Received: 7 September 2025 | Accepted: 3 October 2025

DOI: 10.1002/jcpy.70018

RESEARCH DIALOGUE

Patience as a pathway to optimal consumer experience and behavior

Kate Sweeny

University of California, Riverside, Riverside, California, USA

Correspondence
Kate Sweeny, Department of Psychology, University of California, Riverside, Riverside, CA 92521, USA.
Email: ksweeny@ucr.edu

Funding information
Templeton Religion Trust, Grant/Award Number: TRT-2023-32669

Abstract

Patience has been a consistent source of interest and inspiration for generations of thinkers and writers. In this article, I delineate the tenets of a comprehensive framework for understanding patience, the *process model of patience* (Sweeny, *Personality and Social Psychology Review*, 2025, 29, 145), that positions impatience as a common and unpleasant emotion and patience as a targeted form of emotion regulation. I then outline potential applications of the model for consumer decisions, service experiences, and marketing contexts and close with practical recommendations to optimize consumer behavior in contexts where impatience is likely to arise.

KEYWORDS
emotion, impatience, patience, waiting

> Patience is bitter, but its fruit is sweet.
>
> John Chardin

> The two most powerful warriors are patience and time.
>
> Leo Tolstoy

> Patience is the art of concealing your impatience.
>
> Guy Kawasaki

As the opening quotations make clear, patience has been a consistent source of interest and inspiration for generations of thinkers and writers. Those quotes, just a small selection among many famous ones, portray varied depictions of patience: as a difficult but ultimately beneficial practice, as a powerful tool to achieve goals in the face of delays, or as a strategic form of impression management. Those wise words might make intuitive sense, but neither Chardin nor Tolstoy nor Kawasaki was speaking from a position of deep theoretical clarity about the full nature of patience. In this article, I delineate the tenets of a comprehensive framework for understanding patience, the *process model of patience* (Sweeny, 2025), that positions impatience as a common and unpleasant emotion and patience as a targeted form of emotion regulation. I then outline potential applications of the model for consumer decisions, service experiences, and marketing contexts and close with practical recommendations to optimize consumer behavior in contexts where impatience is likely to arise.

A BRIEF HISTORY OF PATIENCE IN PSYCHOLOGY

As already noted, patience has been a topic of interest for literal thousands of years. Though Aristotle and many other philosophers contributed deep and useful insights into the nature of patience as a virtue, and every major religion speaks to its role in spiritual growth and connection, empirical evidence speaking directly to patience was quite scarce until the 2000s.[1] At that point, researchers studying intertemporal choice adopted the term "patient" to refer to a pattern of behavior in which people make the choice to wait for a larger reward, rather

[1]Note that Michel and others' work on delay of gratification (e.g., Mischel & Ebbesen, 1970), as well as the broad literature on self-control, clearly spoke to the construct of patience but never, to my knowledge, used that term.

Accepted by David Wooten, Editor; Associate Editor, Kathleen Vohs

"Impatience for negative experiences" by David Hardisty. https://doi.org/10.1002/jcpy.70017.

"From decision patience to process patience: A decision-process integration of the choice to wait and the experience of waiting" by Selin A. Malkoc. https://doi.org/10.1002/jcpy.70016.

than grabbing a smaller and more immediate reward, relatively often (e.g., Berns et al., 2007; Takahashi, 2009).

Below I provide a very brief tour through the literature on intertemporal choice and its contributions and limitations. First, though, I would note that contemporaneous work took a different angle, focusing on the virtuous view of patience but using scientific methods to do so. Schnitker (2012) defined patience as "the propensity of a person to wait calmly in the face of frustration, adversity, or suffering" (p. 263) and developed a measure, the three-factor patience scale, to assess the construct. In the years since, Schnitker has produced dozens of rigorous studies investigating well-being correlates of patience (as she defines it) and developing interventions to increase patience (e.g., Schnitker et al., 2017, 2020, 2021). This work has been critical for elevating the study of patience in psychology beyond short-term monetary choices and for demonstrating the utility of virtue approaches in the scientific realm. Schnitker's work inspired the theoretical effort at the heart of this article, but the process model of patience starts from a position of amorality and is agnostic to the virtuous nature of patience.

Turning to the conceptualization of patience most closely related to consumer behavior, typical studies of intertemporal choice present participants choices between a small reward immediately or after a relatively short duration, say $5 tomorrow, and a larger reward after a relatively long duration, say $25 in 6 months. Participants typically make many such choices, varying in value and temporal distance, to establish their discounting rate. A person who tends to choose more immediate rewards has a steeper discounting rate, capturing the degree to which they "discount" the value of a distant future reward, than a person who is more often willing to wait for larger rewards. Researchers in that area have adopted the terms patient and impatient to describe relatively shallow and steep discounting rates, respectively.

Although I will ultimately argue that this conceptualization of patience is too narrow, the literature on intertemporal choice has revealed key insights into the nature of these types of trade-offs. Most fundamental is the finding that people consistently engage in some degree of temporal discounting (also referred to as delay discounting), tied to the duration of the wait for the larger reward (e.g., Lempert & Phelps, 2016). In fact, this differential preference based on both value and time seems to be well-conserved from an evolutionary perspective, as similar choice behavior has been observed in lab studies of chimpanzees (Beran & Hopkins, 2018), Eurasian jays (Schnell et al., 2022), and even cuttlefish (Schnell et al., 2021).

In humans, researchers have identified various factors that tend to affect discounting rates. First, people tend to show a steeper discounting rate for gains than for losses, a phenomenon referred to as the sign effect (Bulley & Schacter, 2020; Thaler, 1981). For example, the same person who opts to take $5 now rather than wait for $25 in 6 months might also choose to pay $25 now rather than wait to pay $5 in 6 months. Second, people tend to show a steeper discounting rate for relatively small gains compared with relatively large gains, a phenomenon referred to as the magnitude effect (Chapman & Winquist, 1998). For example, the same person who opts to wait 6 months for $500 rather than take $400 now might also choose to take $5 now rather than wait for $25 in 6 months. Discounting rates also vary depending on various features of the delay (e.g., length, whether the delay is divided into intervals), and altering the focus of participants' attention or their subjective perception of time or value can similarly alter their discounting rate (see Lempert & Phelps, 2016).

