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Sweeny, Kate

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**On (Im)Patience: A New Approach to an Old Virtue**

Kate Sweeny<sup>1</sup>

<sup>1</sup>University of California, Riverside

**Author Note**

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

Correspondence concerning this article should be addressed to Kate Sweeny, Department of Psychology, University of California, Riverside, CA 92521 USA

### Academic Abstract

Patience has been of great interest to religious scholars, philosophers, and psychological scientists. Their efforts have produced numerous insights but no cohesive theoretical approach to understanding the broad set of experiences people label as patience. I propose a novel view of patience, one that departs from but ties together existing approaches. Grounded in theories of emotion and emotion regulation, I propose impatience as a discrete emotion triggered by an objectionable delay of some sort, and patience (as a state or process rather than a virtue) as a form of emotion regulation that targets the subjective experience and outward expression of impatience. I propose a number of predictors and consequences of patience and impatience and provide initial evidence for many of the theory's tenets. This theoretical approach, the *process model of patience*, reveals coherence across varied fields and methodologies and generates novel, testable, and timely questions for future patience scholars.

**Public Abstract**

“Patience is a virtue” is a familiar exhortation, and patience has been of great interest to religious scholars, philosophers, and psychological scientists. Their efforts have produced numerous insights but no cohesive theoretical approach to understanding the broad set of experiences people label as patience. This paper proposes an entirely novel view of patience, one that departs from but ties together existing approaches. I propose that impatience is an emotion, triggered by a frustrating delay of some sort, and patience captures the various ways people try to deal with their experience of impatience. I also propose that various aspects of the situation and the person combine to determine the intensity of impatience and the effectiveness of patience. Finally, I discuss the implications of a theoretical model, the *process model of patience*, for both scientific inquiry and issues of social justice, which are often fueled by appropriate experiences of impatience.

### **On (Im)Patience: A New Approach to an Old Virtue**

Life is full of unwanted delays. We get stuck in traffic on our way to a long-anticipated outing. We endure a colleague's monologue that extends the length of a tedious meeting, or a child's adorable but unending questions as we try to end our day. We wait to learn if we passed the test, got the job, won the award—or if we will be laid off, rejected from our school of choice, or diagnosed with cancer. These experiences are varied, but they have at least one thing in common: the emotion of impatience that arises when time stands between us and a more appealing future.

Sometimes people meet such moments with patience, radiating calm composure and restraint; other times they fidget, scream or shout, or act impulsively and unwisely in an effort to resolve the unwelcome delay. In this paper, I present a novel, testable, and generative theoretical approach to understanding patience as a state or process and impatience as a discrete emotion.

#### **Historical and Academic Roots**

“Patience is a virtue”—a familiar exhortation, and one that dates back nearly 700 years to the poem *Piers Plowman*, penned in 1360 by English poet William Langland. The idea that patience is a desirable, even holy, quality dates back much further. Patience makes an appearance in the holy texts of Islam, where patience or *sabr* is one of its four pillars (from the Koran, “O ye who believe! Persevere in patience and constancy”), and Christianity (from the Bible, “Be patient, bearing with one another in love,” “But if we hope for what we do not see, we wait for it with patience”). Buddhist teachings emphasize the patient acceptance of suffering and patience with other people, and *khanti pāramī*, often translated as patience, is one of the ten *pāramīs* or noble characteristics of Buddhism (see Dhammapāla, 1996; Gyatso, 1991; Rahula, 1974).

Centuries of philosophers have also taken up the question of patience. Aristotle included patience in his discussions of virtue ethics, positioning it as the “golden mean” between irascibility (later described as recklessness; Ratchford et al., under review) and a lack of spirit (later described as apathy; see Thomsen, 1955 for a translation of Aristotle’s original ideas). Kierkegaard (translated in 1993) focused on the centrality of patience in identity development, arguing that “a person does not first gain his soul and then have the need for patience to preserve it, but he gains it in no other way than by preserving it, and therefore patience is the first and patience is the last” (p. 187). Modern philosophers, most notably Matthew Pianta in his book *On Patience* (2016), have attempted to reconcile the many philosophical and religious takes on patience into a coherent picture of patience as a virtue.

Despite this long history in the humanities, psychological science has mostly ignored patience. The largely-debunked Type A personality included impatience/irritability as one of its three major symptoms (Friedman, 1996), but as the field moved away from those personality types, it similarly left behind the potential importance of impatience and its countervailing virtue of patience. Later, researchers in the early 2000s declared the identification of 24 character strengths, organized within six broad virtues, that characterize human flourishing (Peterson & Seligman, 2004). Surprisingly, patience did not make the list.

Instead, with rare exception (e.g., Devoe & House, 2012; Ellison et al., 2020), a search for the terms “patience” or “impatience” within the psychology literature unearths dozens of studies on intertemporal choice. In this approach, researchers define patience via discounting rates, such that research participants who are able to delay gratification and wait for a larger reward later are identified as patient, and those who choose an immediate, smaller reward are identified as impatient (Curry et al., 2008; Dai & Fishbach, 2013). Although research on

intertemporal choice, and delay of gratification broadly (see Mischel, 2014 for a review), has produced numerous insights into the nature and consequences of human decision making<sup>1</sup>, it has limited generalizability beyond situations that permit a choice between having something now or later (Schnitker, 2012). Thinking back to the examples that opened the paper, many impatience-inducing experiences permit no such choice.

Beyond intertemporal choice, two other research programs have addressed the psychology of patience. Schnitker and Emmons (2007) brought patience as a virtue into the psychological spotlight, and Schnitker's subsequent work has taken a rigorous empirical approach to investigating the construct and consequences of patience (Schnitker, 2012; Schnitker et al., 2017, 2019, 2020). Sweeny and colleagues have taken a different perspective, focusing on the stress of awaiting uncertain news (see Sweeny, 2018 for a review). The latter approach addresses patience centrally but indirectly, in the form of "waiting well" (e.g., Sweeny et al., 2016).

### **Why a New Approach?**

Taken together, the work of religious scholars, philosophers, and psychological scientists paint a picture of patience as a phenomenon worthy of attention—but also one that morphs depending on the viewer. In the eye of a religious scholar, patience is a path to sanctity or closeness to a higher power. In the eye of a philosopher, patience is one of a set of virtues that compose the ethical life. In the eye of most scientists, patience is the ability to forgo an immediate reward in favor of a larger reward later. How can we reconcile these views?

