Canadian Psychology / Psychologie canadienne
2018, Vol. 59, No. 1, 1–14

0708-5591/18/$12.00 http://dx.doi.org/10.1037/cap0000142

Emotion Regulation: Why Beliefs Matter

Brett Q. Ford
University of Toronto

James J. Gross
Stanford University

Emotion regulation research is flourishing. However, enthusiasm for this topic has outpaced conceptual clarity, resulting in a maelstrom of disparate findings. In the present review, we bring together two conceptual frameworks that we believe may be useful in organizing existing findings and suggesting directions for future research. The first considers individuals' fundamental beliefs about emotion and the pervasive role they play in emotion regulation. The second identifies how emotion regulation unfolds across time (Gross, 2015). We bring these two frameworks together to highlight how individuals' beliefs about emotion influence each step in the emotion regulation process: *identifying* a need to regulate, *selecting* regulation strategies, *implementing* regulation, and *monitoring* one's regulatory success. At each stage, we consider both how individuals' beliefs shape the emotion regulation they apply to themselves (intrinsic emotion regulation), and also the emotion regulation they apply to others (extrinsic emotion regulation). We conclude by highlighting several promising directions for future research.

Keywords: emotion, emotion beliefs, emotion regulation, extrinsic emotion regulation

Emotions are a crucial part of the human condition. Without them, we would not have the thrill of victory or the agony of defeat, the ecstasy of love, or the despair of loss. Emotions are not just ornamental, either—they help us effectively respond to opportunities and challenges we encounter (Lazarus, 1991). But emotions are not always helpful—they can also be destructive, especially when they are experienced to an inappropriate degree or in an inappropriate context (Gross & Jazaieri, 2014). Thus, in spite of the pleasure, meaning, and utility that emotions can provide us, it is also crucial that we are able to engage in *emotion regulation*, influencing which emotions we have, when we have them, and how we experience and express them (Gross, 1998).

Reflecting its long-standing importance, emotion regulation has been explored for millennia, as philosophers (e.g., Socrates), historical movements (e.g., the Enlightenment), and more recently, psychologists (e.g., Freud) have weighed in on the interplay between emotion (e.g., *passion*) and its regulation (e.g., *reason*). Interestingly, in our modern age, empirical interest in emotion regulation started slowly: only a small number of papers on emotion regulation were published each year through the mid1990s. Just two decades later, however, we are in the enviable position of witnessing a flood of emotion regulation research: in 2016 alone, Google Scholar indexed 20,000 or so new papers published on emotion regulation.

This accelerating trajectory brings many benefits, including new scientific findings regarding emotion regulation across various domains including mental health (Aldao, Nolen-Hoeksema, & Schweizer, 2010), medicine (DeSteno, Gross, & Kubzansky, 2013), education (Duckworth & Gross, 2014), business (Côté, 2005), economics (Heilman, Crisan, Houser, Miclea, & Miu, 2010), law (Maroney, 2006), and political science (Halperin, 2014). This popularity, however, comes with challenges. Most centrally, an ever-growing set of findings from a diverse set of perspectives has outpaced conceptual clarity. For this reason, it is important to develop conceptual frameworks that are relevant across perspectives and can provide clarity while also generating new testable ideas. In the present review, we focus on two frameworks that we believe may be helpful for the burgeoning field of emotion regulation.

We first consider a thematically oriented framework, highlighting a theme that pervades the field of emotion regulation on a theoretical level but has been relatively sparsely empirically examined: *individuals' fundamental beliefs about emotion*. Individuals differ in how they think about emotions, and it is becoming increasingly clear that these varying beliefs are deeply consequential. Theorizing and initial evidence strongly suggests that emotion regulation may be a core conduit through which these beliefs influences our lives. Second, we consider a process-oriented framework, highlighting a model that clarifies the unfolding nature of emotion regulation across time: *the process model of emotion regulation* (Gross, 2015).

After introducing each of these frameworks, we unite the frameworks and illustrate the pervasive ways in which individuals' beliefs about emotion may influence emotion regulation at each stage of the regulation process—identifying a need to regulate, selecting a regulation strategy, implementing the regulation, and monitoring one's regulatory success. This review highlights exciting new empirical work as well as promising directions for future work.

Beliefs About Emotion

Given that emotions are central to how we relate to our environment and to each other, it is natural that we spend time thinking, discussing, and developing beliefs about emotions. These beliefs, in turn, influence how we perceive and manage our own and others' emotions.

Brett Q. Ford, Department of Psychology, University of Toronto; James J. Gross, Department of Psychology, Stanford University.

Correspondence concerning this article should be addressed to Brett Q. Ford, Department of Psychology, University of Toronto, 1265 Military Trail SW427A, Toronto, Ontario M1C 1A4, Canada. E-mail: brett.ford@utoronto.ca

To identify fundamental beliefs about emotion, it is useful to consider two age-old debates. One debate concerns our attitude toward emotions: to what extent are emotions good (e.g., desirable and useful) versus bad (e.g., unwanted and harmful)? The second debate concerns the controllability of emotions: to what extent are emotions uncontrollable (e.g., arriving unbidden and departing of their own accord) versus controllable (e.g., modulated according to our will)? These debates have endured for thousands of years, likely because they evoke strong intuitions on either side. Indeed, each individual decides for her or himself what the 'right' answer to these questions is and these decisions form the basis for each individual's beliefs about emotion. Although these are not the *only* beliefs individuals hold about emotions, the present review focuses on these beliefs because they are foundational, conceptually orthogonal, and have important consequences for whether and how individuals engage in emotion regulation.

Before considering each of these fundamental beliefs in more detail, we first provide a map of the conceptual space these beliefs cover (see Figure 1). Each of these superordinate beliefs – (1) beliefs about whether emotions are good versus bad and (2) beliefs about whether emotions are controllable versus uncontrollable – can be considered in their most general form as well as in more specific forms that vary across a number of subordinate categories. For example, while an individual can hold a belief about emotion at its broadest level (e.g., *Emotions are uncontrollable*), individuals can also hold a variety of subordinate beliefs that consider: (a) beliefs about specific emotional states or affective states (e.g., anger, worry, happiness; negative or positive emotions); (b) beliefs about specific emotion channels (e.g., the subjective feelings, expressive behaviours, or physiological concomitants of emotions); (c) beliefs about emotions within specific contexts, such as particular settings (e.g., with friends and family vs. colleagues), when pursuing particular goals (e.g., when avoiding threats vs. pursuing rewards), or given certain self-regulatory resources (e.g., when feeling fatigued vs. rested, or when using a particular self-regulation tools); and (d) beliefs about the emotions of specific targets (e.g., a belief about the self, specific others, certain groups, or 'people' in general).

As illustrated in Figure 1, each of these subordinate beliefs can exist in a general form (e.g., *Expressing emotions is bad*), but also in more specific forms in conjunction with other subordinate beliefs (e.g., *Expressing embarrassment is good for making amends*). As such, each individual is capable of holding a nuanced and complex matrix of beliefs. Although many of these beliefs have not yet been thoroughly empirically examined—and the conceptual map we provide here is doubtless incomplete—the groundwork has begun to be laid for a clearer understanding of key emotion-related beliefs. We next offer a brief introduction of the nascent research on each superordinate belief about emotion and its embedded subordinate beliefs.

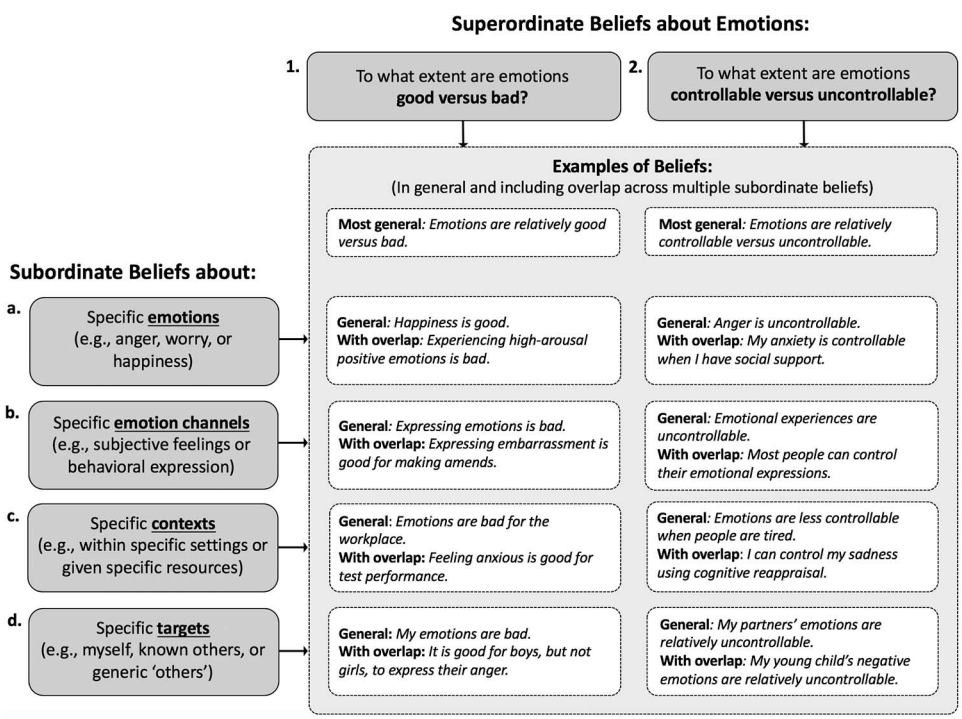

Figure 1. Conceptual mapping of superordinate beliefs about emotion regarding (1) whether emotions are good versus bad and (2) whether emotions are controllable versus uncontrollable, and subordinate beliefs about emotion regarding (a) specific emotions, (b) specific emotion channels, (c) specific contexts in which the emotion occurs, and (d) specific targets of the belief. Although these beliefs can exist in a general form (see "general" examples throughout), they can also overlap with each other (see "with overlap" examples throughout), creating a complex matrix of possible beliefs about emotion.