Despite these useful insights into when people are most likely to resist or give into the lure of an immediate reward, the literature on intertemporal choice is limited in its ability to speak to the nature of patience as it arises in daily life. Methodologically, nearly every study of intertemporal choice relies on hypothetical decisions about monetary trade-offs. Though such clear-cut decisions occasionally arise in the real world (e.g., deciding whether to invest or spend), many circumstances that call for patience do not fall neatly into that framework.

Conceptually, the literature is heavily reliant on rational economic models, largely ignoring the role of emotions or other psychological mechanisms. Despite many neuroscientific studies of brain activity during intertemporal choices (e.g., Carter et al., 2010), the psychological experience of making such choices remains within a nearly opaque box. Studies that have examined the role of emotions tend to focus on the effects of incidental emotions, and even the limited efforts to consider the central role of emotions like dread and eager anticipation (Hardisty & Weber, 2020; Harris, 2012) have met with contradictory evidence from studies with patients with hippocampal brain lesions that limit their ability to simulate the future and thus feel anticipatory emotions (Patt et al., 2024).

In sum, the literature on intertemporal choice has provided one path by which to understand a type of patience, namely the patient choice to delay gratification in relatively simple scenarios. However, a complete picture of patience must go beyond these simple choices to capture the full range of situations to which the term patience might reasonably apply, and thus a more complex theoretical approach that can provide coherence across these contexts is needed.

THE PROCESS MODEL OF PATIENCE

The process model of patience (Sweeny, 2025; Figure 1) is well-suited to that task. Grounded in well-established

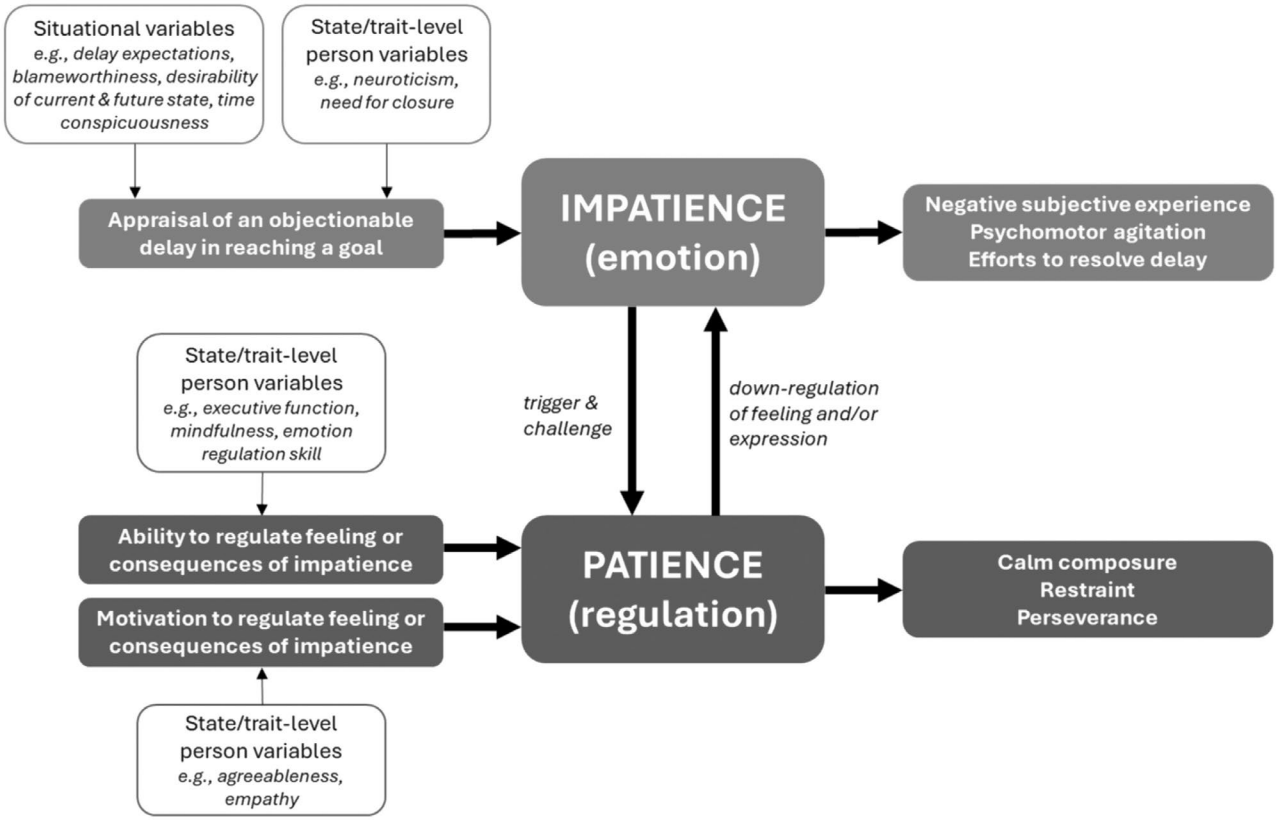

FIGURE 1 The process model of patience. Reprinted from Sweeny (2025).

theories of emotion and emotion regulation, the model starts from the novel premise that impatience is an emotion that is uniquely triggered by the subjective perception that reaching a goal (broadly defined) is taking an unfair, unreasonable, or inappropriate amount of time. Patience, then, is the emotion regulation process that targets impatience and downregulates its experience or expression, or both.

Impatience

The top half of Figure 1 depicts the process by which the emotion of impatience arises, its motivational and behavioral effects, and situational and individual factors that influence its likelihood of arising. Emotion researchers differ widely in their theoretical orientation; in this case, we describe impatience through the lens of functionalist theories, which argue that humans evolved to experience a broad set of discrete emotions because those emotions served to optimize the likelihood of survival (Keltner & Gross, 1999). Functionalist theories have been criticized for paying too little attention to the important role of culture and socialization in shaping humans' emotional life (e.g., Barrett, 2017), so we remain open to the possibility that evolutionary pressures combine with cultural forces to shape nuances in any given person's experience of impatience.

In the context of functionalist theories, the standard for establishing a new emotion (i.e., one that has not yet gained acceptance as such) is multifaceted. Emotions, in that view, are coordinated systems of experience that include elements of situational appraisal, subjective experience, physiology, motivation, and expression (Keltner & Gross, 1999). Definitive proof that a given emotion "counts" based on those standards is difficult to establish, but recent evidence provides support for the idea that impatience should make the list.

