$ ). However, this discretionary purchase would also prevent him from saving money for future needs. For instance, John could save for emergencies and satisfy a security need ( $N_2$ ) or save to buy the biggest house on the block and satisfy a power need ( $N_3$ ). Therefore, whether John decides to save money or buy the sunglasses depends not only on the strength of John's hedonic need ( $N_1$ ), which should decrease self-control (because  $GB_1 > VB_1$ ), but also the strength of his security need ( $N_2$ ), the strength of his power need ( $N_3$ ) and the extent to which John expects that financial savings and sunglasses will offer him immediate pleasure, make him feel more or less secure, and more or less powerful than saving money (i.e. the relative magnitude of  $GB_1, VB_1, GB_2, VB_2, GB_3$  and  $VB_3$ ).

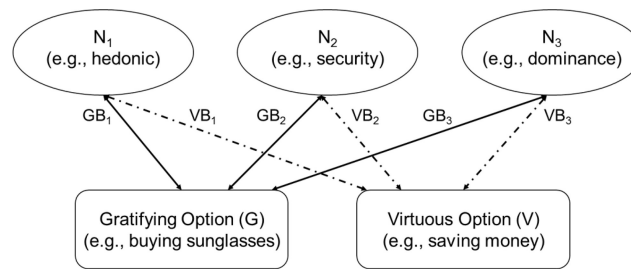
Based on this model, we can predict how hedonic and non-hedonic needs affect self-control. Past research finds that the need for hedonic pleasure ( $N_1$ ) is typically better facilitated by gratifying options (i.e.  $GB_1 > VB_1$ ) (Baumeister, 2002). For instance, visceral hedonic cravings, such as hunger, sexual desire (Loewenstein, 1996) or exhaustion (Muraven and Baumeister, 2000), strengthen the hedonic need and impair self-control. On the other hand, sweetened snacks or beverages replenish blood glucose and thus lower the hedonic need,

improving self-control (Gailliot *et al.*, 2007). However, we note that hedonic pleasure is only one way consumers seek happiness or greater well-being (Deci and Ryan, 2008). While hedonic pleasure focuses on experiences that allow consumers to feel immediate sensory pleasure and enjoyment, another form of well-being, eudaimonia, focuses on experiences that are deeply satisfying and meaningful for consumers and facilitate their desire for self-growth (Deci and Ryan, 2008; Huta, 2013; Steger, 2016). These distinct well-being needs – hedonic and eudaimonic – may be facilitated differently by gratifying and virtuous options. While gratifying options that provide immediate pleasure and enjoyment would better facilitate hedonic needs, we argue that virtuous options (e.g. studying to earn an education degree) better facilitate eudaimonic needs for personal growth and well-being (Huta, 2015).

Similar to eudaimonic needs, research also suggests that virtuous options better benefit other non-hedonic needs (i.e.  $N_2, N_3, N_4$ , etc.) than gratifying options (i.e.  $GB_n < VB_n$ ) (Lades and Hofmann, 2019; Vosgerau *et al.*, 2020). For instance, John is likelier to think that saving money will improve his financial security (i.e.  $GB_2 < VB_2$ ) or financial power and autonomy (i.e.  $GB_3 < VB_3$ ) more than buying sunglasses. Consequently, an increase in the activation of non-hedonic needs, such as security ( $N_2$ ) or power ( $N_3$ ), is more likely to increase the choice of virtuous options. Indeed, consistent with that, research finds that situations that activate non-hedonic needs increase self-control. For instance, the COVID-19 pandemic increased prudent behaviors like mask-wearing or getting vaccines by increasing the desire to be safe (Knowles and Olatunji, 2021). Similarly, the desire for power motivates individuals to achieve their long-term goals (Guinote, 2017; McClelland and Burnham, 2017), and thus to choose virtuous options such as pursuing career growth or saving money (Koley and Warren, 2025).

However, hedonic needs may not always impair self-control, while non-hedonic needs may not always increase self-control. Indeed, their effects on self-control vary depending on how instrumental the gratifying and virtuous options are to these needs.

For instance, while the gratifying option typically offers stronger hedonic benefits than the virtuous option (i.e.  $GB_1 > VB_1$ ), the magnitude of the difference in instrumentality can vary greatly. For example, John might believe that buying the sunglasses will offer a small, temporary boost to his mood or make him joyously exuberant (i.e.  $GB_1$  can vary in magnitude). Alternatively, John might believe that saving money will be an excruciating sacrifice or a pleasurable act of frugality (i.e.  $VB_1$  can vary in magnitude). Consequently, we predict that consumers will exert higher (lower) self-control when they perceive the gratifying options as being less (more) instrumental and the virtuous options as being more (less) instrumental to consumers' hedonic needs. Consistently, research shows that self-control increases when the instrumentality of the gratifying option to the hedonic need decreases, such as when consumers habituate to the gratifying experiences (Baumeister, 2002) or when gratifying carries a penalty (e.g. the pain of payment while spending impulsively) (Thomas *et al.*, 2011). Self-control also increases when the instrumentality of the virtuous option to the hedonic need increases, such as when virtuous activities seem pleasurable

**Figure 1** (a) Need-based model of choice in a self-control dilemma. (b) Emotions' effect on self-control choice

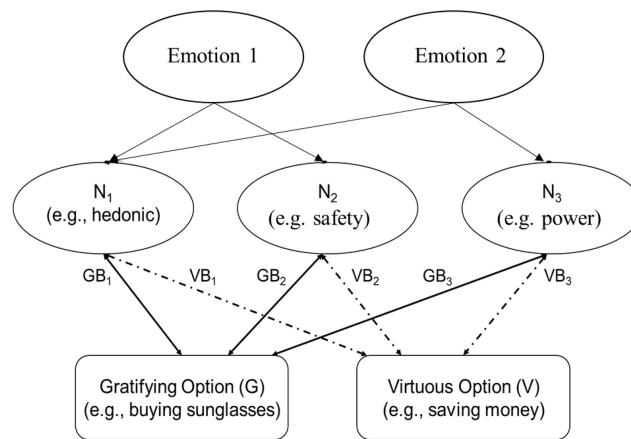
Select V if:  $\sum_n (N_n * VB_n) > \sum_n (N_n * GB_n)$