Beliefs About Whether Emotions Are Good Versus Bad

A belief about whether emotions are 'good' versus 'bad' is one of the most basic beliefs about emotions. When this belief is applied in a more contextualized manner, it can refer to whether emotions are desirable (vs. undesirable), valued (vs. devalued), useful (vs. useless), helpful (vs. harmful), and so forth. Philosophical judgments of emotion's value (or lack thereof) can be traced through the centuries as various historical movements have expressed their opinions regarding emotion's promise (e.g., Sentimentalism) and its peril (e.g., Stoicism). The empirical history of examining these beliefs, however, is surprisingly short.

Recent research has begun to examine beliefs about whether emotions are good or bad by assessing individuals' beliefs about whether emotion should be controlled (e.g., Mauss, Evers, Wilhelm, & Gross, 2006) or whether emotions are illogical or disruptive (e.g., Karnaze & Levine, 2017). Research has also targeted specific emotions, assessing beliefs about whether particular emotions are desirable (Ford & Mauss, 2014; Harmon-Jones, Harmon-Jones, Amodio, & Gable, 2011; Tsai, 2007). Specifying further, recent research has assessed beliefs about whether particular emotions are desirable under certain circumstances. Importantly, this contextualized work has also challenged the heuristic that unpleasant emotions are always believed to be 'bad.' Rather, people can believe that unpleasant emotions are desirable for a variety of reasons, including goal attainment (e.g., *feeling angry is useful when confronting negotiation partners*; Tamir & Ford, 2012; Tamir et al., 2015), or epistemic certainty (e.g., *sadness feels comfortable and authentic*; Millgram, Joormann, Huppert, & Tamir, 2015; Wood, Heimpel, Manwell, & Whittington, 2009). Although much of the above research has examined individuals' beliefs regarding people in general or themselves in particular, some research has examined other targets. For example, the developmental literature has long been interested in parents' beliefs about children's emotions (Gottman, Katz, & Hooven, 1996; Halberstadt et al., 2013).

The superordinate belief about whether emotions are good versus bad, as well as its constituent subordinate beliefs, all share the quality of representing a fundamental evaluation of emotion. Evaluations of emotion, in turn, carry strong implications for emotion regulation. Namely, believing an emotion is *bad* (or *good*) lays the groundwork for wanting to *decrease* (or respectively, to *increase*) that emotion. Conversely, believing an emotion is essentially *neutral*—as in the case of emotional acceptance, when individuals believe that emotions are natural and simply come and go on their own (Baer, Smith, & Allen, 2004)—lays the groundwork for *not* striving to change one's emotion. As such, the process and outcome of emotion regulation depends upon beliefs about whether emotions are good versus bad.

Beliefs About Whether Emotions Are Controllable Versus Uncontrollable

Akin to beliefs about whether emotions are 'good versus bad,' much of the available discourse on beliefs about the controllability of emotion has occurred in the writings of philosophers. The Stoics, for example, rejected the idea that emotions were outside of our control (Epictetus, 1906). Others have taken an opposing view; for example, David Hume suggested that emotions cannot be controlled when he said that "reason is and ought only to be slave of the passions" (Hume, 1739). Despite long-standing interest in emotion's controllability, the empirical history of examining individuals' beliefs about the controllability of emotion is short and relatively sparse (Mikulincer & Ben-Artzi, 1995; Tamir, John, Srivastava, & Gross, 2007).

Much of the available literature on this topic has targeted individual differences in general beliefs about the controllability of emotion, assessed with items like "No matter how hard they try, people cannot really change the emotions that they have" (Tamir et al., 2007). Some scales focus on the controllability of negative emotion, whereas others refer primarily to 'emotion' (Veilleux, Salomaa, Shaver, Zielinski, & Pollert, 2015). Most scales also do not parse apart emotion channels (e.g., experience vs. expression), although some scales combine items referring both to experience (e.g., control of 'feelings') and to expression (e.g., control of what is 'shown'; e.g., Halberstadt et al., 2013). Finally, several lines of research have considered different targets of these beliefs (e.g., children; Halberstadt et al., 2013), including beliefs about the self with items like 'I have very little control over my emotions' (Catanzaro & Mearns, 1990; De Castella et al., 2013; Romero, Master, Paunesku, Dweck, & Gross, 2014).

When considering how beliefs about the controllability of emotion may influence individuals' lives, emotion regulation is a clear candidate: believing that emotions are relatively uncontrollable should pervasively impair the emotion regulation process (Kneeland, Dovidio, Joormann, & Clark, 2016).

The Process Model of Emotion Regulation

The process model (Gross, 2015) holds that emotions fundamentally involve *valuation*—a determination of what is "good for me" versus "bad for me." This valuation process compares one's perception of the world (e.g., being late to an important interview) to one's desired state of the world (e.g., wanting to perform well during the interview), resulting in an evaluative reaction (e.g., anxiety). As such, emotions represent the activity of a valuation system.

In general, a valuation system unfolds as follows: an individual is exposed to the world (W), which can be internal or external; they perceive (P) the world; they evaluate (V) whether the perceived world is good, bad, or irrelevant given their desired state of the world; and finally, they are motivated to engage in action (A) aimed at addressing the gap between their perception of the world and their desired state of the world. In the context of an emotion, the world represents a potentially emotionally evocative situation (W), which individuals then perceive (P) and evaluate (V); based on that evaluation, an emotional response is generated (A).

There are many different valuation systems (Rangel, Camerer, & Montague, 2008) and these systems can interact with each other in many different ways. This conceptualisation sets the stage for emotion regulation: whereas an emotion represents a "first-order" valuation system that takes the world as its input, emotion regulation represents a "second-order" valuation that takes another valuation system—an emotion—as its input. The input for the second-order system can be one's own emotion (in the case of

intrinsic emotion regulation, when one attempts to regulate their own emotion), or the input can be another person's emotion (in the case of *extrinsic emotion regulation*, when one attempts to regulate someone else's emotion).

Most simply, when an emotion (W) is perceived (P) and then evaluated as needing regulation (V), the resulting action impulse (A) is designed to help regulate that emotion. Emotion regulation, however, is not a single monolithic construct. Rather, it is a multistep process that unfolds over time. Figure 2 portrays the interconnections between the original emotion (the first-order valuation system) and the multistep emotion regulation process (the second-order valuation system), where each step in the process triggers a subsequent step.

Emotion Regulation Stages

The identification stage involves deciding whether there is a need to initiate emotion regulation. As depicted in Figure 2, the identification stage is a valuation system itself, consisting of three steps: the task of the perception step (P) is to detect the emotion. The task of the valuation step (V) is to determine whether the value of the emotion is sufficiently negative or positive to activate regulation, given the current internal or external world context. If the value to regulate is strong enough, the action step (A) will activate a goal to regulate the emotion. This goal represents a change in the internal world (W), setting the next stage in motion.

The selection stage involves determining which strategy will be used. The task of the perception step (P) is to represent different regulatory strategies (e.g., using cognitive change to reframe one's perspective of the situation) as well as relevant features of the world that might influence the strategy (e.g., cognitive or physiological resources; type or strength of the emotion). The task of the valuation step (V) is to evaluate the costs and benefits of these strategies based on relevant features of the world. If a given strategy is evaluated sufficiently positively, the action step (A) will

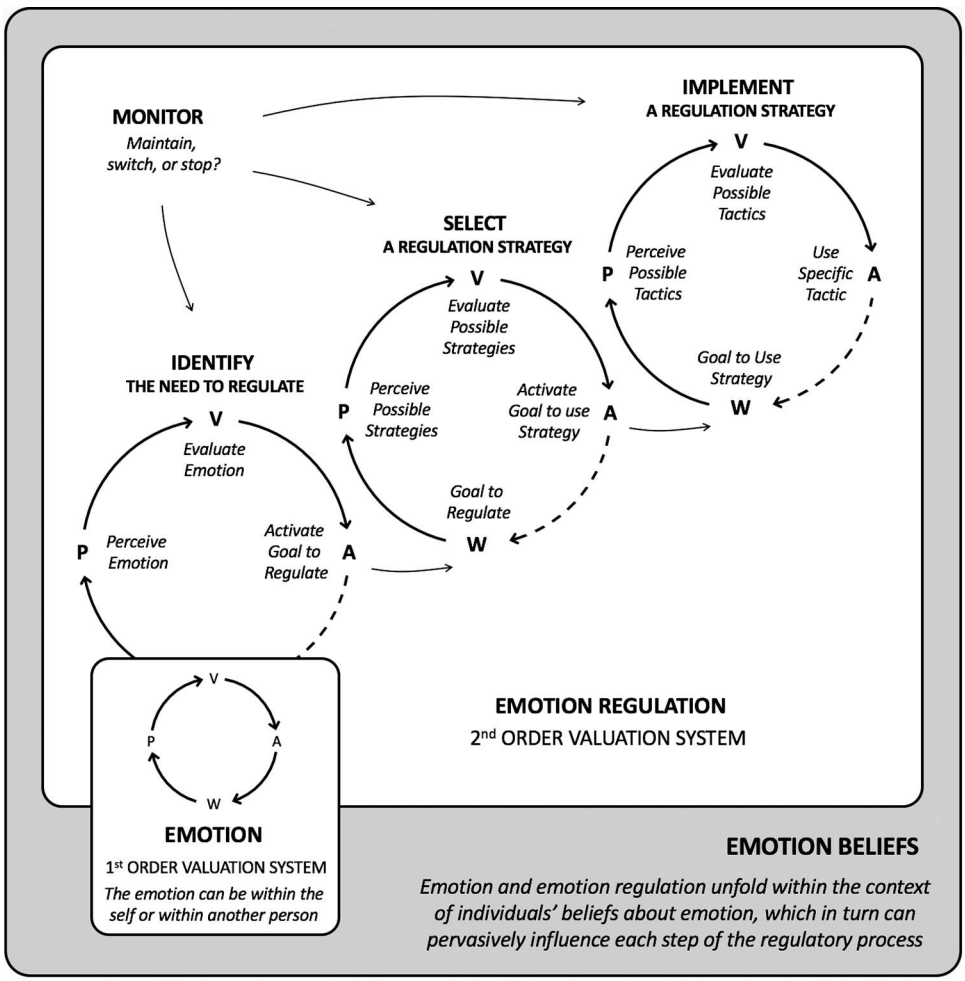

Figure 2. The process model of emotion regulation. Visual depiction of the interconnections between emotion (a 1st order valuation system representing a response to the world) and emotion regulation (a 2nd order valuation system representing a response to an emotion). Emotion regulation consists of linked systems that involve identifying the need to regulate, selecting a regulation strategy, and implementing that strategy. Individuals also monitor their progress throughout this process. Emotion beliefs are represented as surrounding the entire process, given the pervasive influence that emotion beliefs likely have on both emotion and emotion regulation.

activate a goal to use that strategy. This goal represents a change in the internal world (W), and the implementation stage may then be set in motion.

