

# Empathy: A Motivated Account

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Empathy features a tension between automaticity and context dependency. On the one hand, people often take on each other's internal states reflexively and outside of awareness. On the other hand, empathy shifts with characteristics of empathizers and situations. These 2 characteristics of empathy can be reconciled by acknowledging the key role of *motivation* in driving people to avoid or approach engagement with others' emotions. In particular, at least 3 phenomena—suffering, material costs, and interference with competition—motivate people to *avoid* empathy, and at least 3 phenomena—positive affect, affiliation, and social desirability—motivate them to *approach* empathy. Would-be empathizers carry out these motives through regulatory strategies including situation selection, attentional modulation, and appraisal, which alter the course of empathic episodes. Interdisciplinary evidence highlights the motivated nature of empathy, and a motivated model holds wide-ranging implications for basic theory, models of psychiatric illness, and intervention efforts to maximize empathy.

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Many people feel uncomfortable watching a tightrope walker wobble over a precipice. Centuries ago, Adam Smith (1790/2002) explained this feeling in his *Theory of Moral Sentiments*:

The mob, when they are gazing at a dancer on the slack rope, naturally writhe and twist and balance their own bodies as they see him do, and as they feel that they themselves must do if in his situation. (p. 4)

This vicarious experience, which Smith termed the *fellow feeling*, appears effortless and even impossible to avoid, happening to an *observer* whenever he or she encounters a tightrope walker's anxiety or other emotions expressed by a social *target* (the person to whom the observer responds). A slew of data converges with this intuition, demonstrating that many features of *empathy*—observers' sharing and understanding targets' affective states—appear to be automatic.

Although empathy *can be* automatic, by no means is it *always* automatic. Instead, this phenomenon is deeply context dependent and varies along with numerous situational features. Perceivers commonly fail to empathize with outgroup targets, and sometimes even enjoy outgroup members' suffering (Cikara & Van Bavel, 2014). Empathy often diminishes even in response to seemingly irrelevant contextual shifts, for instance, when multiple observers,

as compared to a single observer, witness a target's suffering (Darley & Latane, 1968).

How can empathy simultaneously appear automatic and context dependent? I propose that this tension can be resolved by acknowledging that *empathy is often a motivated phenomenon* in which observers are driven either to experience empathy or to avoid it. Just as they do in response to other emotional goals, observers translate their empathic motives into changes in experience through a number of regulatory strategies.

The remainder of this article is divided into four sections. First, I operationalize three key subcomponents of empathy and trace longstanding theoretical traditions holding that empathy often occurs automatically but also shifts as a function of context. Second, I outline a model of motivated empathy, which describes (a) motives that prompt observers to approach or avoid empathy and (b) regulatory strategies through which observers carry out those motives. Third, I review evidence for motivated empathy across a number of research domains. Finally, I highlight implications of a motivated model for basic science, clinical research, and interventions.

## Automaticity and Context Dependency in Empathy

### Components of Empathy

As others (e.g., Wispé, 1986) have pointed out, there are nearly as many definitions of empathy as there are scientists who study this phenomenon. Yet many definitions share important features, including the idea that empathy is not unitary but rather encompasses multiple subcomponents (Bernhardt & Singer, 2012; Davis, 1994; Decety & Jackson, 2004; Hoffman, 2001; Preston & de Waal, 2002). Three such components have attracted the lion's share of theoretical and empirical attention thus far.

The first, which I call *experience sharing* (Zaki, 2013; Zaki & Ochsner, 2012), describes observers' tendency to take on the sensory, motor, visceral, and affective states they encounter in

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targets (Gallese, 2003b; Hatfield, Cacioppo, & Rapson, 1994; Stotland, 1969). The second, which I call *mentalizing*, refers to observers' capacity to draw explicit inferences about targets' intentions, beliefs, and emotions. Such inferences often follow from observers' "lay theories" concerning how events affect others' experiences (Baker, Saxe, & Tenenbaum, 2009; Frith & Frith, 2012; Gopnik & Wellman, 1992; Heider, 1958; Mitchell, 2009; Ong, Zaki, & Goodman, 2014; Saxe, Carey, & Kanwisher, 2004). Although experience sharing and mentalizing might appear to be two sides of the same coin, these processes are dissociable at a number of levels, including interindividual variation (Davis, 1983) and brain systems (Gobbini, Koralek, Bryan, Montgomery, & Haxby, 2007; Keysers & Gazzola, 2007; Uddin, Iacoboni, Lange, & Keenan, 2007; Zaki, 2013; Zaki & Ochsner, in press). In fact, mentalizing and experience sharing often compete. For instance, classic false-belief tasks—in which observers reason about a target's inaccurate representations of the world—require observers to mentalize about states that they do *not* share with targets (Premack & Woodruff, 1978). Cases such as these generate a hydraulic relationship between empathic subprocesses in which deployment of mentalizing inhibits experience sharing, and vice versa (Brass, Ruby, & Spengler, 2009; Epley, Keysar, Van Boven, & Gilovich, 2004; Zaki, Hennigan, Weber, & Ochsner, 2010). However, though experience sharing and mentalizing can be dissociated, they both predict downstream interpersonal outcomes, including observers' accuracy for targets' internal states (Ickes, 1997; Kenny & Albright, 1987; Taft, 1955; Zaki & Ochsner, 2011) and their motivation to help targets (Batson, 1991, 2011; Cialdini et al., 1987; Eisenberg & Miller, 1987).