Situational appraisal

As noted earlier, the process model of patience (hereafter shortened to PMP) proposes that impatience arises in response to the perception that a goal is taking too long to achieve.[2] To unpack that claim, I would first note that the term "goal" is used quite broadly here. In the context of consumer behavior, a customer could become impatient due to the length of a line (delaying the goal of

[2]In that sense, the PMP harkens back to Carver and Scheier's (1981, 2012) theoretical position that negative affect is a response to an insufficiently high rate of progress toward a goal. The aims of their work differed from those of the PMP, particularly in their focus on self-regulatory feedback loops and generalized positive and negative affect rather than discrete emotion processes, but the general process by which impatience arises is compatible with their thinking.

accomplishing whatever awaits them at the front of the line), the duration of a wait for customer service or a scheduled appointment (delaying the goal of obtaining service), the wait for a delivery or product release (delaying the goal of receiving the item), or even the duration of an employee's explanation or other interpersonal interaction (delaying the goal of receiving information or simply ending the interaction).

The PMP uses the term "objectionable delay" to convey that the objective duration of a delay is far less important, perhaps even irrelevant, compared with the subjective perception of whether the delay is fair, reasonable, and appropriate. For example, waiting an hour in line might be entirely acceptable in some circumstances and absolutely intolerable in others, depending on how the person appraises that delay duration. In fact, in initial tests of the PMP's claims, the objective duration of a delay consistently failed to predict feelings of impatience (Sweeny et al., 2024).

In contrast, several studies have tested the link between impatience and one's perception of a delay as objectionable and found strong support for their tight association. In studies using impatience-inducing scenarios (Sweeny et al., 2024), daily reports of impatience-inducing events (Hawes & Sweeny, unpublished data), and a lab induction of impatience (Sweeny et al., unpublished data), correlations between reports of impatience and appraisals of a delay as objectionable were in excess of $r = 0.60$. Those strong correlations are particularly noteworthy given that the measure of impatience (a single-item rating intensity of that emotion) and the measure of objectionableness (five items, e.g., "Why is this [situation] still going on?" "I wish this wait would resolve more quickly") were separated by several minutes and several other measures in the surveys and were quite distinct in their wording. Thus, strong initial evidence points to impatience arising from a distinct and consistent situational appraisal.

Subjective experience

Put simply, impatience is unpleasant—in other words, a negative emotion. In some cases, impatience arises alongside positive emotions, particularly eager anticipation or excitement, when the goal is both highly appealing and also frustratingly delayed. As a classic example, a child anticipating their birthday may be both excited about the forthcoming shower of attention and presents (a positive emotion), while also impatient about the countless hours that remain between them and their big day (a negative emotion). Supporting this view of impatience are unpublished data showing consistent direct correlations between feelings of impatience and other negative emotions and either near-zero or inverse correlations with positive emotions (data described in Hawes & Sweeny, unpublished data; Sweeny et al., 2024, unpublished data). Note that although impatience may feel unpleasant, it is not inherently a "bad" emotion. That is, impatience can be quite useful at times, as I will address shortly in a section on motivation.

The other commonly addressed dimension of emotion experience is arousal level, which captures both the subjective sense of energy or activation people typically feel when they experience that emotion and specific activation patterns in the autonomic nervous system. I will address physiology next, but the PMP does not make a strong claim about the level of arousal associated with typical experiences of impatience.

Given that impatience is an unpleasant emotional experience, one might wonder how often people suffer its particular form of distress. Evidence on that point is very limited, but a new, still-unpublished study begins to speak to the frequency with which impatience arises in day-to-day life. Undergraduate students at a diverse university in Southern California completed an initial baseline study and then could opt into a 7-day experience sampling protocol, in which they were prompted to complete brief surveys four times per day. At the start of each survey, participants indicated whether they had felt impatient in the time since they last completed a survey for the study. Initial evidence from that study, albeit limited by the nature of the sample (i.e., college-aged students in a single region), suggests that people experience approximately one impatience-inducing incident per day. Given the wide variety of circumstances that could provoke impatience (perhaps especially in Southern California, with its notorious traffic), that rate seems plausible as a first estimate.

Physiology

No modern emotion researcher would claim that individual emotions are associated with unique patterns of physiological activation. However, broad patterns of physiological activation are key to the holistic experience of any given emotion, as noted earlier. To the best of my knowledge, no published work addresses physiological signatures of impatience per se, but new data from my lab provides some early hints of what it might look like in terms of sympathetic nervous system activation (the "fight or flight" system). In that study, more than 500 participants came to the lab for a study ostensibly about games and well-being; ~250 produced usable physiological data. A research assistant applied electrodes for the physiological assessment and took away all of the participant's belongings, including phones and smartwatches due to potential interference with the physiological signals. The research assistant then walked the participant to a nearly empty room, turned on a video camera, instructed them to stay as still as possible, and indicated that they would "be back in just a minute." In fact, the research assistant did not

return for 15 min, at which point the participant completed a brief survey about their waiting experience, including measures of impatience and their appraisal of the delay.

Preliminary analyses point to a process that unfolds over time—which is sensible given that the wait the participants experienced presumably became more objectionable as "just a minute" came and went, and still they were stuck without distraction or explanation. Those who ultimately reported relatively little impatience showed a pattern of decreasing sympathetic activation, as if they settled into the strange circumstances and found a measure of relaxation (our coders noted that some participants even fell asleep as they waited). In contrast, those who reported relatively intense impatience initially showed a decreasing pattern, like their low-impatience counterparts, but their sympathetic activity began to climb in the last 5 min of the 15 min wait. More analyses and further studies are needed to dive deeper into the physiology of impatience, but these findings are an intriguing start.

Motivation

Key to functionalist theories of emotion is that "feeling is for doing" (Zeelenberg & Pieters, 2006)—in other words, that emotions come with specific motivations, often referred to as action tendencies. As the reasoning goes, these action tendencies are the mechanism by which particular emotions prompt action that translates into survival benefits more often than not, thus retaining those emotions in human psychology over the course of generations. In the case of impatience, the PMP proposes that its action tendency is simply to hasten goal achievement.

That motivation may lead to reasonable action in many cases, as when a person pulls up a traffic app to find a way around unexpected traffic, pays extra for faster shipping, or checks in with the receptionist when an appointment time has come and gone. However, impatience can also lead to impulsive, even dangerous behavior, like driving recklessly, cutting in line, or opting for a quick-fix solution that carries unnecessary risks. Alternatively, the goal of ending the wait might become more salient than the original goal if the delay itself becomes sufficiently intolerable, in which case the person could opt to disengage from the original goal (e.g., by leaving the line, hanging up, or turning around and going home).