$N_n$  = the activation of need "n"

$GB_n$  = the extent to which the gratifying option is expected to benefit need "n"

$VB_n$  = the extent to which the virtuous option is expected to benefit need "n"

(a)



Select V if:  $\sum_n (N_n * VB_n) > \sum_n (N_n * GB_n)$

$N_n$  = the activation of need "n"

$GB_n$  = the extent to which the gratifying option is expected to benefit need "n"

$VB_n$  = the extent to which the virtuous option is expected to benefit need "n"

(b)

(e.g. working out feels enjoyable) (Woolley and Fishbach, 2016) or are imminently rewarded (e.g. with appreciation or financial incentives) (Slessareva and Muraven, 2004).

Conversely, while the virtuous option typically offers stronger non-hedonic benefits than the gratifying option (i.e.  $GB_1 > VB_1$ ), the magnitude of the difference in instrumentality can also vary. For example, John might think that sunglasses are a better means to security than saving money, perhaps because he feels adequately financially secure (i.e. decreasing  $VB_2$ ) but wants to protect his eyes from feeling more strained or his vision from getting weaker (i.e. increasing  $GB_2$ ). Consequently, we predict that consumers will exert lower (higher) self-control when they perceive gratifying options as more (less) instrumental and virtuous options as less (more) instrumental to their non-hedonic needs. Consistently, research shows that consumers exert lower self-control (i.e. lower likelihood of working out) when the virtuous options (e.g. working out) become less instrumental to the non-hedonic needs, such as when they facilitate multiple non-hedonic needs (e.g. to build muscles and to lose weight), thus diluting their perceived instrumentality to each need (Zhang *et al.*, 2007). Conversely, believing in naïve theories, such as

tasty = unhealthy (Raghunathan *et al.*, 2006), lowers the instrumentality of the gratifying option to the non-hedonic needs (e.g. the need to be healthy) and increases self-control. In the next section, we apply the need-based choice model to develop mechanisms explaining how emotions affect self-control.

## Emotions and self-control

Emotions greatly influence judgment and decisions (Pham, 2007), including those in self-control dilemmas (Schmeichel and Inzlicht, 2013). Their effect can either be integral or incidental (Schmeichel and Inzlicht, 2013). Integral effects occur when an emotion influences a judgment or decision related to the experience that elicited the emotion. On the other hand, incidental effects occur when the emotions evoked by an experience influence unrelated judgments or decisions. For example, if being excited by a magazine cover influences a consumer's decision to buy the magazine, the effect of excitement is integral (Kim *et al.*, 2010). On the other hand, if the excitement influences the consumer's decision to purchase an adventurous rather than a serene vacation from a travel



agent, the effect is incidental (Kim *et al.*, 2010). Our research focuses on the incidental effects of emotions on self-control.

A need-based model of self-control offers a promising framework for understanding how incidental emotions influence choices in self-control dilemmas. Based on this model, the effect of emotion should depend on the needs they activate ( $N_1$ ,  $N_2$ ,  $N_3$ , etc.) and the instrumentality of the virtuous ( $VB_n$ ) and gratifying options ( $GB_n$ ) to those needs ( $N_n$ ) [see Figure 1(b)].

The framework allows us to infer four broad processes that explain how emotions affect self-control.

#### First process: activation of hedonic needs

The first process predicts that because the gratifying option facilitates the hedonic need more than the virtuous option ( $GB_1 > VB_1$ ), emotions that increase (decrease) the activation of the hedonic need ( $N_1$ ) decrease (increase) self-control.

#### Second process: activation of non-hedonic needs

Emotions can also influence self-control by activating other needs (e.g.  $N_2$ ,  $N_3$ ) in addition to hedonic ones (Tooby and Cosmides, 1990). For instance, fear activates a desire for self-protection (Griskevicius *et al.*, 2009), anxiety for risk avoidance (Raghunathan and Pham, 1999), stress for control (Durante and Laran, 2016), anger for dominance (Koley and Warren, 2025), disgust for avoiding contaminants (Rozin *et al.*, 2008), guilt for self-improvement (Allard and White, 2015) and sadness for avoiding future losses (Salerno *et al.*, 2014). Because consumers generally believe that virtuous options better facilitate non-hedonic needs than gratifying options (i.e.  $GB_n < VB_n$ ), emotions that increase (or decrease) the activation of non-hedonic needs should increase (or decrease) self-control.

#### Third process: instrumentality to hedonic needs

While consumers generally perceive gratifying options as more pleasurable than virtuous ones (i.e.  $GB_1 > VB_1$ ), the difference in instrumentality varies substantially across situations. Process three predicts that decreasing the instrumentality of the gratifying option (i.e. decreasing  $GB_n$ ) or increasing the instrumentality of the virtuous option (i.e. increasing  $VB_n$ ) toward the hedonic need activated by the emotion should improve self-control.

#### Fourth process: instrumentality to non-hedonic needs

While virtuous options are typically more instrumental to non-hedonic needs than gratifying options (i.e.  $VB_n > GB_n$ ), the relative difference in instrumentality can vary. Hence, process four predicts that increasing the instrumentality of the virtuous option (i.e. increasing  $VB_n$ ) or decreasing the instrumentality of the gratifying option (i.e. decreasing  $GB_n$ ) toward the non-hedonic need activated by the emotion should improve self-control.

We now apply the framework to develop propositions about how some of the most frequently experienced emotions affect self-control (see Table 2).

Building on these predictions, we develop strategies that businesses and policymakers can use to enhance self-control among consumers experiencing sadness, happiness, pride, guilt, anger and anxiety.