To answer that question, I propose an entirely novel view of patience, one that departs from but also ties together the myriad perspectives described above. First, though, it is worth

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<sup>1</sup>And monkeys' decision making (Stevens et al., 2005).

considering whether any of the existing approaches are up to that task. I argue that despite the many insights offered by previous work, those approaches both say more (i.e., lack parsimony) and less (i.e., cover insufficient territory) than would be required to understand common experiences of patience and impatience—while also leaving unsolved a number of puzzles that have stymied efforts to make progress in this area of inquiry.

Regarding the problem of parsimony, many definitions of patience read like a laundry list of desirable qualities, without identifying a common process or mechanism that ties them together or clear boundary conditions that distinguish them from related concepts. For example, the philosopher Pianalto (2016) proposes four aspects of patience: self-possessed waiting, uncomplaining endurance, forbearance and tolerance, and constancy or perseverance. In the realm of psychology, one measure distinguishes between three types of patience (life hardship patience, interpersonal patience, and daily hassles patience; Schnitker, 2012) and another between five components (transcendence, forbearance, acceptance, persistence, and delay), each with several subcomponents (Khormaei et al., 2015). Although each item in these lists is recognizable as patience, no approach offers a unifying process that underlies such varied behaviors and experiences.

Regarding the problem of insufficient coverage, the literatures on intertemporal choice and waiting for uncertain news clearly address aspects of patience, while leaving out many others. Approaches that view patience as a virtue are broader in scope but limited by their emphasis on people (who is patient?) rather than situations (when are people patient?). Even the most virtuous person experiences impatience at times, and even the most impatient person sometimes maintains their composure in the face of an objectionable delay.

Finally, previous approaches have raised a number of thorny questions about patience



that remain unanswered. Does patience only have a place in response to some kind of frustration or suffering, or is serene acceptance a form of patience? Does it “count” as patience if a person behaves patiently but feels impatient? How does a person develop patience? Does patience require active engagement, or can it occur automatically or below the level of conscious awareness? These questions and others like them have plagued efforts to provide a comprehensive understanding of patience. The solution to the various challenges articulated here only became clear upon turning my attention to *impatience* rather than positioning patience as the central tenet.

### **Positionality Statement**

The author is a White American woman who was raised in a Judeo-Christian society. I recognize that perspective as limited and limiting, particularly in the context of a deeply cultural and theological topic such as patience. Further, I am an experimental social psychologist by training. In delving into scholarship on patience, I am profoundly informed and influenced by my collaborators in the psychology of religion, personality psychology, developmental psychology, philosophy, and theology as part of an ongoing and highly engaged collaboration. It is from this position I developed the ideas presented in this manuscript.

### **An Affective Science Approach to Patience**

#### ***Impatience is an Emotion***

Figure 1 presents a novel theoretical model, the *process model of patience*. Beginning with the top half of the figure, I propose impatience as a discrete emotion, distinct from other negative emotions in its appraisal, expression, and action tendency. In a classic study of emotions, impatience scored above the midpoint in terms of prototypicality (i.e., responses

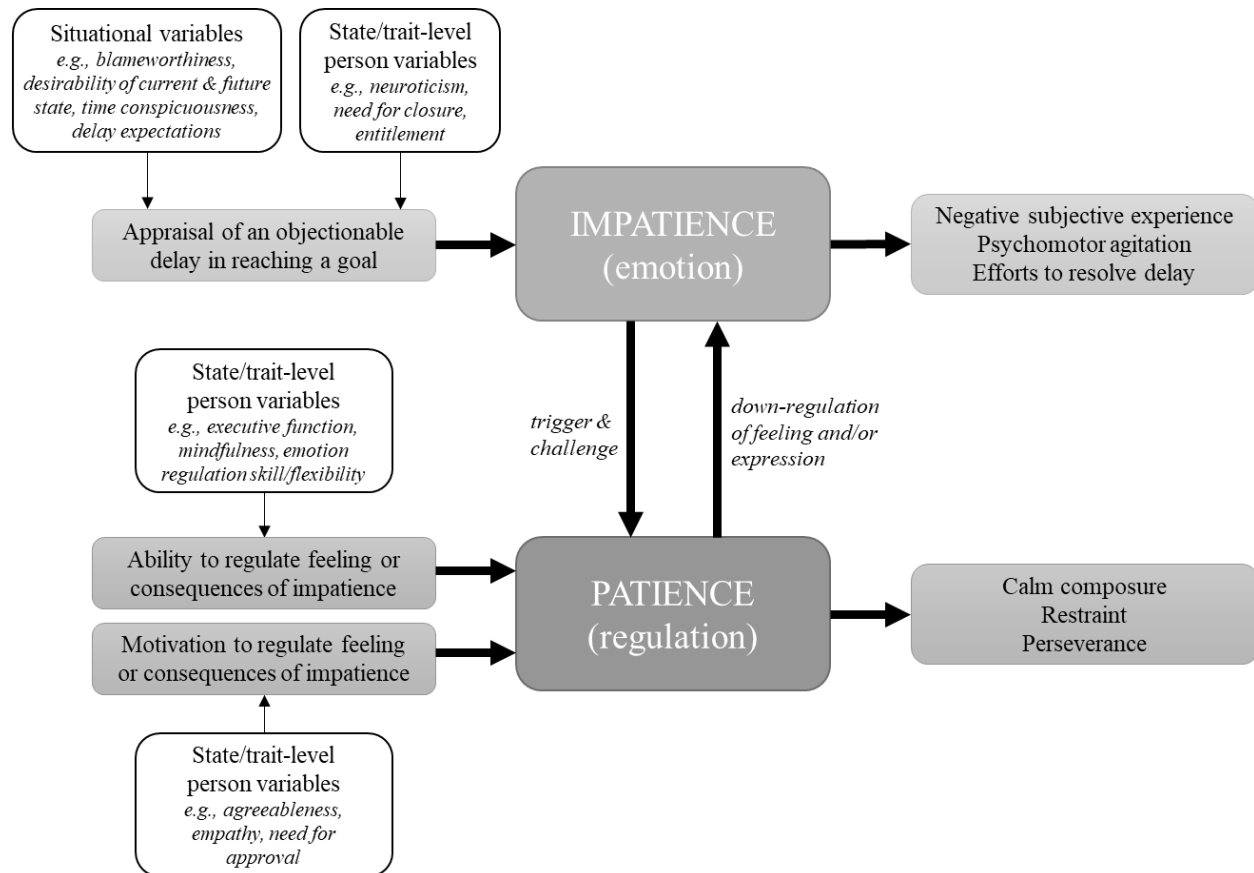


Figure 1. The process model of patience.

ranging from “I definitely would *not* call this an emotion” to “I definitely *would* call this an emotion”), scoring higher than commonly-studied emotions like awe, gratitude, surprise, and boredom (Shaver et al., 1987).