An important implication of functionalist theories is that, as noted earlier, emotions are not good or bad per se; their usefulness depends on the circumstances. In the case of impatience, some delays truly are inappropriate, unfair, or unreasonable, and thus an appropriate, fair, and reasonable response is to hasten their end. On a small scale, such cases might involve an employee moving at a glacial pace, a purchase that was never shipped, or an appointment that seems to have disappeared from the schedule. On a societal scale, impatience may be more than justified among groups who have waited far too long for equality and justice.

Expression

A final component of emotions in the functionalist view is a unique and recognizable expression, which serves to communicate to others that one is experiencing the relevant emotion. Early work by Ekman and others identified near-universal facial expressions for a small set of "basic" emotions (e.g., Ekman, 1992), but more recent work argues that the list of emotions with distinctive expressive patterns is much longer (Keltner et al., 2019). The list has grown in part due to advances in analytic procedures and data collection methods, including the consideration of the entire body rather than just the face and dynamic expressions rather than only static ones.

A case in point is impatience. The PMP posits that its distinctive expression entails psychomotor agitation, such as tapping toes or fingers, bouncing a leg, pacing, repetitive self-focused behaviors, or verbal outbursts—all expressive elements that would be impossible to detect with static pictures of a face. Though speculative, such agitation may be a symptom of a thwarted desire to literally move forward in time.

In the lab-based impatience induction described in the earlier section on physiology, video recordings of participants provide initial evidence in support of the hypothesized expression of impatience. Trained research assistants coded the videos of our impatient participants using a detailed second-by-second coding procedure to capture various behaviors of interest, including several types of restless, repetitive behaviors. Initial findings paint a clear picture: Participants exhibited those behaviors at a rate of more than once per minute, which was more than two times greater than any other recorded behavior (vocalizations like humming or laughing, breath regulation like sighing or deep breathing, and posture shifts). The most common form of repetitive behavior was bouncing a leg or tapping a foot, which was one of the only options available to express agitation given clear instruction to remain seated and as still as possible, without a phone or other fidgeting target. Perhaps most important for the PMP's claims, those repetitive behaviors were most strongly associated with ratings of impatience by both the participant and the coders, compared with associations with other relevant emotions like boredom and annoyance.

Individual-level predictors

People vary in their likelihood of experiencing impatience and the intensity with which they experience it, all

else being equal. The PMP posits two individual differences that would be particularly relevant for impatience, and thus far the evidence has consistently confirmed their uniquely powerful role (Sweeny et al., 2024). The first, unsurprisingly, is the "big five" personality trait of neuroticism (Soto & John, 2017a, 2017b). People high in neuroticism tend to experience negative emotions more frequently and more intensely, and they also tend to be less stable in their emotional state. The reasons for these emotional signatures of neuroticism are complex, including perceptual biases (people high in neuroticism are more likely to view ambiguous situations in threatening ways; e.g., Rusting, 1998), greater reactivity and poorer regulatory control in the brain when exposed to negative stimuli (Servaas et al., 2013), and heightened worry and rumination (Muris et al., 2005). In the case of impatience, we suspect that people high in neuroticism are quicker to perceive a delay as threatening and thus objectionable, perhaps due to a combination of those processes.

Second, people high in need for cognitive closure also tend to report greater impatience across contexts (Sweeny et al., 2024). In this case, the key element is an aversion to uncertainty, ambiguity, and unpredictability (Kruglanski & Fishman, 2009), all of which are heightened during unexpected or unexpectedly long delays. Note that the PMP does not claim that neuroticism and need for closure are the only individual factors that affect impatience; in theory, any individual difference that affects one's tolerance for or their reactivity to a delay could heighten or mitigate their experience of impatience.

Situation-level predictors

Similarly, any aspect of the situation that makes a delay seem more or less objectionable will affect the likelihood that people will respond with impatience. That said, several situational factors have emerged as particularly predictive of impatience in initial tests of the PMP (Sweeny et al., 2024). One key factor is how the delay compares to one's expectation for how long the delay "should" be—in other words, a fair, reasonable, and appropriate amount of time to achieve the goal. In that sense, the idea that expectations matter is essentially baked into PMP's fundamental claims about impatience as an emotion, but it is nonetheless important to emphasize the relative importance of expectations compared with the objective length of a delay. As a personal example, I used to drive 70 miles each way to work and back in Los Angeles traffic. It was a long commute, to put it mildly, yet even a 90 min drive was entirely tolerable because I knew what to expect each time I hopped in the car. Only when an accident or roadwork made the drive drag closer to 2 h did I begin to feel impatient.

In fact, several studies have confirmed the important role of expectations when it comes to impatience. In hypothetical scenarios, retrospective reports, and an experimental paradigm, people reported greater impatience when a delay was longer than anticipated compared with when the delay was shorter than or as anticipated (Karaman & Sweeny, unpublished data; Sweeny et al., 2024). Interestingly, people are no less impatient when a delay is shorter than expected compared with as expected.

People's impatience also depends on how badly they want to reach their goal and how unpleasant it is to wait in the meantime (Sweeny et al., 2024). A traffic jam may be a welcome setback on the way to a dreaded meeting but an objectionable delay on the way to a highly anticipated concert, and that traffic jam will seem less objectionable in both cases if the driver has a great audiobook cued up.

The cause of a delay also matters, such that people report more impatience when someone is clearly to blame for their plight. Early work on attribution processes and emotions (Weiner, 1985, 2006) articulated the key role of controllability (could someone have prevented this outcome?) and intentionality (did someone want this outcome to occur?) in people's emotional reactions to a wide array of experiences. That theory focused on the negative emotion of anger, understandably, but the PMP posits that impatience similarly intensifies when a target for blame is clear. More research is needed to investigate the exact mechanisms of this effect, but in initial studies, people consistently perceived a delay as more objectionable in those cases (Sweeny et al., 2024).