## Managerial relevance

Businesses (e.g. health practitioners, gyms, financial apps that promote budgeting and expense tracking), and policymakers who seek to encourage long-term goals such as financial prudence and healthy lifestyles can enhance self-control among emotional consumers by implementing strategies grounded in the proposed model. There are three ways they could apply these strategies. They could apply them generally when the strategy also benefits non-emotional consumers. However, when it does not confer benefits for the general population, they can either apply the strategies to a segment with a greater tendency to experience the specific emotion (i.e. a trait emotion) or to consumers experiencing the emotion in that moment (i.e. a state emotion). Service providers, such as health practitioners, often collect information about members' emotional health. They can use this information to segment consumers who are more prone to experiencing specific emotions, like anger, anxiety, sadness, etc. Similarly, service providers and policymakers can segment consumers according to their momentary state emotions by leveraging indicators such as online and social media activity that reveal how individuals feel in that moment – for instance, interacting with content that evokes anger or happiness, or sharing messages about a promotion that convey pride.

#### Guilt

Guilt activates a non-hedonic need for self-improvement. Since virtuous behaviors always promote long-term goals, they are naturally aligned with the need for self-improvement. Consequently, guilt should enhance self-control by default. However, making the long-term benefits even more salient (i.e. prediction 10), for example, by emphasizing how healthy eating enhances strength and immunity, saving enhances financial independence and stability or learning a new skill promotes competence, can further increase the instrumentality of virtuous behavior toward the self-improvement need and thus, further enhance self-control.

#### Happiness

Happiness elicits a need for pleasure when consumers focus on mood maintenance (e.g. when consumers read the statement “I want to enjoy the moment”), whereas it fosters a need for self-improvement when aspirations are salient (e.g. when consumers read the statement “Ambition is a virtue”) (Fishbach and Labroo, 2007). Consequently, the most effective way service providers can promote self-control is by reaching out to happy consumers with messaging emphasizing aspirations and growth (e.g. “Become a better version of yourself, one choice at a time,” “Choose the path that strengthens you”, etc.) (i.e. prediction 11). Furthermore, when aspirations are salient, emphasizing how virtuous behaviors promote self-improvement (i.e. prediction 13), just as for guilt, can further enhance self-control among happy consumers.

#### Pride

Because pride increases self-awareness and thus the desire to pursue long-term goals, when the source of pride (e.g. a promotion) is salient, businesses or policymakers should emphasize the source of pride (e.g. a promotion, a win in a

**Table 2** Emotions and self-control: predictions for Sadness, Anxiety, Anger, Guilt, Happiness, and Pride

| Emotion        | Process 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Process 2                                                                                                                                                                                                                                                      | Process 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Process 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                | Because the gratifying option facilitates the hedonic need more than the virtuous option ( $GB1 > VB1$ ), emotions that increase (decrease) the activation of the hedonic need decrease (increase) self-control                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Because consumers generally believe that virtuous options better facilitate non-hedonic needs than gratifying options (i.e. $GBn < VBn$ ), emotions that increase (or decrease) the activation of non-hedonic needs should increase (or decrease) self-control | Decreasing the instrumentality of the gratifying option (i.e. decreasing GBn) or increasing the instrumentality of the virtuous option (i.e. increasing VBn) toward the hedonic need activated by the emotion should improve self-control                                                                                                                                                                                                                                                                                                                                             | Increasing the instrumentality of the virtuous option (i.e. increasing VBn) or decreasing the instrumentality of the gratifying option (i.e. decreasing GBn) toward the non-hedonic need activated by the emotion should improve self-control                                                                                                                                                                                                                                                                                                               |
| <b>Sadness</b> | Sadness activates a hedonic need because it is physiologically aversive (Tice and Bratslavsky, 2000) and is experienced after an unredeemable loss that triggers feelings of helplessness (Garg and Lerner, 2013) and a desire for reward replacement (Lerner et al., 2004). It also activates a non-hedonic need to avoid future reward losses (Salerno et al., 2014). However, since sadness evokes feelings of helplessness and reduced control (Garg and Lerner, 2013), the hedonic need takes precedence over the non-hedonic need (Tice et al., 2001; Tice and Bratslavsky, 2000). Consequently, prediction 1 is that sadness impairs self-control. Consistently, past research finds that sadness increases the desire to gratify, making consumers more likely to engage in retail therapy (Atalay and Meloy, 2011), consume unhealthy foods (Garg et al., 2007; Salerno et al., 2014) and choose smaller immediate financial incentives over larger delayed ones (Lerner et al., 2013)                                                                                                                                |                                                                                                                                                                                                                                                                | Prediction 2 is that sadness increases self-control when consumers are made to believe that (a) gratifying behaviors offer less pleasure (i.e. reducing GBn) and (b) virtuous behaviors offer greater pleasure (i.e. increasing VBn). Consistently, research finds that when sad consumers believe gratification won't improve their mood – such as through a mood-freeze manipulation (Manucia et al., 1984) – they are less likely to consume unhealthy snacks, select small immediate rewards over large deferred ones, or engage in frivolous procrastination (Tice et al., 2001) | Prediction 3 is that self-control improves among sad consumers when they are reminded that a) virtuous behaviors help them prevent future reward losses (e.g. eating healthy prevents weight gain) (i.e. increasing VBn), and b) indulging increases future losses (i.e. decreasing GBn). Consistently, reminding consumers that consuming foods such as candies or cookies offers poor nutrition reduces their consumption (Salerno et al., 2014)                                                                                                          |
| <b>Anxiety</b> | Consumers experience anxiety when they perceive a threat of an adverse event occurring in their future (Eysenck et al., 2007; Lazarus, 1991; Koley et al., 2025; Lerner and Keltner, 2001; Schmeichel and Inzlicht, 2013; Skinner and Brewer, 2002; Smith and Ellsworth, 1985). Anxiety, therefore, enhances vigilance toward perceived threats and activates a desire to avoid them (Eysenck et al., 2007; Koley et al., 2025; Lerner and Keltner, 2001; Raghunathan and Pham, 1999; Schmeichel and Inzlicht, 2013). This, however, depletes consumers' regulatory resources (Derakshan and Eysenck, 2009; Eysenck et al., 2007), increasing consumers' desire to seek relaxation and comfort in domains unrelated to the focal goal. Thus, prediction 4 is that anxiety generally impairs self-control by activating a hedonic need for relaxation. However, when virtuous behaviors directly serve to avert perceived threats – such as wearing masks to prevent illness or saving money to meet imminent bills – the non-hedonic need of threat avoidance takes priority, thereby allowing anxiety to enhance self-control |                                                                                                                                                                                                                                                                | Prediction 5 is that anxiety increases self-control when consumers are made to believe that (a) gratifying behaviors aren't relaxing (i.e. reducing GBn) and (b) virtuous behaviors offer greater relaxation (i.e. increasing VBn)                                                                                                                                                                                                                                                                                                                                                    | Because anxiety increases the need for threat avoidance, prediction 6 is that self-control improves among anxious consumers when they are reminded that a) virtuous behaviors help them avoid threats (e.g. brushing teeth to avoid oral diseases, eating healthier to avoid chronic illnesses) (i.e. increasing VBn), and b) indulgent behaviors enhance threats (i.e. decreasing GBn)                                                                                                                                                                     |
| <b>Anger</b>   | Anger signals that another person or organization is blocking the consumer's progress toward a goal, but the goal remains achievable if the obstacle is cleared (Berkowitz and Harmon-Jones, 2004; Carver and Harmon-Jones, 2009; Clore and Centerbar, 2004). Thus, it activates the non-hedonic need for dominance and power to defeat the opponent (Koley and Warren, 2025). Anger is unlikely to activate a hedonic need because, unlike other negative emotions like fear, anxiety or sadness, anger isn't aversive; while sadness, fear or anxiety prompt avoidance, anger prompts approach and action to confront the opponent (Carver and Harmon-Jones, 2009; Tamir et al., 2008). Hence, prediction 7 is that anger's activation of the dominance need may enhance self-control relative to no emotion, when consumers perceive virtuous behaviors as facilitating the dominance need. However, when consumers do not perceive virtuous behaviors as facilitating them, anger is unlikely to enhance self-control                                                                                                      |                                                                                                                                                                                                                                                                | Because neither anger nor guilt is expected to activate a hedonic need, we do not propose any process-3–based predictions for improvements in self-control for these emotions                                                                                                                                                                                                                                                                                                                                                                                                         | By increasing a desire for dominance or power, prediction 8 is that self-control increases among angry consumers when they perceive that a) virtuous behaviors allow them to feel more dominant or powerful rather than to get alternate benefits (e.g. eating healthy or exercising to build muscles or improve strength rather than to prevent disease; saving to buy the biggest house on the block rather than for rainy days) (i.e. increasing VBn), and b) indulgent behaviors make them appear submissive or weak (e.g. impulsive spending increases |