I take a functionalist view of emotion and thus address both the “what” and the “why” of impatience in my approach (see Keltner & Gross, 1999 for a review and a useful definition of emotions, p. 468). That is, I start with the assumption that the rich emotional life of modern humans reflects an evolutionary process in which emotions benefited human survival more often than not. A functionalist perspective is grounded in the idea that “feeling is for doing” (Zeelenberg & Pieters, 2006): Specific emotions carry specific motivations (i.e., action

tendencies) that serve to coordinate cognitive, physiological, and behavioral processes in ways that generally benefited survival in humans' evolutionary history. This approach is agnostic as to whether impatience is a universal emotion in the tradition of basic emotion theory (e.g., Ekman, 1992) and is thus open to the possibility that the experience and expression of impatience is at least in part culturally bound. That said, I take a perspective that embraces discrete emotions as having unique and definable appraisals, subjective experiences, action tendencies, and expressive behaviors. Although many (perhaps most) emotionally-evocative situations produce mixed emotional experiences rather than "pure" experiences of a single emotion (Scherer & Meuleman, 2013), I argue for the usefulness of theories and investigations that aim to understand individual emotions within those blends (e.g., shame, guilt, and embarrassment, Tangney et al., 1996; pride, Tracy & Robbins, 2004; awe, Keltner & Haidt, 2003; boredom, Westgate & Wilson, 2018).

**Characteristics of Impatience.** What makes people impatient? Put another way, in the lingo of emotion theory, what is the appraisal that evokes impatience? I propose that the appraisal central to impatience (i.e., that is present in all experiences of that emotion) is the perception that one is facing an objectionable delay in reaching a goal. Put simply, people feel impatient when they perceive that a situation is lasting longer than it should, or than they desperately wish it would. Returning to the examples that opened this paper, delays can come in the form of traffic, a long-winded or annoying conversation partner, or an interminable wait for life-changing news.

Initial evidence supports the role of objectionableness appraisals in the experience of impatience, such that people who indicated that various familiar scenarios entailed a particularly objectionable delay consistently indicated that they would feel more impatient in response to those scenarios (Sweeny et al., 2023). Note that appraisals of this type typically occur

automatically and only sometimes rise to the level of conscious awareness (see Moors, 2017 for a review). In other words, a person need not consciously think “what an objectionable delay!” to experience the emotion of impatience.

This definition of impatience does not fundamentally distinguish between what Schnitker (2012) calls interpersonal impatience (impatience with someone) and other types of impatience (daily hassles and life hardship). Although these cases of impatience differ in notable ways, I argue that they share a key commonality. To illustrate, imagine receiving an email from an employee in which they confess to missing an important deadline. Would the recipient of that email feel impatient with their employee? I contend that the answer is “it depends.” They may feel angry if the employee’s failure has shared consequences, or disappointment if the failure is uncharacteristic. Impatience would likely only arise in the case of a persistent pattern, one that provokes in the recipient thoughts like, “why are you *still* making mistakes like that?” or “why haven’t you improved your time management *yet*?” That is, just as a long line or stressful waiting period prompts impatience due to an objectionable delay in reaching a goal, so do interpersonal situations in which unpleasant behavior persists longer than seems reasonable.

Returning to the defining characteristics of impatience, I further propose that the subjective experience of impatience is negative in valence and moderate in activity or arousal (i.e., showing moderate activation of the sympathetic nervous system). Although few studies of discrete emotions have addressed impatience, one such study located impatience in the affect circumplex (see Posner et al., 2005) as somewhat negative and moderately active/arousing (Scherer, 2005). In common usage, people may use the term impatient to refer to eager excitement (positively valenced) about an upcoming event. Nonetheless, I propose that impatience itself is a negatively-valenced experience, such that distress (however mild) about a

delay characterizes impatience, even if it arises alongside positive emotions. For example, children eagerly awaiting their birthday may be buzzing with excitement about cake and presents, while also upset (i.e., impatient) over the fact that their birthday is still weeks away.

Unpublished data from my lab included impatience in a list of emotions that were rated by trained coders on multiple appraisal dimensions (Revord, 2021). Inspection of the top- and bottom-rated appraisals for impatience paint a picture of an unpleasant emotion that is typically caused by and directed toward something or someone else (rather than arising due to one's own actions or thoughts); that arises only when a person's attention is drawn to their current, undesirable state; and that comes on and recedes slowly.

In functionalist theories of emotion, discrete emotions are thought to produce or entail distinct expressive behaviors (Keltner et al., 2019). I propose that impatience produces readily-recognizable forms of psychomotor agitation: tapping feet or fingers, pacing, hand wringing, and the like (see Keltner et al., 2019 for comparison to other common emotion expressions). Somewhat more complex are social forms of agitation, like snapping at someone, having a verbal outburst, honking a car horn, or speaking rudely. I suspect that these expressions of agitation are physical manifestations of the impatient person's obstructed desire to "move forward" in time (and sometimes in space as well, as in the cases of traffic and queuing). I do not propose a distinct facial expression for impatience, though it would likely fall within the general phenotype of anger and related emotions (furrowed brow, pressed and closed lips; Keltner et al., 2019).

Finally, consistent with the functionalist approach to emotions, I propose that impatience has a concomitant action tendency or motivation: to resolve the delay and hasten goal achievement. Consistent with functionalist theories of emotions (see Keltner & Gross, 1999), I posit an evolutionary pathway leading to the modern experience of patience, namely the adaptive

motivation to hasten goal achievement across a wide variety of domains. In some contexts, people can readily channel their impatience toward this end. They can find a route around the traffic, extract themselves from the tedious conversation, or call the doctor for their test result. In other cases, efforts to resolve an unwanted delay can lead to impulsive or even dangerous behavior—think of the driver who hops a median to get around traffic or the hiker who takes a precarious shortcut—and in the case of longer-term goal pursuit, impatience can lead people to rush, cut corners, or disengage from their goal.