The implementation stage involves translating the selected strategy (e.g., cognitive change) into situation-specific tactics (e.g., using positive reappraisal to reframe the meaning of a situation in a more positive manner). The task of the perception step (P) is to represent the various ways of implementing a particular strategy as well as relevant features of the world that might influence implementation. The task of the valuation step (V) is to evaluate the costs and benefits of these tactics based on the relevant features of the world. If a given tactic is evaluated sufficiently positively, the action step (A) implements the tactic (e.g., using positive reappraisal to challenge the appraisal that generated the emotion in the first place). Successful emotion regulation hinges upon this final step of the process.

Finally, individuals monitor their emotion regulation process. Monitoring is perhaps most salient after the implementation stage, as individuals appraise the outcome of their regulation and decide whether to maintain, switch, or stop their regulatory efforts. Monitoring also occurs throughout the entire emotion regulation process as individuals track the progress of their regulatory efforts and decide whether to make course corrections.

Linking Emotion Beliefs With Emotion Regulation

In the sections that follow, we integrate our conceptual mapping of emotion-related beliefs with the process model of emotion regulation. At each stage, we consider not only how individuals' beliefs may shape the regulation they apply to their own emotions (*intrinsic emotion regulation*), but also the regulation they apply to others' emotions (*extrinsic emotion regulation*). Although extrinsic regulation is common (Dixon-Gordon, Bernecker, & Christensen, 2015; Niven, Totterdell, & Holman, 2009; Reeck, Ames, & Ochsner, 2016; Zaki & Williams, 2013), the majority of the emotion regulation literature has focused on intrinsic regulation. And although extrinsic and intrinsic emotion regulation are undoubtedly linked (as when a parent regulates a child's distress to maintain their own sanity), not all instances of extrinsic emotion regulation rely on an intrinsic emotion regulation motive. Extrinsic emotion regulation can occur for a diverse set of reasons and through a variety of pathways that may overlap with—but should also be distinct from—intrinsic regulation. The process model is useful here, providing a scaffold to explore how emotion beliefs may uniquely impact each step of the intrinsic and extrinsic regulatory process.

Identification Phase of Emotion Regulation

As the first stage in the emotion regulation process, much hinges upon the output of the identification stage. Given this, it is particularly important to understand how beliefs about emotion may influence whether and how individuals identify the need to regulate (either within the self or within another person). Not much empirical research has yet specifically examined the identification phase of emotion regulation, let alone which factors might influence this stage. Given this, we provide a theoretical account of how beliefs might influence the perception, valuation, and action steps of the identification stage, considering both intrinsic and extrinsic regulation, then briefly summarise the relevant literature.

Beliefs About Whether Emotions Are Good Versus Bad

Intrinsic emotion regulation. Believing that an emotion is 'good' or 'bad' within a particular context may be a necessary precondition to identifying the need to regulate. At the perception step of the identification stage (see Figure 2), an individual's beliefs about the value of particular emotions may alter her or his experience of such emotions. For example, an individual who strongly believes that anger is dangerous may be especially likely to notice the stirrings of anger or to perceive that anger as unpleasant. At the valuation step of the identification stage, beliefs should heavily influence the desired state against which the current state is compared: emotions that are believed to be desirable, useful, or otherwise 'good' will be positively valued (warranting maintenance or up-regulation), whereas emotions that are believed to be undesirable, harmful, or otherwise 'bad' will be negatively valued (warranting down-regulation). Sometimes this valuation process will be relatively straightforward, as when only one belief is relevant (e.g., believing worry is undesirable should lead to negative evaluations of one's current worry), while other times this valuation process will be more complex, as when multiple—and possibly conflicting—beliefs are relevant (e.g., believing happiness is desirable and also believing worry can enhance performance on an upcoming exam requires weighing the value of both beliefs before making a final valuation). If one's current emotion does not match one's desired emotion, the action step initiates emotion regulation.

Empirically, a growing body of evidence suggests that beliefs about whether emotions are good versus bad influence whether individuals identify the need to engage in emotion regulation. This influence appears to begin at the very earliest perceptual step in the identification stage. For example, individuals who believe that particular emotions are desirable also report experiencing those emotions as relatively more pleasant, even if the emotion in question is typically considered 'unpleasant,' such as anger or fear (Ford & Tamir, 2014). More research has considered the links between beliefs about whether emotions are good or bad and the action output of the identification phase: the actual initiation of emotion regulation. From this output, it is also possible to infer the content of the valuation step. For example, individuals who believed they deserved to feel sad were less likely to engage in regulatory attempts to improve their mood when feeling sad (Wood et al., 2009), perhaps because they actually positively evaluated their current experience of sadness as matching their desired state. As another example, those who believed anger was useful in particular contexts (e.g., confrontational negotiations) were more likely to engage in regulatory attempts to increase anger in those contexts (Tamir et al., 2015), presumably because they negatively evaluated their current emotion as not matching their desired state of elevated anger. Overall, several lines of research indicate that identifying the need to regulate hinges upon the emotions that individuals believe are relatively good versus bad.

Extrinsic emotion regulation. The sequential steps of the identification stage of regulation should proceed relatively similarly whether considering one's own emotion or another's emotion, but the mechanisms behind these steps may be different. For example, the task of the perception step is to detect the emotion, which relies on insight and interoception in the context of one's

own emotion but relies on social cognition in the context of another's emotions. The process of 'decoding' another's emotion can be influenced by a variety of factors (e.g., interpretive biases, empathy deficits; Dixon-Gordon et al., 2015), including one's beliefs about emotions. For example, an individual who believes that expressing emotions is unwise may be particularly sensitive to others' expressions of emotions. The valuation step, in turn, should be strongly influenced by beliefs about emotion, given that the valuation hinges upon what one believes is desirable for other's emotions. Because individuals' desires for others' emotions *could* – but need not – parallel their desires for their own emotions, individuals may be more, less, or similarly likely to initiate emotion regulation in others, compared to themselves under the same circumstances.

Empirically, several lines of work suggest that beliefs about whether emotions are good versus bad influence the initiation of extrinsic emotion regulation. For example, developmental research has found that parents' beliefs about the value or danger of emotion predict how they talk to and teach their children about emotions, a likely precursor to extrinsic regulation (Halberstadt, Thompson, Parker, & Dunsmore, 2008). In addition, social psychological research suggests that people's beliefs about emotion predict whether they initiate extrinsic emotion regulation with new social partners, sometimes in counterintuitive ways. Specifically, although it is common to want social partners to feel good and social rivals to feel bad (Halevy, Bornstein, & Sagiv, 2008), individuals also aim to increase useful feelings in others, whether those emotions are pleasant or unpleasant (López-Pérez, Howells, & Gummerum, 2017; Netzer, Van Kleef, & Tamir, 2015). For example, individuals who believed that anger would be useful to feel during an upcoming task were more likely to try to *increase* anger in a *partner* who would be completing the task, but were also more likely to try to *decrease* anger in a *rival* who would be completing the task (Netzer, Van Kleef, et al., 2015). This research suggests that people initiate extrinsic emotion regulation attempts based upon an interplay between the nature of the interpersonal relationship and one's beliefs about whether emotions are good (e.g., useful) versus bad (e.g., harmful).

Beliefs About Whether Emotions Are Uncontrollable Versus Controllable

Intrinsic emotion regulation. Believing that emotions are relatively uncontrollable versus controllable should impair the initiation of emotion regulation. This belief should have the strongest influence on the valuation step: holding a belief that emotions are relatively uncontrollable should decrease the chance of evaluating one's emotional state as being 'in need' of regulation. This evaluation, in turn, should reduce the likelihood that the action step will activate the goal to regulate. As such, beliefs about the controllability of emotion may have the power to promote or hinder the emotion regulation process from the outset.

Empirically, few studies have directly addressed whether beliefs about controllability influence the identification phase of emotion regulation. Some research has begun to provide clues, however. For example, a recent experiment suggests that beliefs about controllability are linked with the motivation to engage in emotion regulation (Howell, Passmore, & Holder, 2016), the output of the identification phase of emotion regulation. Specifically, participants who were induced to believe that well-being (an emotion-related construct) is relatively uncontrollable (i.e., by reading a passage describing well-being as based on a genetic set-point) were less motivated to increase their well-being, compared to participants who were induced to believe well-being was more malleable. Although this study focused on beliefs about well-being and not emotion per se, it provides initial experimental evidence that believing emotion-related constructs are uncontrollable might impair individuals' ability to identify the need to regulate.

Extrinsic emotion regulation. Believing that emotions are relatively uncontrollable may have a similar influence on initiating emotion regulation in others. More specifically, believing that emotions are uncontrollable may decrease the chance of evaluating another's emotional state as being 'in need' of regulation. In addition to reducing the likelihood of initiating extrinsic regulation, this belief may also foster more compassionate responses to others' suffering—if emotions are uncontrollable, it is not someone's 'fault' if they are suffering.