(continued)

Table 2

| Emotion          | Process 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Process 2 | Process 3 | Process 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |           |           | financial dependence) (i.e. decreasing GBn). Consistently, research finds that angry consumers exert more self-control when it facilitates a dominance need than when it serves an unrelated need, such as security (Koley and Warren, 2025). By increasing the need for self-improvement, prediction 10 is that self-control increases among guilty consumers when they are reminded that a) virtuous behaviors offer opportunity for self-improvement (e.g. becoming healthier, acquiring new skills, etc.) (i.e. increasing VBn), and b) indulgent behaviors cause stagnation (i.e. decreasing GBn) |
| <b>Guilt</b>     | Guilt arises when consumers perceive that they have fallen short of a self-standard, motivating them to acknowledge the wrongdoing and correct their behavior (Baumeister <i>et al.</i> , 1994; Tangney <i>et al.</i> , 2007). Unlike sadness (Garg and Lerner, 2013) or shame (Duhachek <i>et al.</i> , 2012; Han <i>et al.</i> , 2014), which are typically elicited when consumers feel helpless or unable to change their circumstances – and therefore promote mood-repair motivations (Garg and Lerner, 2013; Raghunathan and Pham, 1999) – guilt motivates corrective action and a desire for self-improvement (Allard and White, 2015; Lefebvre <i>et al.</i> , 2019; Zemack-Rugar <i>et al.</i> , 2007). As a result, guilt does not activate a hedonic need but instead elicits only a non-hedonic need for self-improvement (Allard and White, 2015). Accordingly, Prediction 9 proposes that guilt enhances self-control. Consistent with this prediction, prior research shows that guilt reduces the selection of sugary foods compared with sadness (Lefebvre <i>et al.</i> , 2019) |           |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Happiness</b> | Unlike negative moods, which are caused by impaired goal progress and trigger reparative behaviors, happiness signals adequate goal progress and encourages maintenance of current strategies and mood (Fishbach and Labroo, 2007). Consequently, when happy consumers are exposed to cues promoting mood maintenance (e.g. a statement "I want to enjoy the moment"), they seek immediate pleasure. In contrast, when they're exposed to cues promoting growth or self-improvement (e.g. a statement such as "Ambition is virtue"), happiness activates a non-hedonic need for self-improvement (Fishbach and Labroo, 2007). Hence, consistent with previous findings (Fishbach and Labroo, 2007), prediction 11 is that when the cues promoting hedonic needs are salient, happiness impairs self-control, while when cues promoting self-improvement are salient, happiness improves self-control                                                                                                                                                                                               |           |           | Prediction 12 posits that when cues promoting mood-maintenance are salient, self-control among happy consumers increases when they perceive (a) gratifying behaviors as less pleasurable (i.e. reducing GBn) and (b) virtuous behaviors as more pleasurable (i.e. increasing VBn). In contrast, when cues promoting self-improvement are salient, altering the instrumentalities of gratifying and virtuous behaviors toward the hedonic need does not affect self-control                                                                                                                             |
|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |           |           | Prediction 13 posits that when cues promoting self-improvement are salient, self-control increases among happy consumers when they more strongly perceive that (a) virtuous behaviors create opportunities for self-improvement (i.e. increasing VBn), and (b) indulgent behaviors impede progress and lead to stagnation (i.e. decreasing GBn). On the other hand, when cues promoting mood-maintenance are salient, changing instrumentalities of gratifying and virtuous behavior toward the need for self-improvement has no impact on self-control                                                |
| <b>Pride</b>     | According to past literature (Wilcox <i>et al.</i> , 2011), when the source of pride (e.g. a promotion, a win in a competition) is not salient, consumers misattribute their feelings of pride to the long-term goal that a virtuous option facilitates (e.g. weight loss, financial independence), feeling they've made ample progress on the goal. This, in turn, licenses them to seek pleasure and impairs self-control. Thus, consistent with previous research (Wilcox <i>et al.</i> , 2011), prediction 14 is that when the source of pride isn't salient, pride activates a hedonic need and hurts self-control. On the other hand, when the source of pride is salient, an alternative process predicts how pride affects self-control. Specifically, pride increases self-awareness (Tracy and Robins, 2007), which in turn activates a non-hedonic need to pursue long-term goals. Because virtuous options facilitate the pursuit of long-term goals by default, pride increases self-control                                                                                          |           |           | When the source of pride is not salient, pride activates a hedonic need. Accordingly, prediction 15 posits that self-control can be strengthened by leading consumers to perceive (a) gratifying behaviors as less pleasurable (i.e. lowering GB <sub>n</sub> ) and (b) virtuous behaviors as more pleasurable (i.e. increasing VB <sub>n</sub> ). In contrast, when the source of pride is salient, pride does not activate a hedonic need; as a result, shifting the instrumentalities of gratifying and virtuous behaviors toward the hedonic need has no effect on self-control                    |
|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |           |           | When the source of pride is salient, pride increases self-awareness and activates the pursuit of long-term goals (Wilcox <i>et al.</i> , 2011). Thus, prediction 16 posits that pride enhances self-control when consumers perceive virtuous behaviors as more instrumental to long-term goals (i.e. increasing VB <sub>n</sub> ) and gratifying behaviors as more obstructive to those goals (i.e. decreasing GB <sub>n</sub> )                                                                                                                                                                       |