A third empathic component, *mind perception*, describes observers' detection of targets' internal states (Epley & Waytz, 2009; Gray, Gray, & Wegner, 2007). Mind perception serves as a precursor to other empathic subprocesses, as it is difficult to share experiences with or draw inferences about a mind one has not detected. That said, like other empathic processes, the deployment of mind perception is context dependent (see below) and thus not necessarily simpler, more rudimentary, or more automatic than mentalizing or experience sharing.

Several researchers have described motives that govern empathic processes. For instance, observers often "turn up" or "turn down" mentalizing based on their motives to understand or not understand targets' internal states (Hodges & Wegner, 1997; Ickes, 2011; Ickes & Simpson, 2003; J. Smith, Ickes, Hall, & Hodges, 2011). Mind perception likewise is subject to observers' motivation (Epley, Schroeder, & Waytz, 2013). Such motives are on display in cases of anthropomorphism, in which observers ascribe minds to inanimate entities, and dehumanization, in which observers deny internal states to other people (Waytz, Gray, Epley, & Wegner, 2010). By contrast, less work has directly explored the motives that govern experience sharing (but see de Vignemont & Singer, 2006, for one such discussion), and theories of this empathic process tend to emphasize its automaticity.

A motivated model of empathy holds that motives affect all three empathic processes. Before describing these motives, however, it is worth describing the countervailing forces of automaticity and context dependency that have been documented in extant empathy research.

## Automaticity as a Theme in Empathy Research

**Early theory.** Like many areas of psychological research, the study of empathy has its roots in philosophy, as exemplified by Smith's (1790/2002) description of the fellow feeling. Smith viewed this phenomenon as largely reflexive. For instance, he claimed that "when we see a stroke aimed and just ready to fall on the leg or arm of another person, we *naturally* shrink back our own leg or our own arm" (Smith, 1790/2002, p. 4; emphasis added). About a century later, the German aesthetic philosophers Robert Vischer and Theodor Lipps coined the linguistic predecessor of *empathy*. Both theorists echoed Smith's earlier view that empathy operates at an automatic and even nonconscious level. Vischer (1873) first used the term *einfihlung* (roughly translated to *feeling into*) to describe people's responses to works of art and viewed this process as an "unconscious displacement of one's bodily form—and thereby also of the soul—into the form" of art objects (p. vii).<sup>1</sup>

Lipps (1903) expanded Vischer's model of *einfihlung* to encompass observers' responses to other people's emotions and, like Vischer, emphasized empathy's automaticity. In particular, Lipps argued against a popular philosophical claim that people understand each other using inference by analogy, or top-down reasoning based on observers' own past experience (Mill, 1865/1979). Instead, Lipps (1907) insisted that observers share and comprehend targets' affective states, "immediately and simultaneously with perception" (p. 713; cited by Jahoda, 2005).<sup>2</sup>

Vischer's and Lipps's views soon made their way across the Atlantic. In the first decade of the 20th century, Titchener (1909) translated *einfihlung* into *empathy*. Titchener adapted James's (1890/1950) notion of ideomotor action—through which mental representations are scaffolded by embodied percepts—to argue that *kinesthetic imagery* supports empathy. As Titchener described it, "Not only do I see gravity and modesty and pride and courtesy, but I feel or act them in the mind's muscle" (Titchener, 1909, p. 21). Titchener's contemporary, McDougall (1908/2003), likewise referred to empathy as an immediate, interpersonal sensory experience: "each of the principle instincts has a special perceptual inlet (or recipient afferent part) that is adapted to receive and to elaborate the sense-impressions made by the same instinct in other animals" (p. 93).

**Contemporary theory.** Models of empathy have evolved greatly since Lipps's and Titchener's efforts, but often still hold that empathy, and especially experience sharing, is reflexive. In part, this follows the proliferation of theories according to which conceptual knowledge—including visual imagery (Kosslyn, 1980; Kosslyn et al., 1996) and linguistic concepts (Barsalou, 2008; Barsalou, Kyle Simmons, Barbey, & Wilson, 2003; Martin & Chao, 2001)—are grounded in sensorimotor representations. Embodied models support the more specific idea that action and perception are represented through *common coding*, or overlapping psychological and neural representations (Hommel, Müsseler, As-

<sup>1</sup> For a similar argument about art based on neuroscientific research, see Freedberg and Gallese (2007).