Finally, the PMP proposes that people feel more impatient when the passage of time is particularly conspicuous or salient. This hypothesis is based on research on time perception in humans and particularly the time-emotion paradox, which describes the way that time can seem to stretch or contract depending on the subjective state of the person perceiving it (Droit-Volet & Gil, 2009). The precise neural process by which this phenomenon arises is complex and still poorly understood, but it seems that when people are distracted from noticing the passage of time, they typically underestimate its duration (e.g., Droit-Volet, 2018). Thus, we anticipated that when people are particularly focused on the seconds ticking by, they will perceive a delay as both objectively longer and more objectionable.

However, the evidence to date on this point is mixed. In hypothetical scenarios, daily diaries, and a lab paradigm, people reported greater impatience when they also reported that they were more focused on time passing (Sweeny et al., 2024; Wilson, 2024). However, an experimental paradigm intended to manipulate the conspicuousness of time (a visible timer) affected impatience in the opposite direction, such that being able to monitor the passage of time reduced impatience (Wilson, 2024). Further tests are underway to untangle these seemingly contradictory findings, but we suspect that one's focus on time is more complex than simply having access (or not) to a clock.

Summary: Impatience

In sum, the PMP positions impatience as a discrete negative emotion, distinct from other emotions in its precipitating appraisal, action tendency, and expression. Specifically, impatience arises when a person perceives a delay in reaching a goal to be unfair, unreasonable, or inappropriate (i.e., objectionable), and impatience motivates people to find ways to reach their goal more quickly. In the meantime, impatience makes itself known via psychomotor agitation, most recognizably in the form of repetitive motor behaviors (e.g., bouncing a leg, tapping fingers). People high in neuroticism and need for cognitive closure are typically more impatient, all else equal, and people become more impatient when a delay is longer than expected, the goal is highly appealing, the wait is highly unpleasant, someone is to blame for the delay, and the passage of time is more front-of-mind.

PATIENCE

At this point in the article, readers might wonder why a process model of patience is so focused on impatience. Put simply, impatience is the problem that patience attempts to solve. Previous conceptualizations of patience have suffered from a lack of parsimony, at times seeming to claim that nearly any good impulse or action falls under the umbrella of patience (e.g., Khormaei et al., 2015; Pianalto, 2016). Schnitker's (2012) definition ("the propensity of a person to wait calmly in the face of frustration, adversity, or suffering") narrows the problem to one related to time and waiting, but it still casts a very wide net without clear boundary conditions or connective framework. Starting from the question, "what is impatience?" reveals that connective framework: Patience is the process by which people regulate their feelings of impatience, in all the varied (but clearly delimited) contexts in which it arises.

This approach is grounded in decades of theoretical and empirical work on emotion regulation more broadly, particularly Gross's (2015) process model of emotion regulation (the similarity in name to the PMP is not coincidental). In brief, this model delineates various points in the emotion generation process at which regulatory efforts can intervene, namely the situation, the person's focus of attention, their appraisal, and their response to that appraisal. Matched to these stages are emotion regulation strategies: situation selection (seeking or avoiding situations in an effort to feel differently), situation modification (changing a current situation in an effort to feel differently), attentional deployment (shifting or focusing the target of attention, for example via distraction, in an effort to feel differently), cognitive reappraisal (thinking differently about the situation in an effort to feel differently), and response modulation (changing one's behavioral or physiological responses in an effort to feel differently).

In the case of patience, people could theoretically employ any of these strategies to regulate their feelings of impatience. However, the PMP proposes that the proactive strategies of situation selection and situation modification, though often effective, are not typically what people mean when they talk about patience. To illustrate, imagine a person who times their visit to the store to avoid the post-work rush or brings a book to the DMV to pass the time more pleasurably. Is that person behaving patiently? It seems more intuitive to say that they are evading the need for patience altogether by intervening before impatience arises.

I would note that this claim is the subject of considerable debate among philosophers and psychologists who study patience. Furthermore, entire papers could (and should!) be written on the question of whether common linguistic usage is a good metric by which to conceptually define psychological variables—but for now, I will simply note that the PMP focuses specifically on attentional deployment, cognitive reappraisal, and response modulation as strategies to regulate impatience. To return to the example of waiting in line, an increasingly impatient customer could play a game on their phone as a distraction (attentional deployment), remind themselves that they are in no hurry and wanted a break anyway (cognitive reappraisal), or take a few deep breaths and plaster on a fake smile for the cashier (response modulation).

In the recent experience sampling study described earlier, participants who said that they had felt impatient since the previous survey also indicated whether they did anything to make themselves feel better and if so, what they did. They could choose among preset options that represented the set of emotion regulation strategies included in Gross's (2015) model, and they could select as many as applied. Initial findings suggest that cognitive reappraisal and attentional deployment were equally common strategies (each chosen roughly 30% of the time), whereas response modulation was less common in the form of both expressive suppression (10%) and physiological control (16%).

Returning to Figure 1, several additional aspects of the patience process deserve note. First, ability and motivation are key. That is, people do not always respond to impatience by attempting to mitigate it; in fact, in our experience sampling data, participants only attempted to feel better in the face of impatience about a third of the time. Only when a person is both motivated to regulate their impatience and has the wherewithal to do so will they enact patience.

Second, some people in some circumstances are more likely to be able and motivated to be patient. Regarding circumstances, the emotion regulation literature is surprisingly quiet when it comes to identifying situational influences on regulatory processes, aside from

the influence of emotional intensity (see Kobylińska & Kusev, 2019; Wilms et al., 2020). Thus, the PMP focuses on individual-level predictors, whether in the form of stable traits or natural variation in the experience and expression of those traits (see Fleeson & Jayawickreme, 2015). Similar to predictors of impatience, the PMP does not provide a comprehensive list of individual differences that might facilitate or inhibit patience; theoretically, any variable that affects one's regulatory ability or motivation would play that role. However, several characteristics are particularly promising candidates.

When it comes to regulatory ability, both the general capacity for self-control (i.e., executive function; Schmeichel & Tang, 2015) and emotion regulation skill in particular are likely to facilitate patience. Mindfulness similarly facilitates patience by promoting acceptance of one's circumstances and a focus on the present moment rather than the hoped-for future goal (Hawes & Sweeny, unpublished data). Regulatory motivation, in contrast, seems to be primarily driven by one's social orientation, namely agreeableness and empathy (Sweeny et al., 2024). The inherently social nature of patience is consistent with the historical conceptualization of patience as a virtue, as most definitions of virtue emphasize the effect of one's behavior on others (e.g., Ratchford et al., 2024).