competition) when addressing proud consumers (i.e. prediction 14). In addition, while making the source salient, businesses should emphasize how virtuous options are particularly good at facilitating long-term goals (i.e. prediction 16).

### Sadness

Sad consumers can be encouraged to exercise more self-control by highlighting how virtuous behaviors help avoid future reward losses, whereas indulgences don't (i.e. prediction 3). For instance, managers seeking to promote healthy eating can increase the salience of reward losses by adopting practices such as nutrition labeling or emphasizing the sugar and fats that consumers avoid when selecting healthier food options. Financial service providers and policymakers can emphasize that impulsive spending constrains consumers' ability to afford future luxuries, such as travel or a larger home, car, or other aspirational assets.

Sad (predictions 2), happy (prediction 12) and proud (prediction 15) consumers can also be encouraged to exert more self-control by highlighting how virtuous behaviors can be pleasurable, and indulgences less pleasurable than imagined. For instance, service providers in the health space can remind consumers that activities such as exercising, dancing, spending time in nature, yoga and meditation can be enjoyable and boost mood. Similarly, they can remind consumers that gratifying behaviors such as excessive TV watching, scrolling on social media or sedentary behavior can lead to irritation and bad moods.

Because these strategies for guilt, happiness, pride and sadness are normative and might also help the general population, they can be applied more broadly.

### Anxiety

Anxious consumers are more likely to exercise self-control when they are told that virtuous behaviors help prevent future threatening events (i.e. prediction 6). For instance, they're more likely to brush, wear masks, eat healthy and exercise when reminded that these actions help prevent future poor health or disease. Similarly, they are more likely to save money when reminded that savings can increase preparedness for financial uncertainties, emergencies and job losses. Conversely, anxious consumers are also more likely to exercise self-control when reminded that gratifying behaviors increase the risk of future threatening events. For instance, they are more likely to avoid unhealthy foods, quit smoking and drinking, when reminded that they increase the risk of diseases.

Anxious consumers should be more inclined to exercise self-control when virtuous activities are described as more relaxing and indulgent options as less relaxing (prediction 5). For instance, anxious consumers would be more inclined to engage in virtuous activities such as spending time in nature, practicing yoga, dancing or meditating when reminded that these activities provide relaxation. Conversely, they may be less inclined to engage in gratifying behaviors – such as excessive social media use or unhealthy eating – when reminded that any mood enhancement these activities provide is fleeting and often followed by a subsequent drop in mood.

### Anger

Angry consumers can be motivated to exercise greater self-control when virtuous benefits are framed as offering dominance-related rather than unrelated benefits (prediction 8). For instance, angry consumers are more likely to exercise or eat healthily when they're told that these behaviors help them gain strength rather than prevent disease, such as through slogans like "Eat healthy not to be skinny, but to be badass." (p. 252; Koley and Warren, 2025). Conversely, they can also be better motivated by framing gratifying behaviors as inhibiting consumers' dominance needs. For instance, angry consumers should be more likely to forgo a sedentary lifestyle when told it hurts their strength or stamina rather than their immunity.

### Limitations and future research

The need-based choice model offers a key to understanding the complex and seemingly inconsistent effects of emotions on self-control by accounting for the interplay between the specific needs activated by emotions and the benefits of options in self-control dilemmas. However, a limitation of the model is that it predicts the effects of incidental, but not integral, emotions. Prior research suggests that integral emotions are more likely to take the form of fleeting, nonconscious affect rather than persistent, consciously experienced emotions (Baumeister *et al.*, 2007). Because the model assumes that emotional consumers consciously evaluate their active needs and the instrumental value of choice options, it is less suited to predicting the effects of integral emotions. Accordingly, future research could extend the framework to include integral emotions, empirically test the proposed predictions for sadness, happiness, pride, guilt, anger and anxiety, and examine the self-control effects of yet other underexplored incidental emotions, such as excitement, boredom, frustration and loneliness.