<sup>2</sup> Other philosophers—notably Edith Stein (1964/1989) and Max Scheler (1913/1954)—only partially shared Lipps's view and questioned the extent to which empathy was truly automatic. Both Stein and Scheler instead dissected empathy into multiple components, some of which were primitive and relatively automatic and others of which were not.

chersleben, & Prinz, 2001; Jeannerod & Decety, 1995; W. Prinz, 1997). Theorists across a number of psychological subdisciplines have applied common coding to the social domain, arguing that observers' representations of their own and targets' actions overlap automatically (Dijksterhuis & Bargh, 2001; Niedenthal, Barsalou, Winkielman, Krauth-Gruber, & Ric, 2005).

**Developmental psychology.** Developmental psychologists including Hoffman (1973, 1982), Eisenberg (1989; Eisenberg et al., 1991), and Meltzoff (2007) describe early-arising experience sharing as the ontological beginnings of empathy (Bernieri, Reznick, & Rosenthal, 1988). In doing so, they highlight the primitive nature of vicarious experience. For instance, newborns cry in response to other infants' cries and mimic their mothers' affective expressions (Haviland & Lelwica, 1987). As described by Hoffman (1985), this form of empathy allows observers to "involuntarily, forcefully experience others' emotional states" (p. 112; emphasis added).

**Ethology.** Ethologists describe experience sharing as an evolutionarily preserved mechanism. Preston and de Waal's (2002) seminal perception-action model (PAM) exemplifies this approach. As described by the authors, one of PAM's central tenets is that sharing of targets' (in their term, *objects'*) states is largely automatic: "Attended perception of the object's state *automatically* activates the subject's representations of the state, situation, and object, and that activation of these representations *automatically* primes or generates the associated autonomic and somatic responses, unless inhibited" (p. 4; emphasis added). PAM and related models dovetail with evidence that many animals, including rats (Bartal, Decety, & Mason, 2011; Church, 1959), mice (Langford et al., 2006), monkeys (R. L. Miller, Banks, & Ogawa, 1963), and nonhuman primates (de Waal, 2008), share the states of conspecifics. On these models, experience sharing is adaptive for members of any social species, especially in helping organisms within a group reach mutual goals. Importantly, several nonhuman species appear to also have impressive (if not quite human) abilities to mentalize about conspecifics (Call & Tomasello, 2008). On de Waal's (2010) Russian doll model, these cognitive abilities supplement more basic experience-sharing mechanisms in supporting nuanced social behavior. However, in other species, experience sharing might drive adaptive social behavior even absent the ability for cognitive representations of other group members' states (Seyfarth & Cheney, 2013).

**Social psychology.** Hatfield and colleagues (Hatfield et al., 1994; Hatfield, Forbes, & Rapson, 2013) famously described observers' "tendency to *automatically* mimic and synchronize facial expressions, vocalizations, postures, and movements with those of another person and, consequently, to converge emotionally" (Hatfield et al., 1994, p. 5; emphasis added). Hatfield and colleagues draw evidence of such *emotional contagion* from historical examples of affective epidemics, such as the rapid spread of laughter (Provine & Yong, 1991), panic (Kerckhoff & Back, 1968), or euphoria (Ehrenreich, 2007) through crowds.

Social psychological research likewise supports the fast and reflexive nature of psychological contagion. Observers mimic target postures (Chartrand & Bargh, 1999; Chartrand & Dalton, 2008) and facial movements (Hess & Blair, 2001; Lundqvist, 1995; Niedenthal, Brauer, Halberstadt, & Innes-Ker, 2001) and are quicker to perform actions they see others perform concurrently (for a review, see Heyes, 2011). Observers also appear to "catch"

others' sensations, arousal, and affect. For instance, observers condition more quickly to stimuli paired with images of others being shocked (Berger, 1962; Olsson & Phelps, 2007; Vaughan & Lanzetta, 1980) and report pain to be more unpleasant when targets receive simultaneous painful stimuli (Loggia, Mogil, & Bushnell, 2008). Observers likewise take on targets' autonomic arousal (Levenson & Ruef, 1992), as well as moods targets express through facial expressions (Wild, Erb, & Bartels, 2001), prosody (Neumann & Strack, 2000), or both (Barsade, 2002; Sy, Côté, & Saavedra, 2005).