Empirically, initial evidence suggests that beliefs about the controllability of emotion influence the initiation of emotion regulation. For example, when individuals reacted to a vignette depicting a depressed individual, those who believed that emotions were relatively uncontrollable were more empathetic toward that individual and less likely to blame him or her (Tullett & Plaks, 2016). Although this study did not assess the initiation of emotion regulation per se, it suggests that believing emotions are uncontrollable may reduce the extrinsic emotion regulation an individual is likely to offer. Additional indirect evidence indicates that believing emotions are relatively uncontrollable may also hamper the development of new friendships (Tamir et al., 2007), perhaps suggesting that missing opportunities to help new friends to manage their emotions might come at a longer-term cost.

Selection Phase of Emotion Regulation

Much of the available literature on emotion regulation has examined specific strategies, largely building upon hypotheses generated from the process model's early organisation of different families of emotion regulation strategies (Gross, 1998). While this research has often focused on how these strategies have different short and long-term effects (Aldao et al., 2010; Webb, Miles, & Sheeran, 2012), it is also clear that these strategies have different antecedents (Gross & John, 2003). Beliefs about emotion likely represent one of these core antecedents.

Beliefs About Whether Emotions Are Good Versus Bad

Intrinsic emotion regulation. Individuals' beliefs about which emotions are desirable, useful, or otherwise 'good' may influence their selection of emotion regulation strategies. Considering the perception step, an individual may represent a greater number of strategies that are effective at attaining emotions believed to be highly desirable (or that are effective at avoiding emotions believed to be highly undesirable), compared with emotions that are perceived relatively neutrally. Considering the valuation step, an individual should more positively evaluate strategies they believe will help them attain desirable and avoid undesirable emotions. Upon positively evaluating a given strategy,

the output of the action step would consist of activating a goal to use the strategy to attain (or avoid) that desired (or undesired) emotion.

Empirically, little research has considered how beliefs about the desirability of emotion might influence the selection of emotion regulation strategies. The available evidence suggests that individuals are more likely to positive evaluate and thus select strategies they believe will help them attain the emotions they believe are 'good' and avoid the emotions they believe are 'bad.' For example, individuals who aimed to decrease their emotional responses were more likely to select *distraction* (which involves shifting attention away from a stimulus and tends to attenuate emotions), whereas those who aimed to increase their emotional responses were more likely to select *rumination* (which involves repetitively thinking about a stimulus and tends to heighten emotions; Tamir & Millgram, 2017). In other work, individuals who believed emotions are bad or dangerous were more likely to use distraction when faced with negative stimuli (Dennis & Halberstadt, 2013). Although these findings suggest that individuals can select effective strategies to attain (or avoid) their desired (or undesired) emotions, the selection process may not always proceed smoothly: individuals who hold relatively extreme beliefs about the value of particular emotions (e.g., a belief that happiness must be experienced at all times) may be more likely to select strategies in a "scatter-shot" approach wherein they try a variety of strategies that may even interfere with one another (Catalino, Algoe, & Fredrickson, 2014; Fergus & Bardeen, 2016). Overall, particular emotion beliefs that are intense, rigid, or otherwise dysfunctional may generate conflict or confusion at the selection phase of emotion regulation.

Extrinsic emotion regulation. Beliefs about whether emotions are good versus bad should influence an individual's selection of extrinsic emotion regulation strategies in a similar manner as the selection of intrinsic emotion regulation strategies. Specifically, people should be more likely to select strategies that will help them enhance (or reduce) the emotions they believe are most desirable for their target to feel (or to avoid). An individual's valuation of these strategies, however, may be complicated by needing to consider both which strategies they can implement successfully, and which strategies would be successfully received by the person whose emotions are being regulated. Selecting an optimal strategy would likely be facilitated by a greater knowledge and familiarity with the person being regulated.

Empirically, much of the existing literature examining how beliefs about emotion might influence the selection of extrinsic emotion regulation strategies has occurred within developmental contexts. This research suggests that parents' beliefs influence the regulation strategies they encourage in their children. For example, when observing parents and children in the aftermath of a terrorist attack, parents who generally believed that children's emotions are valuable were more likely to have children who engaged in problem-solving, emotion-oriented coping, and support-seeking in the wake of the attack; conversely, parents who generally believed that children's emotions are dangerous were more likely to have children who engaged in avoidance and distraction in the wake of the attack (Halberstadt et al., 2008). Avoidance and distraction—while less adaptive when used chronically—are highly useful at reducing negative emotion in the short run. As such, parents' beliefs appear to influence their use of extrinsic emotion regulation such that their children tend to experience emotions that are in accordance with the parents' beliefs.

Beliefs About Whether Emotions Are Uncontrollable Versus Controllable

Intrinsic emotion regulation. Beliefs about the controllability of emotion are likely to have a pervasive influence on the selection stage of emotion regulation. Considering the perception step, individuals who believe emotions are relatively uncontrollable may perceive fewer strategies to choose from: if these individuals are less likely to initiate emotion regulation in the first place, over time, they may lose opportunities to gain skill in various strategies and would thus be less likely to consider such strategies at the selection phase in the future. Considering the valuation step, individuals who believe emotions are relatively uncontrollable should be less likely to positively evaluate the usefulness of various emotion regulation strategies. The nature of these evaluations may depend on the individuals' subordinate beliefs about controllability. For example, believing that emotional *experiences* are relatively uncontrollable may more strongly influence the valuation of strategies that target emotional experiences (e.g., *reappraisal*, which involves reframing the meaning of an emotional event to change its emotional impact); conversely, believing that emotional *expressions* are relatively uncontrollable may more strongly influence the valuation of strategies that target emotional expressions (e.g., *expressive suppression*, which involves masking one's outward expressions). Being less likely to value certain forms of emotion regulation, in turn, should affect the action step by reducing the motivation to attempt implementing such strategies.

Empirically, much of the recent work examining beliefs about the controllability of emotion have examined how these beliefs are linked with the use of particular emotion regulation strategies. This work has demonstrated that individuals who believe in general that emotions are relatively uncontrollable are less likely to select regulation strategies that involve changing emotional experiences (e.g., *reappraisal*) but are not more or less likely to select strategies that involve changing emotional expressions (e.g., *suppression*; e.g., De Castella et al., 2013, 2015; Ford, Lwi, Hankin, Gentzler, & Mauss, in press; Tamir et al., 2007). Experimental studies have also provided evidence for the causal influence of these beliefs: adults who were induced to believe that emotions were relatively uncontrollable by reading a passage describing the fixed (vs. malleable) nature of emotion were less likely to use reappraisal in a subsequent negative mood induction, but were *not* less (or more) likely to use suppression (Kneeland, Nolen-Hoeksema, Dovidio, & Gruber, 2016a, 2016b). This pattern may suggest that when individuals consider their beliefs about whether 'emotions' are controllable in general, they are considering internal emotional *experiences* more than external emotional *expressions*. Future research considering other strategies will help us understand how broadly or specifically beliefs about the controllability of emotion may shape the selection phase of emotion regulation.

Extrinsic emotion regulation. If believing that emotions are uncontrollable results in an impoverished repertoire of intrinsic regulation strategies, it may also result in an impoverished repertoire of extrinsic regulation strategies. It is important to consider,

however, that a vast repertoire may not be necessary for an individual to select a useful emotion regulation strategy, either for intrinsic or extrinsic regulation. Indeed, having too many options to choose from can be overwhelming and ultimately lead to worse strategy selections (Bigman, Sheppes, & Tamir, in press). That being said, believing emotions cannot be controlled may still inhibit the use of particular strategies that are generally considered to be effective (e.g., reappraisal—although it remains to be confirmed whether *extrinsic* reappraisal is as beneficial as *intrinsic* reappraisal).

Empirically, prior work has demonstrated that beliefs about controllability are linked with social functioning more broadly, but these findings do not yet speak to how beliefs may be linked with the selection of extrinsic emotion regulation strategies in particular. For example, believing emotions are relatively uncontrollable has been linked to *receiving* less social support over time (Tamir et al., 2007), but it is unclear whether these beliefs may also lead to *giving* less social support. More generally, it is possible that research targeting the selection of extrinsic emotion regulation strategies is scarce because assessments of these strategies have only recently been developed. Using such assessment tools, initial research suggests that people, in general, report engaging in a moderate amount of extrinsic emotion regulation using cognitive strategies (e.g., giving helpful advice to try to improve how the target felt) as well as behavioural strategies (e.g., doing something nice to try to make the target feel better; Niven et al., 2009). However, individuals who reported using a greater diversity of extrinsic strategies across their interpersonal relationships also reported *lower* well-being, empathy, and relationship quality (Niven, Macdonald, & Holman, 2012). Although preliminary, this research is consistent with findings from intrinsic emotion regulation that employing 'scatter-shot' approach to extrinsic strategy selection can work against successful regulation (e.g., Gruber, Kogan, Mennin, & Murray, 2013).

Implementation Phase of Emotion Regulation

The implementation phase of emotion regulation consists of representing various regulation tactics that can be used to implement the selected regulation strategy, evaluating those tactics, and then employing a particular tactic. As such, this phase is 'where the rubber meets the road'—without this phase, a successful emotion regulation effort cannot be launched.

Beliefs About Whether Emotions Are Good Versus Bad

Intrinsic emotion regulation. The emotions that an individual believes are desirable, useful, or otherwise 'good' may influence the tactics that the individual employs, perhaps even more strongly than the regulation strategies they employ. Whereas strategies can be used to alter emotions in a variety of directions, specific tactics provide the necessary differentiation to tailor one's regulation attempt to the particular desired emotion, emotion channel, or context (each of which may be the focus of particular emotion beliefs; see Figure 1). For example, someone can watch a sad film or a happy film, as two different tactics that both are forms of the broader emotion regulation category *situation selection*. Overall, individuals should evaluate more positively (and then select) the tactics they believe will help them attain the emotion they believe is desirable. The extent to which people successfully attain desirable emotions (and avoid undesirable emotions) should depend largely on the effectiveness of the regulation tactics they employ.