### References

- Agarwal, S., Chomsisengphet, S., Meier, S. and Zou, X. (2020), "In the mood to consume: effect of sunshine on credit card spending", *Journal of Banking & Finance*, Vol. 121, p. 105960.
- Allard, T. and White, K. (2015), "Cross-domain effects of guilt on desire for self-improvement products", *Journal of Consumer Research*, Vol. 42 No. 3, pp. 401-419.
- Andrade, E.B. (2005), "Behavioral consequences of affect: combining evaluative and regulatory mechanisms", *Journal of Consumer Research*, Vol. 32 No. 3, pp. 355-362.
- Atalay, A.S. and Meloy, M.G. (2011), "Retail therapy: a strategic effort to improve mood", *Psychology & Marketing*, Vol. 28 No. 6, pp. 638-659.
- Baumeister, R.F. (2002), "Yielding to temptation: self-control failure, impulsive purchasing, and consumer behavior", *Journal of Consumer Research*, Vol. 28 No. 4, pp. 670-676.
- Baumeister, R.F., Stillwell, A.M. and Heatherton, T.F. (1994), "Guilt: an interpersonal approach", *Psychological Bulletin*, Vol. 115 No. 2, p. 243.
- Baumeister, R.F., Vohs, K.D., DeWall, C.N. and Zhang, L. (2007), "How emotion shapes behavior: feedback, anticipation, and reflection, rather than direct causation", *Personality and Social Psychology Review*, Vol. 11 No. 2, pp. 167-203.



- Berkowitz, L. and Harmon-Jones, E. (2004), "Toward an understanding of the determinants of anger", *Emotion*, Vol. 4 No. 2, pp. 107-130.
- Carver, C.S. (1979), "A cybernetic model of self-attention processes", *Journal of Personality and Social Psychology*, Vol. 37 No. 8, pp. 1251-1281.
- Carver, C.S. and Harmon-Jones, E. (2009), "Anger is an approach-related affect: evidence and implications", *Psychological Bulletin*, Vol. 135 No. 2, pp. 182-204, doi: [10.1037/a0013965](https://doi.org/10.1037/a0013965).
- Clore, G.L. and Centerbar, D.B. (2004), "Analyzing anger: how to make people mad", *Emotion*, Vol. 4 No. 2, pp. 139-144.
- Cryder, C.E., Lerner, J.S., Gross, J.J. and Dahl, R.E. (2008), "Misery is not miserly: sad and self-focused individuals spend more", *Psychological Science*, Vol. 19 No. 6, pp. 525-530.
- Deci, E.L. and Ryan, R.M. (2008), "Hedonia, eudaimonia, and well-being: an introduction", *Journal of Happiness Studies*, Vol. 9 No. 1, pp. 1-11.
- Derakshan, N. and Eysenck, M.W. (2009), "Anxiety, processing efficiency, and cognitive performance", *European Psychologist*, Vol. 14 No. 2, pp. 168-176.
- Duhachek, A., Agrawal, N. and Han, D. (2012), "Guilt versus shame: coping, fluency, and framing in the effectiveness of responsible drinking messages", *Journal of Marketing Research*, Vol. 49 No. 6, pp. 928-941.
- Durante, K.M. and Laran, J. (2016), "The effect of stress on consumer", *Journal of Marketing Research*, Vol. 53 No. 5, pp. 814-828.
- Eysenck, M.W., Derakshan, N., Santos, R. and Calvo, M.G. (2007), "Anxiety and cognitive performance: attentional control theory", *Emotion*, Vol. 7 No. 2, pp. 336-353.
- Fedorikhin, A. and Patrick, V.M. (2010), "Positive mood and resistance to temptation: the interfering influence of elevated arousal", *Journal of Consumer Research*, Vol. 37 No. 4, pp. 698-711, doi: [10.1086/655665](https://doi.org/10.1086/655665).
- Fishbach, A. and Labroo, A.A. (2007), "Be better or be merry: how mood affects self-control", *Journal of Personality and Social Psychology*, Vol. 93 No. 2, pp. 158-173.
- Gailliot, M.T., Baumeister, R.F., Dwall, C.N., Maner, J.K., Plant, E.A., Tice, D.M., Brewer, L.E. and Schmeichel, B.J. (2007), "Self-control relies on glucose as a limited energy source: willpower is more than a metaphor", *Journal of Personality and Social Psychology*, Vol. 92 No. 2, p. 325.
- Gardner, M.P., Wansink, B., Kim, J. and Park, S.-B. (2014), "Better moods for better eating? How mood influences food choice", *Journal of Consumer Psychology*, Vol. 24 No. 3, pp. 320-335.
- Garg, N. and Lerner, J.S. (2013), "Sadness and consumption", *Journal of Consumer Psychology*, Vol. 23 No. 1, pp. 106-113.
- Garg, N., Wansink, B. and Inman, J.J. (2007), "The influence of incidental affect on consumers' food intake", *Journal of Marketing*, Vol. 71 No. 1, pp. 194-206.
- Govind, R., Garg, N. and Mittal, V. (2020), "Weather, affect, and preference for hedonic products: the moderating role of gender", *Journal of Marketing Research*, Vol. 57 No. 4, pp. 717-738.
- Griskevicius, V., Goldstein, N.J., Mortensen, C.R., Sundie, J. M., Cialdini, R.B. and Kenrick, D.T. (2009), "Fear and loving in las vegas: evolution, emotion, and persuasion", *Journal of Marketing Research*, Vol. 46 No. 3, pp. 384-395.
- Guinote, A. (2017), "How power affects people: activating, wanting, and goal seeking", *Annual Review of Psychology*, Vol. 68 No. 1, pp. 353-381.
- Han, D., Duhachek, A. and Agrawal, N. (2014), "Emotions shape decisions through construal level: the case of guilt and shame", *Journal of Consumer Research*, Vol. 41 No. 4, pp. 1047-1064.
- Hoch, S.J. and Loewenstein, G. (1991), "Time-inconsistent preferences and consumer self-control", *Journal of Consumer Research*, Vol. 17 No. 4, pp. 492-507.
- Huta, V. (2013), "Pursuing eudaimonia versus hedonia: distinctions, similarities, and relationships", In Waterman, A.S. (Ed.), *The best within us: Positive psychology perspectives on eudaimonia*, American Psychological Association, pp. 139-158, doi: [10.1037/14092-008](https://doi.org/10.1037/14092-008).
- Huta, V. (2015), "The complementary roles of Eudaimonia and Hedonia and how they can be pursued in practice", In Joseph, S. (Ed.), *Positive Psychology in Practice*, Wiley, doi: [10.1002/9781118996874.ch10](https://doi.org/10.1002/9781118996874.ch10).
- Keltner, D. and Gross, J.J. (1999), "Functional accounts of emotions", *Cognition & Emotion*, Vol. 13 No. 5, pp. 467-480.
- Khan, U. and Dhar, R. (2006), "Licensing effect in consumer choice", *Journal of Marketing Research*, Vol. 43 No. 2, pp. 259-266.
- Kim, H., Park, K. and Schwarz, N. (2010), "Will this trip really be exciting? The role of incidental emotions in product evaluation", *Journal of Consumer Research*, Vol. 36 No. 6, pp. 983-991.
- Kim, J.C., Wadhwa, M. and Chattopadhyay, A. (2019), "When busy is less indulging: impact of busy mindset on self-control behaviors", *Journal of Consumer Research*, Vol. 45 No. 5, pp. 933-952.
- Kim, S. and Trusov, M. (2025), "The impact of air pollution on consumer spending", *Journal of Marketing*, Vol. 89 No. 3, pp. 78-96.
- Knowles, K.A. and Olatunji, B.O. (2021), "Anxiety and safety behavior usage during the COVID-19 pandemic: the prospective role of contamination fear", *Journal of Anxiety Disorders*, Vol. 77, p. 102323.
- Koley, S. and Warren, C. (2025), "Anger and self-control: how the need to dominate can lead to better choices", *Journal of Public Policy & Marketing*, Vol. 44 No. 2, pp. 242-260.
- Koley, S., Warren, C. and Ramanathan, S. (2025), "When does anxiety increase attempts to spend time and money efficiently?", *Psychology & Marketing*, Vol. 42 No. 9, doi: [10.1002/mar.22236](https://doi.org/10.1002/mar.22236).
- Lades, L.K. and Hofmann, W. (2019), "Temptation, self-control, and inter-temporal choice", *Journal of Bioeconomics*, Vol. 21 No. 1, pp. 47-70.
- Lasaleta, J.D., Werle, C.O. and Yamim, A.P. (2021), "Nostalgia makes people eat healthier", *Appetite*, Vol. 162, p. 105187.
- Lazarus, R.S. (1991), *Emotion and Adaptation*, Oxford University Press.
- Lefebvre, S., Hasford, J. and Wang, Z. (2019), "The effects of guilt and sadness on sugar consumption", *Journal of Business Research*, Vol. 100, pp. 130-138.