**Predictors of Impatience.** Figure 1 also includes a number of factors that may intensify or mitigate impatience, including situational characteristics<sup>2</sup> and trait-level person characteristics (top left of the figure). I propose that these factors lead to impatience via the appraisal of an objectionable delay, such that any characteristic of the situation or person that magnifies a person's perception that a delay is unreasonable, unfair, or inappropriate will in turn intensify the emotional experience of impatience. Thus, the characteristics listed in Figure 1 are not intended to be comprehensive but rather a set of likely predictors of impatience.

A set of recent studies provided an initial test of many predictors of both patience and impatience (Sweeny et al., 2023). I refer the reader to that paper for details of the studies—but in brief, more than 1400 participants responded to a set of familiar, impatience-inducing scenarios, in each case randomly assigned to read one of two or three versions that manipulated various situational predictors. Participants then indicated how they would feel in each situation and rated the scenario on a number of characteristics. No measure of state patience or state impatience existed at the outset of this endeavor. Initial measures were developed for the first of the two studies and then revised based on that validation test and further theoretical development. In the

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<sup>2</sup>These situational characteristics are essentially additional appraisals (i.e., perceptions of a situation) that in turn affect the magnitude or intensity of the appraisal that is central to impatience, namely that a delay is objectionable.

end, my colleagues and I determined that a single-item measure of impatience (simply “impatient”) was most appropriate (see Allen et al., 2022),<sup>3</sup> and we developed and refined a nine-item measure of state patience that captured relevant emotion regulation strategies in the context of regulating impatience (two items addressing attentional deployment, three items addressing cognitive change, and four items addressing response modulation; see Sweeny et al., 2023, for details). We also collected measures of a large array of potentially-relevant individual differences in impatience.

As these studies are the first to test the primary tenets of the process theory of patience, I briefly summarize the key findings below. I focus on predictors for which I had a priori predictions but also briefly address some exploratory findings.

***Relative Desirability of Future vs. Current State.*** First, people may feel more impatient when they experience a delay under unpleasant conditions, particularly relative to their anticipated enjoyment from goal attainment. Put simply, it is harder to wait when every minute of that wait is unpleasant, just as it is harder to wait for something that is highly anticipated compared to something unexceptional.

My colleagues and I tested this proposition in a variety of scenarios (waiting in a government office, waiting in a doctor’s office, waiting in traffic, enduring an unnecessarily long meeting) and consistently found an effect of these situational characteristics on impatience. People also indicated that the depicted delays would be more objectionable when current circumstances were unpleasant and when the awaited goal was particularly desirable, consistent with the theoretical model.

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<sup>3</sup>We also tested various multi-item measures of impatience, based on Revord’s (2021) data that identified correlates of emotion experiences. However, we ultimately determined that including any other emotion item in our measure would muddy the waters in terms of clear conclusions about impatience per se.

***Blameworthiness of Delay.*** People may feel more impatient when they can clearly identify a causal agent for the delay—in other words, someone to blame. This proposition stems in part from research showing that negative emotions are generally more intense when someone is clearly to blame for causing them (Sonnemans & Frijda, 1995) and in part from research on the frustration-aggression hypothesis and later conceptualizations of frustration, which shows a strong and consistent effect of blameworthiness on experiences of frustration (e.g., Berkowitz, 1989; Kulik & Brown, 1979).

My colleagues and I tested this proposition in two scenarios (waiting for an unruly child to quiet down, waiting for a medical test result) and consistently found an effect of blameworthiness on reports of impatience. People also indicated that the depicted delays would be more objectionable when someone was clearly to blame for the delay, consistent with the theoretical model.

***Features of the Delay.*** A third potential situational predictor of impatience captures the important role of expectations in subjective evaluations of nearly any outcome (e.g., Mellers et al., 1997; Shepperd & McNulty, 2002; van Dijk et al., 1999). In short, bad things feel worse when one fails to anticipate them—including delays (Maister, 2005; Shepperd et al., 2007). In fact, evidence across several studies confirms that people report greater impatience when a delay is longer than they expected it to be (Karaman & Sweeny, 2023; Sweeny et al., 2023). Interestingly, an unexpectedly short delay produces no less impatience than an expected delay, as if a mental timer (and consequent feelings of impatience) turns on once a delay crosses the threshold of one's expected duration. My colleagues and I also found initial evidence that having some kind of expectation for the duration of a delay might make a delay seem less objectionable, such that people reported greater impatience in response to a scenario that provided no clear



timeline (compared to a clear timeline) for the review of a job application (Sweeny et al., 2023, Study 3).

We also tested what would seem like an obvious predictor of impatience: the duration of the delay. All else being equal, a short delay should be preferable to a longer delay. However, the evidence thus far does not support an effect of objective duration on impatience. Further research on this point is needed, but I suspect that the duration of a delay is entirely relative, such that expectations, and thus the subjective duration of a delay, are more important than objective duration. Put another way, how long is a long delay? A minute, an hour, a month? The answer to that question is almost certainly “it depends”—a minute is a long time to wait for a webpage to load, an hour is a long time to wait on the phone for customer service, and a month is a long time to wait for a medical test result. Thus, the objectionableness of a delay depends more on how long a delay “should be” than how long it is in reality.

*Conspicuousness of Time.* The idiom “a watched pot never boils” reminds the pot-watcher that occupied time passes far more quickly than unoccupied time (Maister, 2005). Research on the benefits of flow during stressful waiting periods emphasizes that lesson, such that getting fully immersed in an absorbing activity pulls attention away from the tedious activity or situation and makes the waiting less worrisome as a result (Rankin et al., 2019; Sweeny et al., 2020). With these findings in mind, people may feel more impatient when the passage of time is particularly conspicuous during the delay.

To date, the findings paint an incomplete picture. Hypothetical scenarios intended to manipulate conspicuousness were unsuccessful, perhaps due to the subtlety of its effects in real situations—yet people in that study consistently reported that they would feel more impatient to the extent that the passage of time was more conspicuous in any given situation (Sweeny et al.,

2023). A subsequent study experimentally manipulated the visibility of time cues (a real-time version of the scenarios) and found that visible time cues *decreased* reports of impatience during a tedious task (Wilson & Sweeny, 2024). Although further research is needed to clarify the picture, I suspect that people do experience greater impatience when their attention is focused on how slowly time seems to be passing. However, a visible clock may have the opposite effect in many cases, allowing people to divert their attention from the passage of time, secure in the knowledge that temporal information is available to them if needed.