Empirically, several lines of research suggest that individuals are more likely to select tactics they believe will help them attain the emotions they believe are desirable. This work has often examined the selection of tactics within the broader category of *situation selection*, wherein individuals are able to select the emotional stimuli to which they are exposed. Using such designs, individuals reveal their selected tactic via their selection of stimuli: for example, people who believed that anger would be useful during a confrontational negotiation were more likely to select anger-inducing music (vs. other types of music) while preparing for the negotiation; in turn, individuals who engaged with the stimuli they selected were more likely to experience the desired emotion (Tamir & Ford, 2012). Although these findings suggest that individuals can select effective tactics to attain (or avoid) their desired (or undesired) emotions, the selection process may not always proceed smoothly: holding extreme, rigid, or otherwise maladaptive beliefs about emotions may promote a relatively disordered selection of tactics. For example, after a positive event, individuals who hold extreme beliefs about the value of happiness (e.g., who strongly endorse items like: *To have a meaningful life, I need to feel happy most of the time*) tend to use positive rumination tactics that enhance positive emotion, but also use negative rumination tactics that dampen positive emotion (Gentzler, Palmer, & Ramsey, 2016). Although individuals' beliefs about emotion likely exert a pervasive influence on the tactics they select, these tactics can conflict with one another or be otherwise ineffective and thus may not always lead to the desired emotion.

Extrinsic emotion regulation. The emotions that an individual believes are good versus bad should guide the implementation of their extrinsic regulation tactics in a manner similar to the implementation of intrinsic tactics, with some additional complexity. The evaluation of these tactics should be complicated by the fact that the regulator needs to identify and evaluate not only the relevant features of his or her own environment (to know which tactic would be best to implement) but also the relevant features of environment of the target person being regulated (to know which tactic may be best received). When the tactic is implemented, the action output is now an external process—something that must be communicated in one way or another to the target. In turn, successful implementation will depend both on the effectiveness of the regulator at using the tactic that has been selected and on the receptiveness of the target.

Empirically, researchers have begun to assess extrinsic emotion regulation tactics using similar methods to those used in assessing intrinsic emotion regulation tactics. Namely, by allowing people to choose emotion-inducing activities for a partner (e.g., anger-inducing music vs. happiness-inducing music), a regulator can employ specific tactics aimed at whichever emotions are believed to be most desirable. In these studies, the more regulators believed it was useful for a target to feel anger, the more likely they were to choose tactics that would enhance the target's anger (López-Pérez et al., 2017; Netzer, Van Kleef, et al., 2015). The extent to which these tactics will successfully change a target's emotions in the desired direction, however, may also depend on the target's

desires as well. For example, research suggests that targets are more receptive to extrinsic emotion regulation tactics that will help them attain the emotions they believe are valuable (Marigold, Cavallo, Holmes, & Wood, 2014). Taken together, these findings suggest that the process of implementing an extrinsic emotion regulation strategy depends just as much on the individual doing the regulation as the individual receiving the regulation—such dyadic links will be important to capture in greater detail in future work.

Beliefs About Whether Emotions Are Uncontrollable Versus Controllable

Intrinsic emotion regulation. The influence of believing that emotions are relatively uncontrollable should accumulate across the stages of emotion regulation, culminating in less successful implementation. At the perception step, if an individual believes that emotions are relatively uncontrollable, they may also have an impoverished repertoire of useful tactics to choose from. The valuation step may also be impaired as the value of different tactics would be difficult for these individuals to calculate. Finally, the action step—the actual implementation of the tactic—may be less successful because individuals who do not believe that emotions are controllable should be less likely to select effective strategies and tactics over time, and should thus be less practiced in the successful use of those strategies and tactics.

Empirically, several studies speak to the link between believing emotions are relatively uncontrollable and unsuccessful emotion regulation implementation. For example, those who believe emotions are relatively uncontrollable in general reported lower confidence in their ability to regulate their emotions (De Castella et al., 2013; Tamir et al., 2007) and experienced worse mood after an unpleasant mood induction (e.g., Kappes & Schikowski, 2013). When focusing on experimentally manipulated beliefs, however, results have been mixed: on one hand, a manipulation that emphasised the fixed nature of emotion in general did not result in different emotional responses to a stress induction, compared with those in a control condition (Kneeland, Nolen-Hoeksema, et al., 2016b); on the other hand, individuals who were led to believe that their own emotions were highly controllable—based on a manipulation wherein they were convinced that greater emotion control was a side effect of a drug they were given—were more successful at regulating their subsequent emotional responses, compared with those in a control condition (Bigman, Mauss, Gross, & Tamir, 2016).

Extrinsic emotion regulation. Although believing that emotions are relatively *uncontrollable* should hinder the implementation of extrinsic emotion regulation, believing that emotions are relatively *controllable* does not guarantee success. When considering extrinsic regulation, one should also take into account the beliefs of the target: if a regulator believes that emotions are relatively controllable and selects a tactic they believe will be useful for their given target, a target may not be receptive to the tactic if she or he does not believe that emotions are controllable. However, a target does not necessarily need to be aware of and receptive to an extrinsic emotion regulation attempt for it to still be successful—for example, providing relatively 'invisible' indirect social support could be highly successful regardless of the target's beliefs (Bolger, Zuckerman, & Kessler, 2000).

Empirically, we know relatively little about how beliefs about the controllability of emotion might influence the implementation of particular extrinsic emotion regulation tactics. Although believing that emotions are relatively uncontrollable has been linked to less successful *intrinsic* emotion regulation implementation, preliminary evidence suggests these beliefs may not carry the same downsides for *extrinsic* emotion regulation implementation. Specifically, individuals who believed that happiness cannot be controlled responded with more empathy and less blame to an individual who was struggling with intense negative emotions (Tullett & Plaks, 2016). These findings provide indirect evidence that believing emotions cannot be controlled—if it has not impaired the initiation of extrinsic emotion regulation in the first place—could enhance the likelihood of selecting regulation tactics that focus on emotional acceptance and empathy. Ironically, these tactics may be highly effective, even if they are implemented by individuals who do not necessarily believe that emotions are highly controllable.

Monitoring the Emotion Regulation Process

As a second-order valuation system, the emotion regulation process aims to successfully alter a first-order valuation system: the emotion. But how do individuals know if their emotion regulation was successful? The final stage in the process model is the ongoing monitoring that helps individuals assess whether they should stop, maintain, or alter their current regulatory efforts (see Figure 2). This monitoring often occurs after the implementation of a tactic, as the individual evaluates whether the change to the first-order valuation system (i.e., the emotion) is satisfactory or if continued regulation is necessary. If the current emotion is satisfactory, the goal to continue regulating the emotion will not be reactivated and emotion regulation may be discontinued (*emotion regulation stopping*). If the current emotion remains unsatisfactory, emotion regulation may continue either as-is (*emotion regulation maintenance*) or a different strategy or tactic may be employed (*emotion regulation switching*). Monitoring also occurs concurrently with the identification, selection, and implementation phases, as the individual assesses whether changing circumstances require updates to the ongoing emotion regulation process (e.g., a noxious stimulus is removed on its own and regulation is no longer necessary).

Beliefs About Whether Emotions Are Good Versus Bad

Intrinsic emotion regulation. A significant portion of the monitoring process consists of deciding whether the current emotion regulation attempt was successful and if not, what to do about it. Beliefs about whether emotions are good versus bad are likely to influence this monitoring process because beliefs heavily shape the standard of success that individuals set for themselves. Although individuals may sometimes attain the standards they set, many times they do not. If people are unable to attain the emotions they believe are most valuable, they may experience *metaemotion*—an emotional reaction to one's own emotions (Mitmansgruber, Beck, Höfer, & Schüßler, 2009). For example, an individual may feel disappointed about his or her level of happiness (Ford & Mauss, 2014), and this negative metaemotion may

not only directly interfere with the experience of happiness, but may also foster further rumination as the individual continues to negatively evaluate her or his own experience. This is one striking way in which beliefs may influence the monitoring process: when an individual's emotion beliefs reflect unreasonable and unattainable emotion standards, the monitoring process may result in negative metaemotions, which can hinder the ongoing emotion regulation effort.

Extrinsic emotion regulation. Beliefs about whether emotions are good versus bad likely influence *extrinsic* emotion regulation monitoring in a similar way to how they influence *intrinsic* emotion regulation monitoring: beliefs about the desirability, value, and 'goodness' of emotion reflect the standard against which an individual will judge extrinsic emotion regulation. In the case of monitoring the progress of extrinsic regulation, rather than having a metaemotional response to *one's own* emotion, the regulator may have a metaemotional response to (their perception of) *the target's* emotion. This metaemotion can take many forms depending on the regulator's emotion beliefs and the outcome of the regulation. For example, an individual who values excitement and is throwing a party for a friend may feel disappointed if his friend does not show much excitement. Or, an individual who believes that feeling worried would help her partner meet an important deadline may aim to increase her partner's worry but also feel guilty when she successfully enhances her partner's distress. Depending on how these metaemotional reactions are evaluated, these reactions to monitoring one's extrinsic emotion regulation attempts may have the result of either encouraging or discouraging future extrinsic regulation attempts.

Beliefs About Whether Emotions Are Uncontrollable Versus Controllable

Intrinsic emotion regulation. As a result of the monitoring process, individuals decide whether to maintain, switch, or stop ongoing emotion regulation efforts—essentially, whether to persevere or call it quits. Individuals who believe that emotions are relatively uncontrollable should be less likely to persevere in emotion regulation efforts (i.e., less maintenance, more stopping). This would be consistent with prior research examining beliefs about controllability in other domains; for example, those who believe that intelligence is uncontrollable are less likely to persevere in academic pursuits (Blackwell, Trzesniewski, & Dweck, 2007). It is unclear whether believing emotions are relatively uncontrollable may also influence the likelihood of switching regulation strategies or tactics within a regulation episode, given that switching can occur for multiple reasons. The switch may be strategic and flexible, based on an assessment of which approach may work better in the future (which may be more common for individuals who believe that emotions are relatively *controllable*), but the switch may also be haphazard, based on a desperate attempt to exert any possible change (which may be more common for individuals who believe that emotions are relatively *uncontrollable*). Examining the links between beliefs about controllability and flexible emotion regulation switching is now feasible using relatively recent metrics that tap the flexible deployment of strategies and tactics (e.g., Kato, 2012).