Finally, at the visual center of Figure 1 are two arrows that depict how patience and impatience interact. The effect of impatience on patience is both a trigger, as the PMP argues that patience is only relevant in the presence of impatience, and a challenge, as more intense impatience is presumably more difficult to regulate effectively (McRae et al., 2010; Sheppes et al., 2009). The effect of patience on impatience, if successful, mitigates either the feeling of impatience, the expression of impatience, or both, producing a state in contrast to the impulsive, agitated state of impatience: calm composure, restraint, and perseverance.

In sum, patience is a targeted form of emotion regulation that attempts to mitigate the experience or expression of impatience by harnessing one's attention, changing one's thoughts, or taking control of one's behavior or physiology. People with stronger executive function, better emotion regulation skills, and a more mindful perspective tend to be better able to enact patience, and people who are particularly agreeable and empathic tend to be more motivated to do so.

POTENTIAL APPLICATIONS TO CONSUMER BEHAVIOR

The process model of patience provides a useful framework for understanding various aspects of consumer psychology and behavior and for developing interventions to optimize those experiences for all parties involved. Here, I provide three potential applications of the model: impatience as a driver of consumer action, predictors of impatience that translate to consumer contexts, and patience as emotion regulation in consumer settings. To close, I will suggest some practical ways that companies could translate these insights into more satisfied customers, and in turn a better bottom line.

Impatience as a driver of consumer action

Customers experience frequent delays across many consumer contexts. Examples appear throughout the article, including waiting in lines, waiting for deliveries, navigating slow websites or customer service calls, or anticipating product launches or promotions. To the extent that customers perceive these delays as unfair, unreasonable, or inappropriate, they are likely to feel impatient as they wait, which may translate into efforts to hasten goal achievement. Such efforts could affect purchase timing (e.g., buying now instead of waiting for a sale), channel choice (e.g., choosing a store over online if shipping is slow), or switching behavior (e.g., abandoning brands perceived as slow).

Predictors that translate to consumer contexts

The PMP identifies a number of situational factors that amplify impatience, which can be readily applied to consumer contexts. As a reminder, people tend to feel more impatient when a delay is longer than they expected, the goal is highly desirable, the waiting conditions are unpleasant, someone is clearly to blame for the delay, and their attention is laser-focused on the passage of time. Table 1 provides examples of how each of those situational factors might take shape in consumer contexts.

TABLE 1 Examples of situational predictors of impatience in consumer contexts.

Situational factor	Examples in consumer contexts
Expectations violated	Delivery takes longer than estimated, app is unusually slow to load, own line moves slower than others
High desirability of goal	Limited-edition product release, ticket sales for a highly anticipated event, line for a new ride or show
Unpleasant waiting conditions	Crowded waiting room, long line with nowhere to sit, cacophonous or annoying hold music
Clear blame	Poorly organized queue, shipping delay due to error, slow-moving cashier
Time conspicuousness	Watching a progress bar crawl, frequent reminders of remaining wait time, watching others' be served first

Taken together, those factors create *impatience hotspots*: consumer experiences that seem designed to provoke impatience. When a company inadvertently creates an impatience hotspot, they are likely to see their customers' tolerance for delays drop, their trust erode, their anger rise (and with it, their one-star reviews), their satisfaction droop, and their loyalty evaporate.

Patience as emotion regulation in consumer settings

The PMP identifies strategies by which consumers might combat their impatience when it arises, which companies can encourage in various ways. Attentional deployment via distraction is a common way to cope with a physical delay like a long line or crowded waiting room. These days, most customers have the entire world of entertainment in their pocket, but sometimes those familiar phone-based distractions become stale. Companies that consider ways to keep their customers pleasantly distracted when delays inevitably arise are likely to have more patient—and more satisfied—customers (Disney is a classic example; Daniels et al., 2017; Queue-it, 2025).

Cognitive reappraisal can also work in a long line ("I don't have anywhere to be"), but its applications are broader. Even when a delay is less salient, like waiting for a delivery or product launch while otherwise going about one's life, reappraisals can make the delay more tolerable and thus make impatience less intense. For example, a customer waiting for a backordered item might think, "this must mean the item is in high demand," or a customer waiting for tickets to go on sale for their favorite band could think, "I'll enjoy it even more if I get to savor the wait." Companies can include these kinds of reframes in their messaging to encourage customers to practice patience while avoiding the more condescending message of "please be patient" or even "thank you for your patience," a form of preemptive gratitude that can sometimes backfire (Bruttel et al., 2022; Jazaieri & O'Neill, 2025).

Lastly, customers can use response modulation to calm their physiological activation and suppress or mask their outward expression of impatience. Companies can set up waiting environments that decrease sympathetic nervous system activation (e.g., soft music, dim lights, comfortable temperature) to facilitate customers' own efforts, and friendly, affable staff can motivate customers to tamp down their agitation and behave patiently in service interactions.

CONCLUSIONS

A unique feature of the PMP within the broader literature on patience is that it treats impatience not as a flaw or moral failing, but rather a predictable, manageable emotional driver of consumer decisions. Similarly, it does not demand virtue or heroic self-control to practice patience, instead providing familiar tools for the job. The theory also highlights when impatience is likely to drive social action, as in cases of consumer activism when impatience with a company's slow response to concerns may drive collective action like boycotts or public shaming. These features make the PMP a promising fit for interdisciplinary work at the intersection of affective science and consumer psychology.

Taking everything together, this article points to a number of practical and scalable interventions to optimize consumer behavior when delays are inevitable—though it is also worth noting that companies' efforts to shorten delays are likely to help at scale, despite weak effects of objective delay length on impatience in small, controlled studies. Companies can:

- Set and meet realistic timelines for service (in many cases, slightly overestimating the delay can be effective for managing consumer experiences; e.g., Shepperd et al., 2007).
- Invest in experience design to improve waiting conditions and create opportunities for pleasant distractions.
- Manage customers' attributions for frustrating delays, particularly when a reasonable explanation is available that minimizes blame.
- Integrate reappraisal opportunities into messaging to their customers.
- Use customer segmentation to tailor communications for customers with impatience "risk factors" like high neuroticism and need for closure.
- Monitor customers' nonverbal behavior to identify symptoms of impatience and respond with additional service personnel.

Companies that take into account the process of patience will be well-equipped to minimize or eliminate impatience hotspots and maximize satisfaction, loyalty, and long-term value.

FUNDING INFORMATION

The article was supported by the Templeton Religion Trust (grant number TRT-2023-32669).