***Individual Differences.*** The role of intrapersonal factors, particularly stable individual differences, in emotion generation is complex. Broadly, people can be more or less reactive to situational cues that might prompt a given emotion, but those individual tendencies often interact with situational factors (Doré et al., 2016). For example, in the case of impatience, a highly conscientious person might be especially prone to impatience only or particularly in situations where the delay impedes an achievement goal, whereas a highly extroverted person might be prone to impatience only or particularly in situations where the delay impedes a social goal. For the purpose of the theoretical model, I sought to identify stable individual differences that would likely exacerbate one's sense that a delay is objectionable, all else being equal, and thus moderate the experience of impatience across domains.

As with situational factors, the process model of patience does not include a comprehensive list of possible individual differences in impatience. It would be difficult to count the number of individual differences that appear in the psychological literature, and many of them could be candidates for this theory. Nonetheless, my theoretical work has led to a focus on two individual differences that are well-established and have clear implications for impatience, regardless of domain: one that broadly exacerbates negative emotions (i.e., neuroticism; Soto &

John, 2017a, 2017b) and one that is closely aligned with a distaste for unresolved situations (i.e., need for closure, Kruglanski & Fishman, 2009, or intolerance of uncertainty, Carleton, 2012). In the latter case, need for closure and intolerance of uncertainty are strongly correlated in situations relevant to impatience (Sweeny & Andrews, 2014), and thus I focused on the more widely-used measure of need for closure. Evidence from initial tests of the theoretical model supported those predictions. In fact, among a large number of individual difference measures included across three studies, neuroticism and need for closure stood out as particularly strong and consistent predictors of impatience (Sweeny et al., 2023).

**Interim summary: Impatience.** In sum, I propose that impatience is a negative emotion, moderate in negative valence and arousal, that arises in response to the appraisal that one is facing an objectionable (i.e., unreasonable, unfair, or inappropriate) delay in reaching a goal. I further propose that impatience is recognizable by its characteristic psychomotor and social agitation, and it motivates action (sometimes impulsive action) to swiftly resolve the delay.

Initial evidence suggests that people feel more impatient to the extent that their current situation is particularly unpleasant, the delayed goal is particularly desirable, someone is to blame for the delay, and the delay is longer than expected. Some evidence suggests that impatience may be more intense when time feels particularly conspicuous. Lastly, evidence suggests that people who are high in negative emotionality (i.e., neuroticism) and uncomfortable with uncertainty (i.e., high in need for closure) experience impatience as particularly intense, all else being equal. Of course, all else is often not equal, and individual differences may interact with situational factors, such that some people are more perturbed by particular features of the situation than others (e.g., blameworthiness could exacerbate impatience more in a person lower in agreeableness).

*Patience is a Targeted Form of Emotion Regulation*

I now turn to the question that has captivated theologians, philosophers, and scientists alike. If impatience is an emotion, what is patience? I focus on patience as a state or process rather than a virtue, and propose that patience is a form of emotion regulation that targets the subjective experience and outward expression of impatience. In Gross's (2015) model of emotion regulation, patience can intervene on experiences of impatience at the attentional deployment stage (via distraction), the cognitive change stage (via cognitive reappraisal), or the response modulation stage (e.g., via expressive suppression, deep breathing or meditation). Note that Gross's model positions attentional deployment and cognitive change as antecedent-focused strategies (i.e., intervening on the emotion process before the emotion fully blooms). Although people may proactively manage their impatience in these ways, I propose a narrower definition of state patience, entailing the use of these strategies in response to experiences of impatience during later iterations of the regulation process. That is, once impatience arises, people can patiently downregulate it by turning their attention elsewhere or thinking differently about the impatience-inducing situation, consistent with the extended process model of emotion regulation (Gross, 2015).

This conceptualization of patience may seem prosaic when compared to poetic descriptions of patience as a virtue. However, I argue for the value of asking two questions in tandem: what does patience look like in everyday life, and is patience virtuous? Those questions are quite different yet entirely compatible—and different types of scholars (psychologists vs. philosophers or religious scholars, respectively) are best-suited to answer them.

From the perspective of theoretical and empirical advancement, understanding patience as a form of emotion regulation offers a link between the varied historical and modern

conceptions of patience. Why have holy texts and religious scholars fixated on patience as a key virtue? I argue that patience is virtuous in that it mitigates socially disruptive and personally destructive manifestations of impatience. What ties together Pinalto's four aspects of patience (self-possessed waiting, uncomplaining endurance, forbearance and tolerance, and constancy or perseverance)? Those ends are all achieved by managing the impulsive action tendency of impatience, a tendency that can lead to agitation, complaining, haste, and equivocation—the other side of Pinalto's patience coin. Similarly, I view Schnitker's (2012) three types of patience (life hardship, interpersonal, and daily hassles) as domain-specific forms of well-regulated impatience.

Approaches to patience that are relatively limited, like those focused on intertemporal choice and awaiting uncertain news, capture specific forms of patience's emotion regulation function. In the case of intertemporal choice, people must regulate their impulsive desire to end or avoid a delay by grabbing the reward that is right in front of them. In the case of awaiting uncertain news, impatience can become overwhelming and detrimental to well-being when a delay is unavoidable and uncertainty is intensely stressful; patient regulation of those emotional reactions can make the wait more tolerable.

**The Process of Patience.** The bottom half of Figure 1 depicts the proposed process of state patience. Like any form of self-regulation, one must have the ability and be motivated to regulate either the feeling or expression of impatience (or both) to enact the regulatory process of patience (Gutentag & Tamir, 2022). The consequences of patience oppose the consequences of impatience: calm composure rather than agitation, restraint and perseverance rather than impulsivity. These expressions likely in part reflect activity in the parasympathetic nervous system that counteract the arousal of impatience via the sympathetic nervous system (e.g., Thayer &

Lane, 2000). The middle section of the figure depicts the interplay between patience and impatience, such that impatience triggers the opportunity to enact patience and poses a challenge for its effectiveness (i.e., if impatience is particularly intense), and patience down-regulates the emotion of impatience via reappraisal or distraction and expressions of impatience via suppression or control.