Extrinsic emotion regulation. Monitoring an ongoing extrinsic emotion regulation attempt is complicated by the fact that the regulator may not have full access to information that could help them determine whether the regulation was successful. For example, the target may or may not may provide explicit feedback (e.g., 'Thank you, I feel much better now!' Or perhaps more likely, 'You're not helping!'). Additionally, if the regulation is not occurring in-person, the individual may not have access to nonverbal emotion information from which to glean clues about how the regulation attempt is faring (e.g., facial expressions, body language). Given this, the process of monitoring may be particularly ambiguous during extrinsic emotion regulation. As such, beliefs about emotion may play a particularly strong role as these beliefs help the regulator 'fill in the blanks' (Plaks, Levy, & Dweck, 2009). For example, an individual who believes that emotions are relatively uncontrollable may be particularly likely to view much of their own attempts at extrinsic emotion regulation to be unsuccessful. We might expect these individuals to stop their extrinsic emotion regulation efforts quite quickly—and perhaps prematurely—whether the effort was successful or not.

Directions for Future Research

The field of emotion regulation is growing at an incredible pace. This growth reflects a strong interest in emotion regulation across many areas of inquiry and has led to a great influx of new discoveries and ideas. The risk of this popularity, however, is that we may lose track of a common thread. To maintain conceptual clarity and scaffold the growing field, common vantage points are needed. The present review describes two frameworks that are relevant across the domain of emotion regulation, and can be used to organise existing findings and generate hypotheses to guide future research. First, we considered a thematic framework that considers individuals' *fundamental beliefs about emotion* and their pervasive role in emotion regulation. Second, we considered an organisational framework that identifies the stages of emotion regulation as they unfold across time in the *process model of emotion regulation*. By uniting these two frameworks, we gain a greater understanding of who is likely to engage in emotion regulation, what that regulation will consist of, and whether it is likely to be successful. Next, we turn to three directions for future research that are guided by these frameworks.

Learning More About Emotion-Related Beliefs

Increasing our knowledge about individuals' emotion-related beliefs will be greatly served by improving our measurements of beliefs and by examining the origins of those beliefs. Because beliefs about emotion are relatively abstract metatheories about how the world works, they should be primarily accessible via self-report (vs. observable behaviours). Although there may not be clear behavioural criteria of beliefs, it is still possible to observe the downstream consequences of those beliefs, ideally with assessments other than self-reported questionnaires (e.g., behaviours, peer reports). For example, some beliefs can be assessed using implicit association tests, which rely on reaction times (Mauss et al., 2006): one's implicit association between an emotion concept (e.g., "anger") and the concept of "good" or "bad," reveals one's fundamental evaluation of that emotion (Netzer, Igra, Anan, & Tamir, 2015).

This review's primary focus was to examine the links between beliefs about emotion and emotion regulation, and did not address

where these beliefs may originate. At least two options are possible. First, beliefs may be generated from the 'outside in,' as individuals learn which beliefs to hold from their social partners (e.g., through explicit messages, observation, socialization, or cultural expectations). For example, a robust body of research supports the crucial role of culture in shaping individuals' beliefs about emotion (Tsai, 2007; Uchida & Kitayama, 2009). Second, beliefs may be generated from the 'inside out,' as individuals base their beliefs on personal experience (e.g., those who experience intense and hard-to-manage emotions may conclude that emotions are relatively uncontrollable). Although some research supports an 'inside out' approach (e.g., Schleider & Weisz, 2016), little research has actually tested this model of belief generation (cf. Ford, Lwi, et al., in press). Examining the origins of emotion beliefs remains a crucial area of future research given that these origins could lend key insights into effective ways to shape beliefs. Knowing how to cultivate relatively 'adaptive' beliefs about emotion should have implications for promoting successful emotion regulation and enhancing longer-term outcomes such as greater psychological health and well-being.

Learning More About Regulation Processes

Our understanding of emotion regulation will be further served by improving assessments of the full regulation process, within both intrinsic and extrinsic contexts, and across various regulation phases. Much of the available literature on emotion regulation has examined specific intrinsic regulation strategies, focusing either on habitual strategy use (see Aldao et al., 2010 for meta-analysis) or labouratory strategy use (see Webb et al., 2012 for meta-analysis). This literature has led to a rich understanding of the correlates and outcomes of specific regulation strategies, but it has rarely parsed the different phases of regulation (identification, selection, implementation, monitoring). Differentiating among these phases will require novel approaches. As one example, recent research suggests that daily diaries may be particularly useful for separately assessing when individuals have *selected* an emotion regulation strategy in daily life, from their success in *implementing* that strategy (Ford, Karnilowicz, & Mauss, 2017; Goldin et al., 2014).

Studying the dynamic nature of extrinsic emotion regulation in particular also requires clear operationalization, creative measurement, and sophisticated analysis (Dixon-Gordon et al., 2015). This creates challenges for examining extrinsic emotion regulation but the theoretical groundwork has begun (Dixon-Gordon et al., 2015; Niven et al., 2009; Reeck et al., 2016; Zaki & Williams, 2013) and the necessary measurement and analysis tools are being developed (e.g., Butler, 2015). Because relatively little empirical research has examined extrinsic emotion regulation (although developmental researchers have considered parent-to-child regulation for many years; Thompson, 2011), future research will benefit from a systematic approach. To this end, the process model of emotion regulation is a useful framework given that it already acknowledges regulation as a dynamic and iterative process.

Finally, it is important for future research to assess diverse emotion regulation configurations—such as the use of regulation sequences or blends—given that such diversity may be more the norm than the exception (Gross, 2015). For example, specific sequences of strategies may be particularly effective (e.g., distraction followed by reappraisal may be a valuable sequence for high-intensity stressors because distraction can combat the initial intensity, but reappraisal is a more advantageous longer-term strategy that allows individuals to learn and grow from the stressors; Sheppes & Gross, 2011). Blends of strategies are also important to consider. Emotional acceptance, for example—wherein people accept rather than judge their emotions as 'bad' or unacceptable (Baer et al., 2004)—represents a blended strategy that includes attentional change (as individuals attend nonjudgmentally to their experiences), cognitive change (as they think about their emotions differently), and response modulation (as they are less likely to suppress their emotions). Although acceptance appears not to involve an explicit goal to regulate one's emotions, it nonetheless helps lower negative emotion in negative contexts (Ford, Lam, John, & Mauss, 2017) and enhance positive emotion in positive contexts (Dan-Glauser & Gross, 2015). Acceptance may thus represent a particularly effective case of blended emotion regulation that warrants future investigation. Interestingly, acceptance also reflects a relatively neutral belief about emotions—that emotions simply happen and are neither *good* nor *bad.* Research on acceptance suggests that taking a nonevaluative stance toward one's emotions—perhaps particularly when considering negative emotions—should promote less rumination and negative metaemotion and thus represents a relatively adaptive approach to reducing one's overall distress (e.g., Ford, Lam, et al., 2017). Theoretically, although evaluating emotion is often a core element in the emotion regulation process, being able to minimising one's evaluations of emotion may represent a beneficial long-term approach.

Learning More About How Beliefs Shape Core Outcomes

This review highlights the numerous ways in which our fundamental beliefs about emotion are likely to shape emotion regulation. Emotion beliefs may thus represent a crucial lever on emotion regulation processes which, in turn, are known to influence a variety of core outcomes. For example, recent longitudinal research indicates that believing that emotions are uncontrollable predicts worse psychological health in the future via impaired emotion regulation processes (e.g., Ford, Lwi, et al., in press; Tamir et al., 2007). These beliefs also predict outcomes for psychiatric samples and represent a mechanism of change within psychological treatment (De Castella et al., 2015). Given the critical importance of emotion regulation for longer term health and well-being, future research will benefit greatly from experimental and longitudinal work directly examining how beliefs about emotion influence psychological and even physical health.

Given that beliefs about emotion have the power to influence how individuals perceive and manage their daily lives, these beliefs may have a pervasive influence on numerous practical domains, including but not limited to: medicine, e.g., *does sharing the same emotion beliefs with one's doctor improve one's health outcomes?* (Sims, Tsai, Koopmann-Holm, Thomas, & Goldstein, 2014), education, e.g., *do children's beliefs about emotion influence their socioemotional function in the school environment*? (Romero et al., 2014), business, e.g., *does believing that emotions are harmful influence how individuals make decisions?* (Karnaze & Levine, 2017), law, e.g., *does believing emotions are uncontrollable influence how we perceive culpability for 'crimes of*

passion'? (Plaks et al., 2009), and political science, e.g., *what are the policy ramifications if individuals believe it is desirable to feel anger toward political rivals?* (Porat, Halperin, & Tamir, 2016). Here, as elsewhere, it is clear that much exciting work lies ahead of us as we seek a clearer understanding of the role that emotion beliefs play in shaping emotion regulation and other core life outcomes.

Résumé

La recherche sur la gestion des émotions est florissante. Or, l'enthousiasme que suscite cette question outrepasse la clarté conceptuelle, ce qui a généré une série de résultats disparates. Dans le présent examen, nous réunissons deux cadres conceptuels qui, nous croyons, pourront être utiles pour organiser les résultats actuels et suggérer des pistes de recherche future. Le premier cadre considère les croyances fondamentales de l'individu par rapport aux émotions et le rôle prépondérant de ces croyances sur la gestion des émotions. Le deuxième cadre identifie comment la gestion des émotions suit son cours avec le temps (Gross, 2015). Nous réunissons ensuite ces deux cadres pour mettre en lumière comment les croyances des individus concernant les émotions influencent chaque étape du processus de gestion des émotions soit : l'*identification* de la nécessité de gestion, la *sélection* des stratégies de gestion, la *mise en œuvre* de la gestion et l'*évaluation* du succès de la gestion. À chacune des étapes, nous considérons comment les croyances des individus façonnent la gestion des émotions vis-à-vis eux-mêmes (gestion des émotions intrinsèque), ainsi que la gestion des émotions vis-à-vis d'autres (gestion des émotions extrinsèque). Nous concluons en proposant plusieurs orientations prometteuses en matière de recherche future.