- Lench, H.C., Bench, S.W., Darbor, K.E. and Moore, M. (2015), "A functionalist manifesto: goal-related emotions from an evolutionary perspective", *Emotion Review*, Vol. 7 No. 1, pp. 90-98.
- Lerner, J.S. and Keltner, D. (2001), "Fear, anger, and risk", *Journal of Personality and Social Psychology*, Vol. 81 No. 1, pp. 146-159.
- Lerner, J.S., Li, Y. and Weber, E.U. (2013), "The financial costs of sadness", *Psychological Science*, Vol. 24 No. 1, pp. 72-79.
- Lerner, J.S., Small, D.A. and Loewenstein, G. (2004), "Heart strings and purse strings: carryover effects of emotions on economic decisions", *Psychological Science*, Vol. 15 No. 5, pp. 337-341.
- Li, Z., Liu, N. and Li, S. (2020), "Environmental orderliness affects self-control and creative thinking: the moderating effects of trait self-control", *Frontiers in Psychology*, Vol. 11, p. 1515.
- Loewenstein, G. (1996), "Out of control: visceral influences on behavior", *Organizational Behavior and Human Decision Processes*, Vol. 65 No. 3, pp. 272-292.
- Manucia, G.K., Baumann, D.J. and Cialdini, R.B. (1984), "Mood influences on helping: direct effects or side effects?", *Journal of Personality and Social Psychology*, Vol. 46 No. 2, pp. 357-364.
- McClelland, D.C. and Burnham, D.H. (2017), "Power is the great motivator", *In Leadership Perspectives*, Routledge.
- Muraven, M. and Baumeister, R.F. (2000), "Self-regulation and depletion of limited resources: does self-control resemble a muscle?", *Psychological Bulletin*, Vol. 126 No. 2, pp. 247-259.
- Pham, M.T. (2007), "Emotion and rationality: a critical review and interpretation of empirical evidence", *Review of General Psychology*, Vol. 11 No. 2, pp. 155-178.
- Raghunathan, R., Naylor, R.W. and Hoyer, W.D. (2006), "The unhealthy = tasty intuition and its effects on taste inferences, enjoyment, and choice of food products", *Journal of Marketing*, Vol. 70 No. 4, pp. 170-184.
- Raghunathan, R. and Pham, M.T. (1999), "All negative moods are not equal: motivational influences of anxiety and sadness on decision making", *Organizational Behavior and Human Decision Processes*, Vol. 79 No. 1, pp. 56-77.
- Rozin, P., Haidt, J. and McCauley, C.R. (2008), *Disgust*, Guilford Press.
- Salerno, A., Laran, J. and Janiszewski, C. (2014), "Hedonic eating goals and emotion: when sadness decreases the desire to indulge", *Journal of Consumer Research*, Vol. 41 No. 1, pp. 135-151.
- Salerno, A., Laran, J. and Janiszewski, C. (2015), "Pride and regulatory behavior: the influence of appraisal information and self-regulatory goals", *Journal of Consumer Research*, Vol. 42 No. 3, pp. 499-514.
- Schmeichel, B.J. and Inzlicht, M. (2013), "Incidental and integral effects of emotions on self-control", in Robinson, M. D., Watkins, E. and Harmon-Jones, E. (Eds), *Handbook of Cognition and Emotion*, The Guilford Press, pp. 272-290.
- Skinner, N. and Brewer, N. (2002), "The dynamics of threat and challenge appraisals prior to stressful achievement events", *Journal of Personality and Social Psychology*, Vol. 83 No. 3, p. 678.
- Slessareva, E. and Muraven, M. (2004), "Sensitivity to punishment and self-control: the mediating role of emotion", *Personality and Individual Differences*, Vol. 36 No. 2, pp. 307-319.
- Smith, C.A. and Ellsworth, P.C. (1985), "Patterns of cognitive appraisal in emotion", *Journal of Personality and Social Psychology*, Vol. 48 No. 4, pp. 813-838.
- Steger, M.F. (2016), "Hedonia, eudaimonia, and meaning: Me versus us; fleeting versus enduring", *Handbook of Eudaimonic Well-Being*, pp. 175-182.
- Tamir, M., Mitchell, C. and Gross, J.J. (2008), "Hedonic and instrumental motives in anger regulation", *Psychological Science*, Vol. 19 No. 4, pp. 324-328.
- Tangney, J.P., Stuewig, J. and Mashek, D.J. (2007), "Moral emotions and moral behavior", *Annual Review of Psychology*, Vol. 58 No. 1, pp. 345-372.
- Thomas, M., Desai, K.K. and Seenivasan, S. (2011), "How credit card payments increase unhealthy food purchases: visceral regulation of vices", *Journal of Consumer Research*, Vol. 38 No. 1.
- Tice, D.M. and Bratslavsky, E. (2000), "Giving in to feel good: the place of emotion regulation in the context of general self-control", *Psychological Inquiry*, Vol. 11 No. 3, pp. 149-159.
- Tice, D.M., Bratslavsky, E. and Baumeister, R.F. (2001), "Emotional distress regulation takes precedence over impulse control: if you feel bad, do it!", *Journal of Personality and Social Psychology*, Vol. 80 No. 1, pp. 53-67.
- Tooby, J. and Cosmides, L. (1990), "The past explains the present", *Ethology and Sociobiology*, Vol. 11 Nos 4-5, pp. 375-424.
- Tracy, J.L. and Robins, R.W. (2007), "The psychological structure of pride: a tale of two facets", *Journal of Personality and Social Psychology*, Vol. 92 No. 3, pp. 506-525, doi: [10.1037/0022-3514.92.3.506](https://doi.org/10.1037/0022-3514.92.3.506).
- Tuk, M.A., Zhang, K. and Sweldens, S. (2015), "The propagation of self-control: self-control in one domain simultaneously improves self-control in other domains", *Journal of Experimental Psychology: General*, Vol. 144 No. 3, p. 639.
- Van Osselaer, S.M.J. and Janiszewski, C. (2012), "A goal-based model of product evaluation and choice", *Journal of Consumer Research*, Vol. 39 No. 2, pp. 260-292.
- Van Osselaer, S.M.J., Ramanathan, S., Campbell, M.C., Cohen, J.B., Dale, J.K., Herr, P.M., Janiszewski, C., Kruglanski, A.W., Lee, A.Y., Read, S.J., Russo, J.E. and Tavassoli, N.T. (2005), "Choice based on goals", *Marketing Letters*, Vol. 16 Nos 3-4, pp. 335-346.
- Vosgerau, J., Scopelliti, I. and Huh, Y.E. (2020), "Exerting self-control  $\neq$  sacrificing pleasure", *Journal of Consumer Psychology*, Vol. 30 No. 1, pp. 181-200.
- Wilcox, K., Kramer, T. and Sen, S. (2011), "Indulgence or self-control: a dual process model of the effect of incidental pride on indulgent choice", *Journal of Consumer Research*, Vol. 38 No. 1, pp. 151-163, doi: [10.1086/657606](https://doi.org/10.1086/657606).
- Winterich, K.P. and Haws, K.L. (2011), "Helpful hopefulness: the effect of future positive emotions on consumption", *Journal of Consumer Research*, Vol. 38 No. 3, pp. 505-524.