Many forms of mimicry meet central criteria for automatic processing (Bargh & Chartrand, 1999; Lieberman, 2000). For instance, facial mimicry occurs within a fraction of a second after exposure to social cues, outside of awareness (Condon, 1982; Dimberg, Thunberg, & Elmehed, 2000; Dimberg, Thunberg, & Grunedal, 2002; Sonnyby-Borgström, 2002), and when it is task independent or even runs counter to an observer's goals (Bertenthal, Longo, & Kosobud, 2006; Brass, Bekkering, & Prinz, 2001). Facial mimicry and affective mimicry are likewise rapid and task independent (Dimberg & Thunberg, 1998; Neumann & Strack, 2000), suggesting a lack of top-down control.

Automatic contagion connects with the common observation that clinicians—despite their best intentions—often take on their patients' moods. Empirical work bears out this intuition: After interacting with depressed or anxious patients, observers report and display congruent negative affect (Coyne, 1976; Howes, Hokanson, & Loewenstein, 1985). Organizational psychologists have likewise documented ripple effects through which moods spread through groups (Barsade & Gibson, 2012).

**Neuroscience.** Neuroscience provides converging evidence for the automaticity of experience sharing. Scientists have documented a robust and consistent phenomenon that I refer to as *neural resonance*: When encountering cues about targets' states (e.g., emotional facial expressions), observers' brains exhibit patterns of activation consistent with experiencing those states themselves. Famously, mirror neurons in macaque monkeys respond both to their own actions and to the actions of conspecifics and experimenters (di Pellegrino, Fadiga, Fogassi, Gallese, & Rizzolatti, 1992; Ferrari, Gallese, Rizzolatti, & Fogassi, 2003; Rizzolatti & Craighero, 2004). Similar mirrorlike properties characterize human parietal and inferior frontal cortex (Iacoboni et al., 2005, 1999). Neural resonance further characterizes the experience and observation of touch (Keysers, Kaas, & Gazzola, 2010; Keysers et al., 2004), pain (Lamm, Decety, & Singer, 2011; T. Singer et al., 2004), disgust (Jabbi, Bastiaansen, & Keysers, 2008; Wicker et al., 2003), and reward (Mobbs et al., 2009; Zaki, Lopez, & Mitchell, 2014; Zaki & Mitchell, 2013).

At least some evidence suggests that neural resonance is reflexive. Engagement of the human mirror neuron system occurs even when observers are not directed to attend to a target (Iacoboni et al., 2005) or are put under cognitive load through a concurrent secondary task (Fadiga, Fogassi, Pavesi, & Rizzolatti, 1995; Spunt & Lieberman, 2013). Neural resonance in response to others' affective states (e.g., pain) likewise occurs rapidly (Fan & Han, 2008) and in the absence of instructions to empathize (T. Singer et al., 2004; Zaki & Mitchell, 2013).

These data have inspired a crop of neuroscientifically based theories of empathy (Decety, 2011; Iacoboni, 2009; Keysers & Gazzola, 2009), some of which emphasize the reflexive nature of



neural resonance (Coricelli, 2005). Most prominently, Gallese and colleagues (Gallese, 2003a, 2003b, 2007; Gallese & Goldman, 1998; Gallese, Keysers, & Rizzolatti, 2004) argue that experience sharing and neural resonance are largely automatic. In one of many such examples, Gallese (2003b) concluded that the “*implicit, automatic, and unconscious* process of embodied simulation enables the observer to use his/her own resources to penetrate the world of the other without the need of explicitly *theorizing* about it” (p. 174; emphasis in original).

**Summary.** The foregoing review demonstrates that early and contemporary accounts of empathy—across philosophy, development, ethology, cognitive and social psychology, and neuroscience—share a common thread, viewing empathy and experience sharing in particular as automatic. This approach, which rests on an impressive amount of data, holds that experience sharing is an evolutionarily preserved, early-developing mechanism that matches an observer’s state to a target’s state rapidly and often irrepressibly.

### Context Effects on Empathy

Although empathy clearly exhibits features of automaticity, observers do not *always* empathize automatically. Instead, empathic processes are deeply context dependent. Here, I highlight two contextual features that shift empathy.

**Intergroup conflict.** Anyone who has ever been on one side of an intergroup rivalry has likely experienced the speed with which empathy can dissipate once observers realize a target is wearing the wrong uniform, carrying the wrong flag, or rooting for the wrong team (cf. Greene, 2013). A vast amount of evidence supports this intuition. Whether measured through self-report, physiological responses, or neural resonance, empathy decreases in the presence of outgroup, as compared to ingroup, targets. Such effects hold across a number of intergroup boundaries, including political (Mitchell, Macrae, & Banaji, 2006), ethnic (Avenanti, Sirigu, & Aglioti, 2010; Gutsell & Inzlicht, 2010; Leyens et al., 2000; Mitchell, Ames, Jenkins, & Banaji, 2009; Xu, Zuo, Wang, & Han, 2009), and social categories (Cikara & Van Bavel, 2014; Harris & Fiske, 2006, 2007; Hein, Silani, Preuschoff, Batson, & Singer, 2010). Empathic decrements also accompany group boundaries created de novo in the lab, for instance, through zero-sum competition (Lanzetta & Englis, 1989) and minimal group assignment (Leyens et al., 2000).