DATA AVAILABILITY STATEMENT

Data sharing not applicable to this article as no datasets were generated or analyzed during the current study.

ORCID

Kate Sweeny https://orcid.org/0000-0002-6653-422X

REFERENCES

Barrett, L. F. (2017). Functionalism cannot save the classical view of emotion. *Social Cognitive and Affective Neuroscience*, *12*, 34–40. https://doi.org/10.1093/scan/nsw156

Beran, M. J., & Hopkins, W. D. (2018). Self-control in chimpanzees relates to general intelligence. *Current Biology*, *28*, 574–579.

Berns, G. S., Laibson, D., & Loewenstein, G. (2007). Intertemporal choice – Toward an integrative framework. *Trends in Cognitive Sciences*, *11*, 482–488. https://doi.org/10.1016/j.tics.2007.08.011

Bruttel, L., Nithammer, J., & Stolley, F. (2022). "Thanks in advance": The negative effect of a polite phrase on compliance with a request. *German Economic Review*, *23*, 61–78. https://doi.org/10.5465/amd.2021.0077

Bulley, A., & Schacter, D. L. (2020). Deliberating trade-offs with the future. *Nature Human Behaviour*, *4*, 238–247. https://doi.org/10.1038/s41562-020-0834-9

Carter, R. M., Meyer, J. R., & Huettel, S. A. (2010). Functional neuroimaging of intertemporal choice models: A review. *Journal of Neuroscience, Psychology, and Economics*, *3*, 27–45. https://doi.org/10.1037/a0018046

Carver, C. S., & Scheier, M. F. (1981). The self-attention-induced feedback loop and social facilitation. *Journal of Experimental Social Psychology*, *17*(6), 545–568.

Carver, C. S., & Scheier, M. F. (2012). Cybernetic control processes and the self-regulation of behavior. *The Oxford handbook of human motivation*, 28–42.

Chapman, G. B., & Winquist, J. R. (1998). The magnitude effect: Temporal discount rates and restaurant tips. *Psychonomic Bulletin & Review*, *5*, 119–123. https://doi.org/10.3758/BF03209466

Chardin, J. (1735). *Voyages en Perse, et autres lieux de l'orient: Une Description générale de l'Empire de Perse; & les Descriptions particulieres des Sciences & des Arts, qui y sont en usage; du Gouvernement Politique, Militaire, & Civil. 3* (Vol. *3*). La compagnie.

Daniels, E. C., Burley, J. B., Machemer, T., & Nieratko, P. (2017). Theme park queue line perception. *International Journal and Cultural Heritage*, *2*, 105–118.

Droit-Volet, S. (2018). Intertwined facets of subjective time. *Current Directions in Psychological Science*, *27*, 422–428. https://doi.org/10.1177/0963721418779978

Droit-Volet, S., & Gil, S. (2009). The time-emotion paradox. *Philosophical Transactions of the Royal Society, B: Biological Sciences*, *364*, 1943–1953. https://doi.org/10.1098/rstb.2009.0013

Ekman, P. (1992). Are there basic emotions? *Psychological Review*, *99*(3), 550–553. https://doi.org/10.1037/0033-295X.99.3.550

Fleeson, W., & Jayawickreme, E. (2015). Whole trait theory. *Journal of Research in Personality*, *56*, 82–92. https://doi.org/10.1016/j.jrp.2014.10.009

Gross, J. J. (2015). The extended process model of emotion regulation: Elaborations, applications, and future directions. *Psychological Inquiry*, *26*, 130–137. https://doi.org/10.1080/1047840X.2015.989751

Hardisty, D. J., & Weber, E. U. (2020). Impatience and savoring vs. dread: Asymmetries in anticipation explain consumer time preferences for positive vs. negative events. *Journal of Consumer Psychology*, *30*, 598–613. https://doi.org/10.1002/jcpy.1169

Harris, C. R. (2012). Feelings of dread and intertemporal choice. *Journal of Behavioral Decision Making*, *25*, 13–28. https://doi.org/10.1002/bdm.709

Jazaieri, H., & O'Neill, O. A. (2025). Thanks in advance: The social function of gratitude expressions to employees in distress. *Academy of Management Discoveries*, *11*, 61–95. https://doi.org/10.1515/ger-2021-0020

Keltner, D., & Gross, J. J. (1999). Functional accounts of emotions. *Cognition & Emotion*, *13*, 467–480. https://doi.org/10.1080/026999399379140

Keltner, D., Sauter, D., Tracy, J., & Cowen, A. (2019). Emotional expression: Advances in basic emotion theory. *Journal of Nonverbal Behavior*, *43*, 133–160. https://doi.org/10.1007/s10919-019-00293-3

Khormaei, F., Farmani, A., & Soltani, E. (2015). The patience scale: Instrument development and estimates of psychometric properties. *Educational Measurement*, *117*, 83–99. https://doi.org/10.22054/jem.2015.324

Kobylińska, D., & Kusev, P. (2019). Flexible emotion regulation: How situational demands and individual differences influence the effectiveness of regulatory strategies. *Frontiers in Psychology*, *10*, 72. https://doi.org/10.3389/fpsyg.2019.00072

Kruglanski, A. W., & Fishman, S. (2009). The need for cognitive closure. In M. R. Leary & R. H. Hoyle (Eds.), *Handbook of individual differences in social behavior* (pp. 343–353). The Guilford Press.

Lempert, K. M., & Phelps, E. A. (2016). The malleability of intertemporal choice. *Trends in Cognitive Sciences*, *20*, 64–74.

McRae, K., Hughes, B., Chopra, S., Gabrieli, J. D. E., Gross, J. J., & Ochsner, K. N. (2010). The neural bases of distraction and reappraisal. *Journal of Cognitive Neuroscience*, *22*, 248–262. https://doi.org/10.1162/jocn.2009.21243

Mischel, W., & Ebbesen, E. B. (1970). Attention in delay of gratification. *Journal of Personality and Social Psychology*, *16*, 329–337. https://doi.org/10.1037/h0029815

Muris, P., Roelofs, J., Rassin, E., Franken, I., & Mayer, B. (2005). Mediating effects of rumination and worry on the links between neuroticism, anxiety, and depression. *Personality and Individual Differences*, *39*, 1105–1111. https://doi.org/10.1016/j.paid.2005.04.005

Patt, V. M., Strang, C., & Verfaellie, M. (2024). The sign effect in temporal discounting does not require the hippocampus. *Neuropsychologia*, *199*, 108888. https://doi.org/10.1016/j.neuropsychologia.2024.108888

Pianalto, M. (2016). *On patience: Reclaiming a foundational virtue*. Rowman & Littlefield.