To illustrate the various forms this conceptualization of patience can take, imagine being stuck in traffic. As the minutes tick by, impatience becomes increasingly intense and uncomfortable. With little to no ability to channel that impatience toward delay reduction (imagine there is no exit ramp in sight), the only feasible option is to regulate the impatience. One option would be to find a distraction from the delay, perhaps by putting on a favorite band or podcast. Another option would be to reappraise the situation, seeing it as an unexpected opportunity to listen to an audiobook or catch up on the news rather than as a pointless waste of time. Alternatively, the motivation to regulate impatience might be more about resisting the urge to honk the horn or make a rude gesture (i.e., response modulation). In that case, expressive suppression or deep breathing could be effective. If distraction or reappraisal is effective, impatience fades away and along with it its unpleasant subjective experience and agitated behaviors. If response modulation is effective, impatience might remain, but it will be largely invisible and inconsequential.

**Predictors of Patience.** As depicted at the bottom of Figure 1, the model proposes that patience is relatively unaffected by situational factors (beyond their role in tempering or intensifying impatience) and is instead predicted by both state- and trait-level intrapersonal factors that support or undermine one's ability or motivation to regulate impatience. Although that claim may be a bold one, it is grounded in the research base on emotion regulation. Very

little research has identified situational modifiers of emotion regulation effort or the probability of an emotion regulation attempt, aside from the intensity of the emotion the person is trying to regulate (represented by the downward arrow in Figure 1; see Kobylińska & Kusev, 2019; Wilms et al., 2020). Like nearly all psychological processes, emotion regulation is almost certainly a function of both the person and the situation (Doré et al., 2016). Nonetheless, the literature that informed the development of the process model of patience does not provide any hints as to situational predictors of the use of patience in response to experiences of impatience, and thus I focus on intrapersonal factors at this stage of theory development. In support of that proposition, the scenario manipulations had less consistent effects on measures of patient responses, and situational appraisals were relatively weak in their associations with patience (Sweeny et al., 2023).

Although the model includes both stable and state variations in patience, initial studies have not been suited to capture the sorts of short-term fluctuations in intrapersonal states that would be relevant for enacting patience. Thus, for now I focus on trait-level measures and briefly address state-level propositions where relevant. As with impatience, the process model of patience does not include a comprehensive list of individual differences in patience. People vary in countless ways that might affect their ability or motivation to regulate emotions in general, and impatience specifically. Here, I focus on several types of individual differences are most likely to be relevant to patience.

Regarding one's ability to regulate emotional states, the model proposes that executive functioning, mindfulness, and emotion regulation skill and flexibility would bolster that ability. Executive functioning refers to the cognitive processes that underlie various forms of self-regulation, along with temporary fluctuations in self-regulatory resources (e.g., due to cognitive

load). People with stronger executive functioning are more skilled at regulating emotions via reappraisal and expressive suppression (Schmeichel & Tang, 2015; Tabibnia et al., 2011; Von Hippel & Gonsalkorale, 2005), and thus people with stronger executive functioning may similarly show a greater facility for patience. Studies of executive functioning in the context of temporal discounting have found that people with better executive functioning tend to be more patient by that definition (e.g., Basile & Toplok, 2015). The studies conducted in my lab included a self-reported measure of executive functioning and similarly found an association with patience (Sweeny et al., 2023).

I further suspect that mindfulness (state and trait) and patience are quite intertwined. A common definition of mindfulness includes two components, both relevant to patience (Bishop et al., 2004): focusing one's attention on the present moment (in the words of Ram Dass, 1971, "be here now"), and non-judgmental acceptance of whatever the present moment contains. One route to patience is to withdraw attention from the sought-after goal and focus instead on what the present moment has to offer, making mindfulness a perfect foundation on which to build a patient response.

Difficulties in emotion regulation (the lack thereof, in the latter case) are essential to the model's conceptualization and measurement of patience. People who generally have difficulties effectively regulating all emotions presumably face such difficulties when impatience arises as well, and emotion regulation flexibility is a relatively recent conceptualization of emotion regulation skill (Aldao et al., 2015).

Turning to one's motivation to regulate emotional states, initial empirical efforts have focused on social motivations, namely empathy (Davis, 1983), agreeableness (Soto & John, 2017a, 2017b), and need for approval from others (Crocker et al., 2003). Empathy (trait and



situation-specific) and agreeableness are relevant to the often-interpersonal nature of impatience, such that people may look for a human cause of objectionable delays even in situations that are relatively low in blameworthiness (e.g., traffic, long lines, unavoidable delays in processing medical tests or grading exams). In such situations, agreeable and empathic people likely have an easier time engaging in reappraisal and response modulation, or may not assign blame so easily in the first place (see Robinson, 2007). Although I know of no work that has tested this idea, I also suspect that these prosocial individual differences motivate the suppression of impatience's expressions (i.e., psychomotor and social agitation), consistent with findings pointing to improved motor control in people high in agreeableness when facing a negative provocation (Bresin et al., 2012). In many contexts, impatience promotes anti-social behavior (in a loose sense) like putting others at risk to speed goal attainment or being short or snappish with others.

In fact, initial evidence from three studies was quite consistent with these predictions about the role of regulatory skill and social motivations in supporting patience. In a mini meta-analysis, the individual difference measures that stood out as predictors of patience were (lack of) impulsivity (one measure of executive functioning), mindfulness, emotion regulation flexibility, empathy, and agreeableness.

**Interim summary: Patience.** In sum, I propose that patience is a form of emotion regulation that targets the negative emotion of impatience. Patience can take the form of attentional deployment (distraction), cognitive change (cognitive reappraisal), or response modulation (e.g., expressive suppression). Initial evidence suggests that patience is largely a function of the person rather than the situation, except in cases where the situation serves to demotivate emotion regulation. Key predictors of patience cluster around one's ability and motivation to regulate emotions generally, and impatience specifically.

### **Constraints on Generality and Citations Statement**

As the ideas presented here are quite novel and only initial empirical tests of the theoretical model are available at this point, it is difficult to assess the generality of the work. That said, the foundational theories of emotion and emotion regulation that underlie the process model of patience have undergone quite rigorous cross-cultural tests, even in majority-world cultures that are vastly underrepresented in psychological science (e.g., Matsumoto et al., 2008; Mesquita & Frijda, 1992). The empirical study of patience is in its infancy, but philosophical and religious thought on the topic spans all major world religions and regions, as addressed earlier.

That said, a review of the citations included in this paper reveals a clear skew toward English-speaking, Western, high-industrialized cultures. This lack of diversity is unfortunately consistent with psychological science as a whole (Arnett, 2009; Thalmayer et al., 2021). Thus, one key step moving forward (in addition to those articulated below) is deep collaboration across cultural contexts in further refining and testing the ideas posed in this manuscript.