Critically, group boundaries not only decrease the deployment of empathic processes but also render empathy *less automatic*. For instance, event-related potentials (ERP) reveal that observers display reduced neural resonance in response to outgroup, as compared to ingroup, targets as early as 200 ms after seeing those targets in pain (Sheng & Han, 2012). In a very different but aligned study, Ames (2004) found that observers were faster to answer questions about minimal ingroup, as compared to outgroup, members’ internal states after first answering the same question about themselves, indicating a more reflexive experience of self–other overlap for ingroup targets. Jenkins, Macrae, and Mitchell (2008) corroborated this finding by demonstrating that individuals showed less neural repetition suppression (an index of overlap in information processing) when answering questions about political outgroup, as compared to ingroup, targets after answering the same questions about themselves.

**Expertise.** Expertise is a second context in which empathy appears to lose its automaticity. In particular, medical professionals frequently encounter others in profound physical and emotional pain. Empathizing with all targets at all times could render the work these individuals must do—especially certain tasks such as incising a patient with a scalpel—taxing or even impossible. A fascinating and growing body of research suggests that physicians respond to this conflict through targeted decreases in empathy. For instance, physicians and nurses systematically underestimate the amount of pain patients feel (Marquié et al., 2003; Sloman, Rosen, Rom, & Shir, 2005). Furthermore, acupuncturists and surgeons exhibit blunted neural resonance in response to patient pain (Y. Cheng et al., 2007; Decety, Yang, & Cheng, 2010). As in the case of group boundaries, physicians also appear to engage in *less automatic* empathy in medically relevant settings. For instance, physicians display blunted ERP responses as early as 110 ms after viewing images of targets being pierced with needles (Decety et al., 2010), suggesting that they fail to engage typically automatic empathic processing.

**Summary.** The foregoing evidence suggests that although empathy can be automatic, it is not always automatic. Instead, features of observers’ situations, experiences, and relationships to targets systematically alter the experience of empathy.

### Foundations and Structure of a Motivated Model

How can empathy seem automatic in some cases, but so fragile in others? Here, I propose that this tension can be resolved by recasting empathy as a motivated phenomenon. A motivated model of empathy follows a long tradition of examining forces that push individuals toward (*approach motives*) or pull them away from (*avoidance motives*) actions. These motives reflect psychological costs and benefits that together provide a net signal as to whether an individual should engage in an action or not (Chartrand & Bargh, 2002; Dweck & Leggett, 1988; Higgins, 1997; Kahneman & Tversky, 1979; Lewin, 1952; D. Miller & Prentice, 2013; Weiner, 1972). Motives affect everything from visual perception (Balcetis & Dunning, 2010; Balcetis & Lassiter, 2010; Bruner, 1957; Bruner & Goodman, 1947) to adaptive and prosocial behaviors (Shang & Croson, 2009; Stone, Aronson, Crain, Winslow, & Fried, 1994).

Critically, individuals also experience motives to feel particular emotions. One obvious example of this is people’s desire for happiness, a goal so ubiquitous that it figures among the inalienable rights conferred by the Declaration of Independence and is acknowledged as a policy objective at the national scale (Diener, 2000). Affective motives, however, extend beyond pursuing pleasure and avoiding pain (Higgins, 2011). In particular, people approach even negative emotions that are consistent with their goals. Individuals seek out stimuli that will make them feel goal-relevant negative emotions, such as anger prior to a conflict or sadness prior to seeking help from others (Hackenbracht & Tamir, 2010; Tamir, Mitchell, & Gross, 2008). Affective goals also vary stably across people and groups. Individuals in East Asian cultures typically seek out low-arousal positive experiences (e.g., calmness), whereas Americans seek out high-arousal positive states (e.g., excitement; Tsai, 2007).

I propose that people likewise experience motives to engage or not engage with others’ emotions, because empathy is consistent

with some social goals and inconsistent with others. In particular, at least three phenomena individuals might avoid—pain, costs, and interference with competition—and three phenomena they might approach—positive affect, affiliation, and desirability—produce goals to stave off or experience empathy.

### Ultimate Sources of Empathic Motives

In understanding empathic motives, it is useful to first consider how they might have evolved. Following Tinbergen's logic, behavior can be explained at the connected but distinct level of *ultimate* sources that render a behavior evolutionarily adaptive or *proximate* motives that drive individual organisms to engage in that behavior in the moment (Scott-Phillips, Dickins, & West, 2011). Under this framework, motives to avoid or approach others' emotions likely emerged from selection pressures associated with social life. For many species, individual survival necessitates social coordination, and as such, internal states (including empathy or its avoidance) that facilitate such coordination serve critical functions.