Mots-clés : émotion, croyances à propos des émotions, gestion des émotions, gestion des émotions extrinsèque.

References

Aldao, A., Nolen-Hoeksema, S., & Schweizer, S. (2010). Emotion-regulation strategies across psychopathology: A meta-analytic review. *Clinical Psychology Review, 30,* 217–237. http://dx.doi.org/10.1016/j.cpr.2009.11.004

Baer, R. A., Smith, G. T., & Allen, K. B. (2004). Assessment of mindfulness by self-report: The Kentucky inventory of mindfulness skills. *Assessment, 11,* 191–206. http://dx.doi.org/10.1177/1073191104268029

Bigman, Y. E., Mauss, I. B., Gross, J. J., & Tamir, M. (2016). Yes I can: Expected success promotes actual success in emotion regulation. *Cognition and Emotion, 30,* 1380–1387. http://dx.doi.org/10.1080/02699931.2015.1067188

Bigman, Y. E., Sheppes, G., & Tamir, M. (in press). Less is more in emotion regulation: The availability of regulation options impairs efficacy. *Emotion*.

Blackwell, L. S., Trzesniewski, K. H., & Dweck, C. S. (2007). Implicit theories of intelligence predict achievement across an adolescent transition: A longitudinal study and an intervention. *Child Development, 78,* 246–263. http://dx.doi.org/10.1111/j.1467-8624.2007.00995.x

Bolger, N., Zuckerman, A., & Kessler, R. C. (2000). Invisible support and adjustment to stress. *Journal of Personality and Social Psychology, 79,* 953–961. http://dx.doi.org/10.1037/0022-3514.79.6.953

Butler, E. A. (2015). Interpersonal affect dynamics: It takes two (and time) to tango. *Emotion Review, 7,* 336–341. http://dx.doi.org/10.1177/1754073915590622

Catalino, L. I., Algoe, S. B., & Fredrickson, B. L. (2014). Prioritizing positivity: An effective approach to pursuing happiness? *Emotion, 14,* 1155–1161. http://dx.doi.org/10.1037/a0038029

Catanzaro, S. J., & Mearns, J. (1990). Measuring generalized expectancies for negative mood regulation: Initial scale development and implications. *Journal of Personality Assessment, 54,* 546–563. http://dx.doi.org/10.1080/00223891.1990.9674019

Côté, S. (2005). A social interaction model of the effects of emotion regulation on work strain. *The Academy of Management Review, 30,* 509–530. http://dx.doi.org/10.5465/AMR.2005.17293692

Dan-Glauser, E. S., & Gross, J. J. (2015). The temporal dynamics of emotional acceptance: Experience, expression, and physiology. *Biological Psychology, 108,* 1–12. http://dx.doi.org/10.1016/j.biopsycho.2015.03.005

De Castella, K., Goldin, P., Jazaieri, H., Heimberg, R. G., Dweck, C. S., & Gross, J. J. (2015). Emotion beliefs and cognitive behavioural therapy for social anxiety disorder. *Cognitive Behaviour Therapy, 44,* 128–141. http://dx.doi.org/10.1080/16506073.2014.974665

De Castella, K., Goldin, P., Jazaieri, H., Ziv, M., Dweck, C. S., & Gross, J. J. (2013). Beliefs About emotion: Links to emotion regulation, well-being, and psychological distress. *Basic and Applied Social Psychology, 35,* 497–505. http://dx.doi.org/10.1080/01973533.2013.840632

Dennis, P. A., & Halberstadt, A. G. (2013). Is believing seeing? The role of emotion-related beliefs in selective attention to affective cues. *Cognition and Emotion, 27,* 3–20. http://dx.doi.org/10.1080/02699931.2012.680578

DeSteno, D., Gross, J. J., & Kubzansky, L. (2013). Affective science and health: The importance of emotion and emotion regulation. *Health Psychology, 32,* 474–486. http://dx.doi.org/10.1037/a0030259

Dixon-Gordon, K. L., Bernecker, S. L., & Christensen, K. (2015). Recent innovations in the field of interpersonal emotion regulation. *Current Opinion in Psychology, 3,* 36–42. http://dx.doi.org/10.1016/j.copsyc.2015.02.001

Duckworth, A., & Gross, J. J. (2014). Self-control and grit: Related but separable determinants of success. *Current Directions in Psychological Science, 23,* 319–325. http://dx.doi.org/10.1177/0963721414541462

Epictetus. (1906). *The discourses of Epictetus: With the Encheiridion and fragments. Translated, with notes, a life of Epictetus, and a view of his philosophy*. London, UK: G. Bell and Sons.

Fergus, T. A., & Bardeen, J. R. (2016). Negative mood regulation expectancies moderate the association between happiness emotion goals and depressive symptoms. *Personality and Individual Differences, 100,* 23–27. http://dx.doi.org/10.1016/j.paid.2015.08.010

Ford, B. Q., Karnilowicz, H. R., & Mauss, I. B. (2017). Understanding reappraisal as a multicomponent process: The psychological health benefits of attempting to use reappraisal depend on reappraisal success. *Emotion, 17,* 905–911. http://dx.doi.org/10.1037/emo0000310

Ford, B. Q., Lam, P., John, O. P., & Mauss, I. B. (2017). The psychological health benefits of accepting negative emotions and thoughts: Laboratory, diary, and longitudinal evidence. *Journal of Personality and Social Psychology*. Advance online publication. http://dx.doi.org/10.1037/pspp0000157

Ford, B. Q., Lwi, S., Hankin, B., Gentzler, A., & Mauss, I. B. (in press). The cost of believing emotions are uncontrollable: Youths' beliefs about emotion predict emotion regulation and depressive symptoms. *Journal of Experimental Psychology: General*.

Ford, B. Q., & Mauss, I. B. (2014). The paradoxical effects of pursuing positive emotion: When and why wanting to feel happy backfires. In J. Gruber & J. T. Moskowitz (Eds.), *The light and dark sides of positive emotion* (pp. 363–381). New York, NY: Oxford University Press. http://dx.doi.org/10.1093/acprof:oso/9780199926725.003.0020

Ford, B. Q., & Tamir, M. (2014). Preferring familiar emotions: As you want (and like) it? *Cognition and Emotion, 28,* 311–324. http://dx.doi.org/10.1080/02699931.2013.823381

Gentzler, A. L., Palmer, C., & Ramsey, M. (2016). Savoring with intent: Investigating types of and motives for responses to positive events. *Journal of Happiness Studies, 17,* 937–958. http://dx.doi.org/10.1007/s10902-015-9625-9

Goldin, P. R., Lee, I., Ziv, M., Jazaieri, H., Heimberg, R. G., & Gross, J. J. (2014). Trajectories of change in emotion regulation and social anxiety during cognitive-behavioral therapy for social anxiety disorder. *Behaviour Research and Therapy, 56,* 7–15. http://dx.doi.org/10.1016/j.brat.2014.02.005

Gottman, J. M., Katz, L. F., & Hooven, C. (1996). Parental meta-emotion philosophy and the emotional life of families: Theoretical models and preliminary data. *Journal of Family Psychology, 10,* 243–268. http://dx.doi.org/10.1037/0893-3200.10.3.243

Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology, 2,* 271–299. http://dx.doi.org/10.1037/1089-2680.2.3.271

Gross, J. J. (2015). Emotion regulation: Current status and future prospects. *Psychological Inquiry, 26,* 1–26. http://dx.doi.org/10.1080/1047840X.2014.940781

Gross, J. J., & Jazaieri, H. (2014). Emotion, emotion regulation, and psychopathology: An affective science perspective. *Clinical Psychological Science, 2,* 387–401. http://dx.doi.org/10.1177/2167702614536164

Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology, 85,* 348–362. http://dx.doi.org/10.1037/0022-3514.85.2.348

Gruber, J., Kogan, A., Mennin, D., & Murray, G. (2013). Real-world emotion? An experience-sampling approach to emotion experience and regulation in bipolar I disorder. *Journal of Abnormal Psychology, 122,* 971–983. http://dx.doi.org/10.1037/a0034425

Halberstadt, A. G., Dunsmore, J. C., Bryant, A., Parker, A. E., Beale, K. S., & Thompson, J. A. (2013). Development and validation of the Parents' Beliefs About Children's Emotions Questionnaire. *Psychological Assessment, 25,* 1195–1210. http://dx.doi.org/10.1037/a0033695

Halberstadt, A. G., Thompson, J. A., Parker, A. E., & Dunsmore, J. C. (2008). Parents' emotion-related beliefs and behaviours in relation to children's coping with the 11 September 2001 terrorist attacks. *Infant and Child Development, 17,* 557–580. http://dx.doi.org/10.1002/icd.569

Halevy, N., Bornstein, G., & Sagiv, L. (2008). "In-group love" and "out-group hate" as motives for individual participation in intergroup conflict: A new game paradigm. *Psychological Science, 19,* 405–411. http://dx.doi.org/10.1111/j.1467-9280.2008.02100.x

Halperin, E. (2014). Emotion, emotion regulation, and conflict resolution. *Emotion Review, 6,* 68–76. http://dx.doi.org/10.1177/1754073913491844

Harmon-Jones, E., Harmon-Jones, C., Amodio, D. M., & Gable, P. A. (2011). Attitudes toward emotions. *Journal of Personality and Social Psychology, 101,* 1332–1350. http://dx.doi.org/10.1037/a0024951

Heilman, R. M., Crişan, L. G., Houser, D., Miclea, M., & Miu, A. C. (2010). Emotion regulation and decision making under risk and uncertainty. *Emotion, 10,* 257–265. http://dx.doi.org/10.1037/a0018489

Howell, A. J., Passmore, H.-A., & Holder, M. D. (2016). Implicit theories of well-being predict well-being and the endorsement of therapeutic lifestyle changes. *Journal of Happiness Studies, 17,* 2347–2363. http://dx.doi.org/10.1007/s10902-015-9697-6

Hume, D. (1739). *A treatise of human nature*. London, UK: John Noon.