Queue-it. (2025). The happiest queues on earth: 6 lessons in queue psychology from Disney Parks. Queue-it Blog. https://queue-it.com/blog/disney-queue-psychology/

Ratchford, J. L., Pawl, T., Jeffrey, A., & Schnitker, S. A. (2024). What is virtue? Using philosophy to refine psychological definition and operationalization. *Philosophical Psychology*, *37*, 2597–2622. https://doi.org/10.1080/09515089.2023.2203157

Rusting, C. L. (1998). Personality, mood, and cognitive processing of emotional information: Three conceptual frameworks. *Psychological Bulletin*, *124*, 165–196. https://doi.org/10.1037/0033-2909.124.2.165

Schmeichel, B. J., & Tang, D. (2015). Individual differences in executive functioning and their relationship to emotional processes and responses. *Current Directions in Psychological Science*, *24*, 93–98. https://doi.org/10.1177/0963721414555178

Schnell, A. K., Boeckle, M., & Clayton, N. S. (2022). Waiting for a better possibility: Delay of gratification in corvids and its relationship to other cognitive capacities. *Philosophical Transactions of the Royal Society B*, *377*, 20210348. https://doi.org/10.1098/rstb.2021.0348

Schnell, A. K., Boeckle, M., Rivera, M., Clayton, N. S., & Hanlon, R. T. (2021). Cuttlefish exert self-control in a delay of gratification task. *Proceedings of the Royal Society B*, *288*, 20203161. https://doi.org/10.1098/rspb.2020.3161

Schnitker, S. A. (2012). An examination of patience and well-being. *Journal of Positive Psychology*, *7*, 263–280. https://doi.org/10.1080/17439760.2012.697185

Schnitker, S. A., Felke, T. J., Fernandez, N. A., Redmond, N., & Blews, A. E. (2017). Efficacy of self-control and patience interventions in adolescents. *Applied Developmental Science*, *21*(3), 165–183. https://doi.org/10.1080/10888691.2016.1178578

Schnitker, S. A., Ro, D., Foster, J. D., Abernethy, A. D., Currier, J. M., Witvliet, C. V. O., Root Luna, L. M., Putnam, K., VanHarn, K., & Carter, J. (2020). Patient patients: Increased patience associated with decreased depressive symptoms in psychiatric treatment. *Journal of Positive Psychology*, *15*, 300–313. https://doi.org/10.1080/17439760.2019.1610482

Schnitker, S. A., Shubert, J., Ratchford, J. L., Lumpkin, M., & Houltberg, B. J. (2021). Mixed results on the efficacy of the CharacterMe smartphone app to improve self-control, patience, and emotional regulation competencies in adolescents. *Frontiers*

in Psychology, *12*, 586713. https://doi.org/10.3389/fpsyg.2021.586713

Servaas, M. N., van der Velde, J., & Aleman, A. (2013). The neural correlates of neuroticism: A meta-analysis of neuroimaging studies. *Neuroscience and Biobehavioral Reviews*, *37*, 1674–1685. https://doi.org/10.1016/j.neubiorev.2013.06.005

Shepperd, J. A., Sweeny, K., & Cherry, L. C. (2007). Influencing audience satisfaction by manipulating expectations. *Social Influence*, *2*, 98–111. https://doi.org/10.1080/15534510601095772

Sheppes, G., Catran, E., & Meiran, N. (2009). Cognitive reappraisal tends to succeed for low-intensity emotion, but not for high-intensity emotion. *Emotion*, *9*, 870–876. https://doi.org/10.1037/a0017748

Soto, C. J., & John, O. P. (2017a). Short and extra-short forms of the Big Five Inventory–2: The BFI-2-S and BFI-2-XS. *Journal of Research in Personality*, *68*, 69–81. https://doi.org/10.1016/j.jrp.2017.02.004

Soto, C. J., & John, O. P. (2017b). The next Big Five Inventory (BFI-2): Developing and assessing a hierarchical model with 15 facets to enhance bandwidth, fidelity, and predictive power. *Journal of Personality and Social Psychology*, *113*, 117–143. https://doi.org/10.1037/pspp0000096

Sweeny, K. (2025). On (im)patience: A new approach to an old virtue. *Personality and Social Psychology Review*, *29*, 145–158. https://doi.org/10.1177/10888683241263874

Sweeny, K., Hawes, J., & Karaman, O. (2024). When time is the enemy: An initial test of the process model of patience. *Personality and Social Psychology Bulletin*. https://doi.org/10.1177/01461672241284028

Takahashi, T. (2009). Theoretical frameworks for neuroeconomics of intertemporal choice. *Journal of Neuroscience, Psychology, and Economics*, *2*, 75–90. https://doi.org/10.1037/a0015463

Thaler, R. (1981). Some empirical evidence on dynamic inconsistency. *Economics Letters*, *8*, 201–207. https://doi.org/10.1016/0165-1765(81)90067-7

Tolstoy, L. (1993). *War and peace* (L. Maude & A. Maude, Trans.). Wordsworth Editions.

Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review*, *92*, 548–573. https://doi.org/10.1037/0033-295X.92.4.548

Weiner, B. (2006). *Social motivation, justice, and the moral emotions: An attributional approach*. Erlbaum.

Wilms, R., Lanwehr, R., & Kastenmüller, A. (2020). Emotion regulation in everyday life: The role of goals and situational factors. *Frontiers in Psychology*, *11*, 877. https://doi.org/10.3389/fpsyg.2020.00877

Wilson, M. D. (2024). A watched clock never ticks? The role of time salience in impatience (Doctoral dissertation, University of California, Riverside).

Zeelenberg, M., & Pieters, R. (2006). Feeling is for doing: A pragmatic approach to the study of emotions in economic behavior. In D. DeCremer, M. Zeelenberg, & J. K. Murnighan (Eds.), *Social psychology and economics* (pp. 117–137). Erlbaum.

How to cite this article: Sweeny, K. (2025). Patience as a pathway to optimal consumer experience and behavior. *Journal of Consumer Psychology*, *00*, 1–11. https://doi.org/10.1002/jcpy.70018