- Woolley, K. and Fishbach, A. (2016), "For the fun of it: harnessing immediate rewards to increase persistence in long-term goals", *Journal of Consumer Research*, Vol. 42 No. 6, pp. 952-956.
- Wyer, R.S., Dong, P., Huang, X., Huang, Z. and Wan, L.C. (2019), "The effect of incidental emotions on judgments and behavior in unrelated situations: a review", *Journal of the Association for Consumer Research*, Vol. 4 No. 2, pp. 199-207.
- Zemack-Rugar, Y., Bettman, J.R. and Fitzsimons, G.J. (2007), "The effects of nonconsciously priming emotion concepts on behavior", *Journal of Personality and Social Psychology*, Vol. 93 No. 6, p. 927.
- Zemack-Rugar, Y. and Corus, C. (2018), "The effects of anticipated goal-inconsistent behavior on present goal choices", *Psychology & Marketing*, Vol. 35 No. 9, pp. 676-695.

- Zhang, Y., Fishbach, A. and Kruglanski, A.W. (2007), "The dilution model: how additional goals undermine the perceived instrumentality of a shared path", *Journal of Personality and Social Psychology*, Vol. 92 No. 3, pp. 389-401.

### **Further reading**

- Giner-Sorolla, R. (2001), "Guilty pleasures and grim necessities: affective attitudes in dilemmas of self-control", *Journal of Personality and Social Psychology*, Vol. 80 No. 2, p. 206.

### **Corresponding author**

Shruti Koley can be contacted at: [skoley@pdx.edu](mailto:skoley@pdx.edu)