**Offspring care.** Parental behavior alone allows young to survive their atypical, or helpless, period. Such offspring care rests on key shifts in the behavior and neurochemistry of adult animals that motivate them to invest in offspring (Champagne, Diorio, Sharma, & Meaney, 2001; Pedersen, Ascher, Monroe, & Prange, 1982). In mammalian species, including humans, this translates into strong instincts to nurture infants. Such instincts are triggered by signs of helplessness (Brosch, Sander, & Scherer, 2007; Glocker et al., 2009; Hrdy, 2009) and expressed through attachment behavior (Bowlby, 1969). Offspring care provides the clearest evolutionary case for empathy, as aiding kin connects directly with adaptive genetic outcomes. Recent theories (Goetz, Keltner, & Simon-Thomas, 2010; Keltner, Kogan, Piff, & Saturn, 2014; Preston, 2013) hold that prosociality evolved as an expansion of offspring care instincts, and it follows that familial relationships promote strong instincts to understand and share others' emotions as well.

**Ingroup identification.** In addition to kin relationships, humans (among other species) depend on larger social groups for survival, through predation prevention, group hunting, and other coalitional activities (Brewer & Caporael, 2006). Such cooperation requires trust and reciprocity between group members, rendering psychological qualities that promote cooperation adaptive.

One such quality is *ingroup identification*, or individuals' need for and positive stance toward coalition members (Brewer & Caporael, 2006). Individuals rank belonging in groups among their fundamental psychological needs (Baumeister & Leary, 1995) and take on cooperative and trusting behaviors (Brewer & Kramer, 1986) and attitudes (Clark, Mills, & Powell, 1986; A. P. Fiske, 1991) when interacting with members of their coalitions. Group identification also translates to the affective domain: Emotions such as gratitude and guilt likely motivate cooperation with ingroup members (Trivers, 1971). Humans and nonhuman primates are further sensitive to the *coalitional value* of other individuals, favoring cooperation with targets who (a) are socially or genetically close to the observer, (b) have behaved cooperatively in the past (Melis, Hare, & Tomasello, 2006), or (c) are high status and thus likely able to confer resources through cooperative endeavors (Tomasello, 2009). In this context, empathy for ingroup members is also adaptive, as sharing and understanding targets' states facil-

itates cooperation between interdependent individuals (de Waal, 2008).

**Outgroup exclusion.** Just as individuals' survival hinges on their ability to cooperate with ingroup members, it also requires them to delineate boundaries between ingroup and outgroup members. Evolutionarily, this need could arise from direct competition between groups for limited resources (Kurzban & Leary, 2001; Tooby & Cosmides, 2010; Van Vugt, De Cremer, & Janssen, 2007). However, even absent direct intergroup competition, individuals likely benefit from identifying and relying on group boundaries. This is because the requirements of coalitional behavior—including reciprocity and accountability—constrain the number of individuals who can be part of a group, especially in the interdependent groups in which humans evolved (Caporael, 1997; Dunbar, 1992). As such, individuals are best served by limiting their cooperative efforts to ingroup members and withholding cooperation from, or even actively exploiting, noncoalition members.

As with ingroup identification, outgroup exclusion is served by a number of psychological mechanisms, including perceiving outgroups as inferior (Tajfel, 1982), justifying the dominance of outgroup members (Sidanius & Pratto, 2001), and viewing outgroups as homogeneous (S. T. Fiske, 2000). Critically, a motivated model of empathy suggests that the adaptive function of ingroup identification and outgroup exclusion should produce affective and motivational sequelae. In particular, observers should experience explicit or implicit goals to empathize with ingroup, but not outgroup, targets.

### Proximate Mechanisms Supporting Empathic Motives

How do motives affect empathy? Here I borrow from two theoretical traditions to answer this question.

**Information processing.** According to Kunda's (1990) classic model, motives bias information processing in a number of ways. For instance, individuals might attend to and retrieve information in ways that suit their goals. People motivated to view themselves positively, for instance, selectively access information that allows them to infer that they are better than average and have unrealistic amounts of control over external events (Epley & Dunning, 2000; Taylor & Brown, 1988). Individuals likewise discount evidence for opinions that they find unsavory (Lord, Ross, & Lepper, 1979; Taber & Lodge, 2006) or that suggest positive impressions of competitive outgroup members (W. M. Klein & Kunda, 1992). Motivational biases in information processing affect even lower level functions such as sensation and perception, for instance, causing individuals to view desired objects as closer to them in space than undesired objects (Balcetis & Dunning, 2010).