### **Making Progress on Patience**

Despite considerable interest in patience over time and across fields, both consensus and clarity are sorely lacking. I suggest that one barrier to theoretical advancement in this area is that scholars have been starting in the wrong place, asking “what is patience?” rather than inquiring about the problem that patience presumably solves (i.e., impatience). In so doing, patience presents as a tangled knot of loosely related observations and experiences. Starting from the experience of impatience locates the end of the metaphorical thread, and pulling on it easily unravels the knot—revealing that patience is not many things but rather many paths to the same end, namely the effective regulation of impatience and its social and personal consequences.

Returning to the limitations of previous approaches, articulated earlier, my approach to

patience is simultaneously more parsimonious and broader in scope than previous approaches, and it solves the puzzles that those approaches have raised but left unresolved. Regarding parsimony, this approach succinctly links together the various manifestations and domains of patience via the emotion of impatience, which can arise whenever someone faces an objectionable delay in reaching any goal. Regarding the problem of insufficient breadth, this approach positions patience within the broader context of emotion and emotion regulation, and it addresses a broad range of situations that might evoke impatience and thus provide an opportunity for patience. In contrast to approaches that narrowly address intertemporal choice or waiting for uncertain news, the process model of patience catches those experiences and more in its theoretical net.

This theoretical approach also lays to rest many of the most perplexing patience puzzles. Does patience only have a place in response to some kind of frustration or suffering? I argue that patience is only relevant in the face of impatience, a negative emotion that arises from an unpleasant situational appraisal (in short, yes). Does it “count” as patience if a person behaves patiently but feels impatient? I argue that the various regulatory routes to patience readily and logically produce such experiences, such that a person who regulates impatience via expressive suppression might look patient but feel quite impatient.<sup>4</sup> How do people develop patience? The large literature on emotion regulation in developmental psychology points to a variety of processes (e.g., cognitive development, parenting, peer interactions; Cole et al. 2004) that build the regulatory skillset necessary to enact patience. Does patience require active engagement, or

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<sup>4</sup>Although the process model of patience does not address questions about morality or virtuousness, it is worth noting that different religious and societal traditions vary in whether intentions and similar internal process are key to defining a moral act. For example, Western cultures seem to place relatively high value on intentions and motivation when judging morality (Barrett et al., 2016), as do American Protestants (compared to American Jews; Cohen & Rozin, 2001). Thus, the question of whether it “counts” as patience when someone acts patient but feels impatient likely does not have a single answer when it comes to patience as a virtue.

can it proceed implicitly? To the extent that any form of emotion regulation can occur implicitly at the stages of attentional deployment, cognitive change, and response modulation (Koole & Fockenberg, 2011; Zou et al., 2022), patience can as well.

### **Open Questions**

Our theoretical approach answers a variety of questions about patience, but it also generates many testable questions for future research. The first and most obvious is simply, are the theoretical propositions of the process model of patience empirically defensible? That is, is impatience best understood as a discrete emotion, and is patience best understood as emotion regulation? Do the proposed predictors consistently predict impatience or patience, and are any other predictors that do so consistent with my theoretical reasoning? I have presented initial evidence in support of many of the theory's claims, but further evidence (particularly peer-reviewed evidence) is needed to solidify these theoretical propositions.

An important question to consider is what type of evidence would be required to falsify the theory's claims. The claim at the heart of its approach is difficult to test: that impatience is an emotion and patience a form of emotion regulation. The work by Shaver et al. (1987) cited earlier provides some reassurance as to the former point, and the robust association between patience and multiple measures of emotion regulation (difficulties in emotion regulation, emotion regulation flexibility) provides some reassurance on the latter. Studies that experimentally induce patience and measure impatience would provide yet stronger evidence for the regulatory role of patience, as well as the specific types of emotion regulation that effectively mitigate impatience. The model's other predictions are easier to test and thus falsify. For example, initial studies and other studies in the works systematically test the proposed predictors of patience and impatience and thus far support the model's theoretical assumptions. Table 1

provides an overview of the model's claims, current evidence, and potential approaches to testing each claim, which can serve as a roadmap for further research on patience and impatience.

Measurement of patience and impatience, as the current model conceptualizes them, is also in its infancy. My colleagues and I have proposed and tested one approach to measuring the two constructs, with some success, but further validation will likely refine those measures. These efforts have thus far been limited to self-report measures; observational measures will be key to capturing the expression of impatience and the outward signs of patience, as proposed by the model, and peer reports and physiological measures can add further precision and validation.

Turning to questions that go beyond the basic tenets of the theoretical model, another question that arises when comparing this approach to previous ones is what it might mean to be a "patient person"—or inversely, an impatient one. One possibility, consistent with the theoretical model, is that other traits and trait-like individual differences are entirely responsible for trait-like variability in patience and impatience. That is, perhaps being an impatient person simply means being someone who is high in neuroticism or need for closure (or any other traits that emerge as predictors in future research), and being a patient person means being someone who is high in agreeableness, empathy, mindfulness, and so forth. Alternatively, and more consistent with a virtue ethics approach, perhaps being a patient person means being someone who is consistently motivated to regulate the feeling or consequences of impatience, for whatever reason (e.g., values, religious beliefs).

Positioning patience as a set of targeted emotion regulation strategies further raises questions about the specific strategies that might be most effective in particular situations. Although emotion regulation research has focused very little on situational predictors, as