Kappes, A., & Schikowski, A. (2013). Implicit theories of emotion shape regulation of negative affect. *Cognition and Emotion, 27,* 952–960. http://dx.doi.org/10.1080/02699931.2012.753415

Karnaze, M. M., & Levine, L. J. (2017). Data versus Spock: Lay theories about whether emotion helps or hinders. *Cognition and Emotion*. Advance online publication. http://dx.doi.org/10.1080/02699931.2017.1326374

Kato, T. (2012). Development of the Coping Flexibility Scale: Evidence for the coping flexibility hypothesis. *Journal of Counseling Psychology, 59,* 262–273. http://dx.doi.org/10.1037/a0027770

Kneeland, E. T., Dovidio, J. F., Joormann, J., & Clark, M. S. (2016). Emotion malleability beliefs, emotion regulation, and psychopathology: Integrating affective and clinical science. *Clinical Psychology Review, 45,* 81–88. http://dx.doi.org/10.1016/j.cpr.2016.03.008

Kneeland, E. T., Nolen-Hoeksema, S., Dovidio, J., & Gruber, J. (2016a). Beliefs about emotion's malleability influence state emotion regulation. *Motivation and Emotion, 40,* 740–749. http://dx.doi.org/10.1007/s11031-016-9566-6

Kneeland, E. T., Nolen-Hoeksema, S., Dovidio, J. F., & Gruber, J. (2016b). Emotion malleability beliefs influence the spontaneous regulation of social anxiety. *Cognitive Therapy and Research, 40,* 496–509. http://dx.doi.org/10.1007/s10608-016-9765-1

Lazarus, R. S. (1991). *Emotion and adaptation*. Oxford, UK: Oxford University Press.

López-Pérez, B., Howells, L., & Gummerum, M. (2017). Cruel to be kind: Factors underlying altruistic efforts to worsen another person's mood. *Psychological Science, 28,* 862–871. http://dx.doi.org/10.1177/0956797617696312

Marigold, D. C., Cavallo, J. V., Holmes, J. G., & Wood, J. V. (2014). You can't always give what you want: The challenge of providing social support to low self-esteem individuals. *Journal of Personality and Social Psychology, 107,* 56–80. http://dx.doi.org/10.1037/a0036554

Maroney, T. A. (2006). Law and emotion: A proposed taxonomy of an emerging field. *Law and Human Behavior, 30,* 119–142. http://dx.doi.org/10.1007/s10979-006-9029-9

Mauss, I. B., Evers, C., Wilhelm, F. H., & Gross, J. J. (2006). How to bite your tongue without blowing your top: Implicit evaluation of emotion regulation predicts affective responding to anger provocation. *Personality and Social Psychology Bulletin, 32,* 589–602. http://dx.doi.org/10.1177/0146167205283841

Mikulincer, M., & Ben-Artzi, E. (1995). Lay theories of emotion: 1. Conceptualization and measurement. *Imagination, Cognition and Personality, 15,* 249–271.

Millgram, Y., Joormann, J., Huppert, J. D., & Tamir, M. (2015). Sad as a matter of choice? Emotion-regulation goals in depression. *Psychological Science, 26,* 1216–1228. http://dx.doi.org/10.1177/0956797615583295

Mitmansgruber, H., Beck, T. N., Höfer, S., & Schüßler, G. (2009). When you don't like what you feel: Experiential avoidance, mindfulness and meta-emotion in emotion regulation. *Personality and Individual Differences, 46,* 448–453. http://dx.doi.org/10.1016/j.paid.2008.11.013

Netzer, L., Igra, L., Anan, Y. B., & Tamir, M. (2015). When bad emotions seem better: Experience changes the automatic evaluation of anger. *Social Psychological and Personality Science, 6,* 797–804. http://dx.doi.org/10.1177/1948550615584198

Netzer, L., Van Kleef, G. A., & Tamir, M. (2015). Interpersonal instrumental emotion regulation. *Journal of Experimental Social Psychology, 58,* 124–135. http://dx.doi.org/10.1016/j.jesp.2015.01.006

Niven, K., Macdonald, I., & Holman, D. (2012). You spin me right round: Cross-relationship variability in interpersonal emotion regulation. *Frontiers in Psychology, 3,* 394. http://dx.doi.org/10.3389/fpsyg.2012.00394

Niven, K., Totterdell, P., & Holman, D. (2009). A classification of controlled interpersonal affect regulation strategies. *Emotion, 9,* 498–509. http://dx.doi.org/10.1037/a0015962

Plaks, J. E., Levy, S. R., & Dweck, C. S. (2009). Lay theories of personality: Cornerstones of meaning in social cognition. *Social and Personality Psychology Compass, 3,* 1069–1081. http://dx.doi.org/10.1111/j.1751-9004.2009.00222.x

Porat, R., Halperin, E., & Tamir, M. (2016). What we want is what we get: Group-based emotional preferences and conflict resolution. *Journal of Personality and Social Psychology, 110,* 167–190. http://dx.doi.org/10.1037/pspa0000043

Rangel, A., Camerer, C., & Montague, P. R. (2008). A framework for studying the neurobiology of value-based decision making. *Nature Reviews Neuroscience, 9,* 545–556. http://dx.doi.org/10.1038/nrn2357

Reeck, C., Ames, D. R., & Ochsner, K. N. (2016). The social regulation of emotion: An integrative, cross-disciplinary model. *Trends in Cognitive Sciences, 20,* 47–63. http://dx.doi.org/10.1016/j.tics.2015.09.003

Romero, C., Master, A., Paunesku, D., Dweck, C. S., & Gross, J. J. (2014). Academic and emotional functioning in middle school: The role of implicit theories. *Emotion, 14,* 227–234. http://dx.doi.org/10.1037/a0035490

Schleider, J. L., & Weisz, J. R. (2016). Implicit theories relate to youth psychopathology, but how? A longitudinal test of two predictive models. *Child Psychiatry and Human Development, 47,* 603–617. http://dx.doi.org/10.1007/s10578-015-0595-2

Sheppes, G., & Gross, J. J. (2011). Is timing everything? Temporal considerations in emotion regulation. *Personality and Social Psychology Review, 15,* 319–331. http://dx.doi.org/10.1177/1088868310395778

Sims, T., Tsai, J. L., Koopmann-Holm, B., Thomas, E. A. C., & Goldstein, M. K. (2014). Choosing a physician depends on how you want to feel: The role of ideal affect in health-related decision making. *Emotion, 14,* 187–192. http://dx.doi.org/10.1037/a0034372

Tamir, M., Bigman, Y. E., Rhodes, E., Salerno, J., & Schreier, J. (2015). An expectancy-value model of emotion regulation: Implications for motivation, emotional experience, and decision making. *Emotion, 15,* 90–103. http://dx.doi.org/10.1037/emo0000021

Tamir, M., & Ford, B. Q. (2012). When feeling bad is expected to be good: Emotion regulation and outcome expectancies in social conflicts. *Emotion, 12,* 807–816. http://dx.doi.org/10.1037/a0024443

Tamir, M., John, O. P., Srivastava, S., & Gross, J. J. (2007). Implicit theories of emotion: Affective and social outcomes across a major life transition. *Journal of Personality and Social Psychology, 92,* 731–744. http://dx.doi.org/10.1037/0022-3514.92.4.731

Tamir, M., & Millgram, Y. (2017). Motivated emotion regulation: Principles, lessons, and implications of a motivational analysis of emotion regulation. In A. J. Elliot (Ed.), *Advanced in motivation science* (Vol. 4, pp. 207–247). Amsterdam, The Netherlands: Elsevier. http://dx.doi.org/10.1016/bs.adms.2016.12.001

Thompson, R. A. (2011). Emotion and emotion regulation: Two sides of the developing coin. *Emotion Review, 3,* 53–61. http://dx.doi.org/10.1177/1754073910380969

Tsai, J. L. (2007). Ideal affect: Cultural causes and behavioral consequences. *Perspectives on Psychological Science, 2,* 242–259. http://dx.doi.org/10.1111/j.1745-6916.2007.00043.x

Tullett, A. M., & Plaks, J. E. (2016). Testing the link between empathy and lay theories of happiness. *Personality and Social Psychology Bulletin, 42,* 1505–1521. http://dx.doi.org/10.1177/0146167216665092

Uchida, Y., & Kitayama, S. (2009). Happiness and unhappiness in east and west: Themes and variations. *Emotion, 9,* 441–456. http://dx.doi.org/10.1037/a0015634

Veilleux, J. C., Salomaa, A. C., Shaver, J. A., Zielinski, M. J., & Pollert, G. A. (2015). Multidimensional assessment of beliefs about emotion: Development and validation of the emotion and regulation beliefs scale. *Assessment, 22,* 86–100. http://dx.doi.org/10.1177/1073191114534883

Webb, T. L., Miles, E., & Sheeran, P. (2012). Dealing with feeling: A meta-analysis of the effectiveness of strategies derived from the process model of emotion regulation. *Psychological Bulletin, 138,* 775–808. http://dx.doi.org/10.1037/a0027600

Wood, J. V., Heimpel, S. A., Manwell, L. A., & Whittington, E. J. (2009). This mood is familiar and I don't deserve to feel better anyway: Mechanisms underlying self-esteem differences in motivation to repair sad moods. *Journal of Personality and Social Psychology, 96,* 363–380. http://dx.doi.org/10.1037/a0012881

Zaki, J., & Williams, W. C. (2013). Interpersonal emotion regulation. *Emotion, 13,* 803–810. http://dx.doi.org/10.1037/a0033839

Received August 9, 2017
Revision received December 7, 2017
Accepted December 14, 2017 ■