**Emotion modulation.** As discussed above, individuals experience motives to experience or avoid particular affective states, including empathy. A long research tradition investigates strategies through which individuals modify their affective experience in response to such goals (Lazarus & Folkman, 1984; Schachter, 1959). As described by Gross (1998, 2002), *emotion regulation* encompasses a suite of such goal-driven strategies. More recent theories specifically adapt emotion regulation to interpersonal contexts (Coan, 2011; Rimé, 2007; Zaki & Williams, 2013).

Prior to considering the use of motivated information processing and regulatory strategies to alter empathy, two general points about goals and regulation bear emphasis.

**Goals and strategies need not be explicit.** Although the terms *goal* and *strategy* are intuitively associated with top-down control, they can also implicitly affect individuals' behavior (Custers & Aarts, 2010; Gyurak, Gross, & Etkin, 2011; Williams, Bargh, Nocera, & Gray, 2009). For instance, implicitly priming goals for cooperation (Shah, 2005), achievement (Custers, Aarts, Oikawa, & Elliot, 2009), impression formation, and memorization (Chartrand & Bargh, 1996) all facilitate goal-relevant behavior outside of awareness. Implicit processes operate in the social domain, for instance, driving individuals to cooperate with or stereotype targets (Alexander, Brewer, & Hermann, 1999; Bargh, Gollwitzer, Lee-Chai, Barndollar, & Trötschel, 2001).

Emotion-regulatory strategies likewise can be activated and carried out implicitly (see Gyurak et al., 2011, for a review). This is illustrated, for instance, through habitual emotion-regulation tendencies in the absence of any task instruction (Hopp, Troy, & Mauss, 2011; Koole & Rothermund, 2011). Priming control tendencies likewise improves people's ability to regulate without activating explicit regulatory goals (Mauss, Evers, Wilhelm, & Gross, 2006). As such, both goals to avoid or approach empathy and the strategies observers use to carry out these goals can likewise be represented explicitly or implicitly.

**Regulation can alter emotions as they unfold.** A second tempting but incorrect inference is that regulation temporally follows the experience of emotion, operating only to modulate emotions that have already occurred. Instead, regulatory strategies can alter the entire process of emotion experience, sometimes preempting emotion generation altogether (Gross & Barrett, 2011). This follows from appraisal and constructivist theories (Barrett, Mesquita, Ochsner, & Gross, 2007; Schachter & Singer, 1962; Scherer, Schorr, & Johnstone, 2001), which hold that emotion reflects individuals' interpretation of lower level states such as valence and arousal. As such, individuals' goal to experience particular emotional states can cause them to (a) change the way they currently feel, as per canonical emotion regulation, but also (b) change the way they interpret emotion-relevant information, or even (c) avoid or approach that information, thus changing, preventing, or intensifying their initial experience of an emotion.

Consistent with this point, a motivated model of empathy holds that observers' motives to experience or avoid empathy can manifest as a *reduction* or *intensification* of empathy that has already occurred and also as a *prevention*, *initiation*, or *modulation* of the initial experience of empathy.

## Empathic Regulatory Strategies

**Situation selection.** One key regulatory strategy, *situation selection*, illustrates the idea that regulation often precedes, as opposed to follows, emotion generation. The vast majority of empathy research focuses on how observers react once they encounter targets' emotional cues. Outside the laboratory, however, observers often make choices about empathic engagement *before* being exposed to targets at all.

Consider an individual on a city street who notices the profile of a wheelchair-bound homeless person 100 feet away. At this distance, the observer perceives few if any of this target's affective

cues but nonetheless might foresee the emotions (e.g., sadness, empathy, or guilt) that will arise from encountering those cues. In response, the observer can choose to cross the street and keep his or her distance from the distressed target, heading off an empathic response before it occurs at all. People also make the opposite choice: tuning into telethons, watching documentaries, and reading news stories they know will bring them into contact with others' suffering (Iyengar & Kinder, 2010). In essence, observers often choose to put themselves in, or take themselves out of, empathy's way. Hodges and Biswas-Diener (2007; see also Hodges & Wegner, 1997) in particular described this phenomenon nicely, as observers' use of *exposure control* to titrate their contact with empathy-inducing cues.

**Attention modulation.** Observers also up- or down-regulate empathy by shifting their *attention* toward or away from affective cues (Todd, Cunningham, Anderson, & Thompson, 2012). This strategy aligns with individuals' focus on cool nonemotional stimulus features to down-regulate emotional responses (Ayduk & Kross, 2010; Metcalfe & Mischel, 1999; Nix, Watson, Pyszczynski, & Greenberg, 1995) and on hot affective cues to intensify emotion (Livingstone & Srivastava, 2012; Ochsner et al., 2004). This strategy also connects with appraisal theory, in that individuals use attention modulation not only to alter but also to modify the initial process of generating emotions. According to a motivated model of empathy, observers can respond to avoidance and approach motives by increasing or decreasing their attention to social targets' emotions, thus increasing or decreasing empathy.