Table 1. *Testing the Process Model of Patience.*

Theoretical Claim	Current Evidence	Next Steps
Impatience is a discrete emotion, distinct from other emotions.	Shaver et al. (1987): Impatience is a prototypical emotion; Revord (2021): Maximum correlation between impatience and any other emotion (of 329) is $r = .55$ , average $r = .21$ .	Experimental studies testing emotional responses to objectionable delays and testing impatience expressions as distinct from other emotion expressions.
The appraisal that leads to impatience is that of an objectionable delay in reaching a goal.	Sweeny et al. (2023): Objectionableness appraisals are strongly and robustly associated with reports of impatience.	Experiments manipulating objectionableness, assessing impatience and other emotions.
Impatience is expressed via psychomotor or social agitation.	N/A	Experiments inducing impatience, with behavioral observation.
Impatience is reflected in sympathetic nervous system activity; patience is reflected in parasympathetic nervous system activity.	N/A	Experiments inducing impatience and patience, with autonomic nervous system assessments.
The action tendency of impatience is to hasten the resolution of the delay.	N/A	Experiments inducing impatience, providing opportunities to resolve a delay.
Situational variables that amplify the appraisal of an objectionable delay will intensify impatience.	Sweeny et al. (2023): Key situational factors increased both objectionableness appraisals and impatience.	Tests of additional situational appraisals to determine boundary conditions.
State/trait-level person variables that amplify the appraisal of an objectionable delay will intensify impatience.	Sweeny et al. (2023): Key individual differences associated with both objectionableness appraisals and impatience.	Experimental manipulation of relevant states, assessing appraisals and impatience.
It is more difficult to engage in patience when impatience is more intense.	Sweeny et al. (2023): Negative associations between reports of patience and impatience.	Experimental inductions of impatience with patience interventions, testing effectiveness.
Patience is a targeted form of emotion regulation aimed at reducing the experience/expression of impatience.	Sweeny et al. (2023): Strong associations between measures of patience and trait-like measures of emotion regulation.	Patience interventions targeting well-established emotion regulation strategies, assess effect on impatience.
People engage in patience to the extent that they have the ability and motivation to do so.	Sweeny et al. (2023): Individual differences associated with the ability/motivation to regulate emotions generally also predict reports of patience.	Experimental manipulations of ability and motivation, assess patience.
Successful efforts toward patience produce calm composure, restraint, and perseverance.	N/A	Patience interventions with behavioral observation and persistence/restraint tasks.
State/trait-level person variables that bolster the ability or motivation to regulate increase the likelihood that a person will engage in patience.	Sweeny et al. (2023): Individual differences associated with the ability or motivation to regulate emotions generally also predict reports of patience.	Experimental manipulation of relevant states, assessing patience.

discussed earlier, newer work addresses the value of emotion regulation flexibility (i.e., the ability to shift from one strategy as another when needed) and strategy choice. This work generally concludes that greater flexibility is better for well-being (e.g., Aldao et al., 2015; Springstein et al., 2022) but thus far stops short of identifying consistent situational features that might push someone toward one strategy or another. Future work on patience can test these ideas in the context of impatience-inducing situations, investigating whether people who have a wider range of tools in their patience toolbox have better outcomes. Further research can also test interactions between individual differences and ways of engaging in patience, such that some people may tend toward, or be more successful at, regulating impatience via one strategy over another.

As a related point, my conceptualization of patience excludes antecedent-focused strategies, such as situation selection. Admittedly, the choice to limit its scope is as much a semantic one as a theoretical one. That is, the term “patient” (as a state rather than a trait) typically refers to forms of emotion regulation that are responsive to experiences of impatience, not preemptive actions to prevent that experience. For example, is it patient to pack a book for a long plane ride? Is it patient to make an appointment at a government office to avoid a wait? Those actions are planful, but it would be a stretch to call them patient. Nonetheless, future research can investigate the boundaries of patience as emotion regulation.

Next, what is the role of culture in patience and impatience, as defined here? The initial set of studies testing the theory was quite diverse in terms of nationality and various demographic factors (Sweeny et al., 2023)<sup>5</sup>, but my colleagues and I did not take a systematic

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<sup>5</sup>Across 6 samples, three from Prolific and three from the author’s university, the demographics are as follows:

- *Prolific participants*:  $N = 787$ ; 52% female; 12% US/Canada, 51% Europe, 36% other countries; mean age = 30 years old, mean subjective socioeconomic status on a 1 to 10 scale = 5.3.

approach to evaluating cultural differences, and the theoretical bases of the model were developed largely in the United States (i.e., functionalism and the process model of emotion regulation). One theory that provides some guidance on this front is affect valuation theory (Tsai et al., 2006), which posits that people vary in terms of collectivistic versus individualistic cultural background in the type of emotion they ideally feel, namely whether they prefer high arousal (individualistic) or low arousal (collectivistic) emotions (see Tsai, 2007 for a review). Because impatience is an emotion that is moderate in arousal, and patience tends to produce a relatively calm (i.e., low arousal) state, people with collectivistic cultural values may be less tolerant of impatience and more motivated to engage in patience. In fact, my colleagues and I included a measure of affect valuation in one study (the AVI; Tsai et al., 2006; included in Sweeny et al., 2023, Study 1) and found significant associations between valuing high-arousal emotion and impatient responses to the scenarios, and between valuing low-arousal emotion and patient responses to the scenarios. These findings provide an initial direction for research on culture and patience, but other cultural considerations (e.g., display rules, face considerations, norms) should be a focus of future research as well.

Finally, when is it be good to be impatient, or bad to be patient? In the case of social justice reform, for example, is it unreasonable or even unethical to ask people to be patient in their pursuit of equality, when even a small delay would be truly unfair, unreasonable, and inappropriate? When one group of people demands patience in others, that demand often reflects an exercise of power and privilege (e.g., Ayuero, 2012). These dynamics arise in the context of large-scale pursuits (e.g., civil rights movements) and seemingly small ones (e.g., who gets to skip the line)—but in either case, my approach provides some insight into how to balance the

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- *US undergraduate participants*:  $N = 613$ ; 61% female; 8% White, 43% Asian-American, 34% Latino/a/x; mean age = 20 years old, mean subjective socioeconomic status = 5.5.



benefits of patience and impatience. Like all emotions, impatience is motivating, specifically motivating efforts to resolve an objectionable delay. That energizing power of impatience can be channeled toward many good ends, when resolution is preferable to resignation. Even in those cases, however, people may benefit from the response modulation form of patience, thus optimizing their impatient efforts rather than succumbing to impulsivity and undirected agitation. A quote from *On Patience* puts it beautifully (Pianalto, 2016, p. xii):

One might worry that too much patience leads to passivity and inaction, and that patience must be counter-balanced with assertiveness, direct action, and perhaps at times even (righteous) anger. However...there is a way of understanding patience according to which one can never have 'too much' of it and that does not construe patience as a purely (and at times problematically) passive mode of being. Patience is something we can manifest and exercise even as we act, and which can help us to remain focused, mindful, and true to our ideals and goals.

## **Conclusion**

Inspired by the insights of many religious scholars, philosophers, and scientists, I propose a new approach to an old virtue and suggest that patience is nothing more (and nothing less) than a socially-valuable form of emotion regulation. I remain agnostic of the claim that patience is a virtue, instead grounding claims in well-established theories of emotion, and bringing precision and clarity to age-old wisdom. In doing so, this theoretical approach reveals coherence across these varied fields and methodologies and generates novel, testable, and timely questions for future patience scholars.

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The Author declares that there is no conflict of interest.

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