**Appraisal.** A final strategy through which observers up- or down-regulate empathy is by modulating their *appraisal* of targets' emotional cues. Such appraisal can take multiple forms. First, observers might shift their beliefs about the *intensity* of targets' affective states. Targets often misrepresent their emotions in accordance with social display rules (Ansfield, 2007; Ekman & Friesen, 1969, 1982) or emphasize the intensity of their emotions to draw support from others (Gable & Reis, 2010; Rimé, 2009). Observers need not take targets' cues at face value, and indeed, observers often conclude that targets have misrepresented their affect (Bernstein, Young, Brown, Sacco, & Claypool, 2008; Porter & ten Brinke, 2008). An observer motivated to avoid empathy could, as such, decide that a target is overplaying his or her affective hand, whereas an observer motivated to feel empathy could appraise emotional cues as faithful or even understated representations of a target's feelings.

Observers who believe targets' affective displays can still modulate their empathic response by changing their appraisal of the *affective meaning* of a target's state in at least three ways. First, observers can decide whether or not a target is *responsible* for his or her emotions. For instance, one observer might decide that a homeless target's suffering reflects factors under that target's control (e.g., choices to engage in maladaptive behavior), whereas a second observer might decide that the target is the victim of unfortunate circumstances (Weiner, 1980). Second, observers can decide that targets—even when not responsible for their fates—nonetheless *deserve* them. One example of such an effect reflects observers desire to believe in a just world (Lerner, 1980). Random events that befall and harm innocent people challenge observers' ability to hold such beliefs. To reduce this dissonance, observers often derogate suffering targets (Hafer & Begue, 2005; Lerner,



1980), protecting would-be empathizers from the psychological hardship associated with interpersonal affect.

Finally, even if observers believe that a target neither caused nor deserved their emotions, they can decide that the target's suffering is—on balance—a good thing. This is most obviously applicable to zero-sum competition, under which one person's misfortune is tied to another's gain. In such cases, observers often appraise targets' affect incongruently (seeing target suffering as a positive cue, and vice versa). Indeed, flavors of antipathy such as *schadenfreude* (enjoyment of others' suffering) and *gluckschmerz* (unhappiness at others' good fortune) demonstrate observers' deployment of such appraisal modulation. Such modulations also occur in friendlier contexts, such as so-called *paternalistic helping*, under which observers down-regulate empathy in order to act in ways that upset targets in the short term but benefit them in the long term (Sibicky, Schroeder, & Dovidio, 1995). Paternalistic appraisal peppers good parenting, which requires parents to reduce their children's positive affect by replacing cake with broccoli and television with homework.

### Evidence for Motivated Empathy

The empathic motives and empathy-regulating strategies described by a motivated empathy model produce a 6 (motive)  $\times$  3 (strategy) grid. This grid is presented in Table 1, along with studies supporting each expected effect. A brief description of each study listed in Table 1 can be found in Table 2. A schematic of empathic motives and their effects on empathy is presented in Figure 1.

Table 1 immediately makes clear that research on motivated empathy is highly imbalanced. Whereas some cells in the grid (e.g., shifts in attention or appraisal in response to intergroup competition) are supported by 30 or more empirical demonstrations, others (e.g., selecting one's self into contact with targets' positive affect) have hardly been examined at all. This likely reflects the relatively few times that motivation has been used as an organizing principle in empathy research. Whereas the most filled cells in Table 1 synthesize effects on empathy across many previously disparate literatures, the empty cells highlight novel but unexplored predictions about when and how motivation should affect empathy. In these latter cases, I describe any indirect evidence related to these predictions.

### Avoiding Pain

**Theory.** Experience sharing often exerts an affective cost in that targets' suffering simply makes observers feel bad (Hodges & Klein, 2001). Others' pain—and vicarious sharing of that pain—constitutes an aversive stimulus powerful enough to potentiate conditioning (Olsson & Phelps, 2004; Vaughan & Lanzetta, 1980) and outweigh monkeys' desire for food (Wechkin, Masserman, & Terris, 1964). The affective cost of empathy can be so strong that it increases observers' risk for depression (Rosenquist, Fowler, & Christakis, 2011), especially when observers and targets are socially close, such as spouses of individuals suffering from cancer (Braun, Mikulincer, Rydall, Walsh, & Rodin, 2007). Empathy can also induce more abstract forms of negative affect. For example, targets' unjust suffering shakes observers' ability to maintain their belief that the world is a fair place (Janoff-Bulman, 1989).

**Evidence.** Here I review evidence suggesting that observers implement motives to avoid pain by reducing empathy through one

of the three regulatory strategies—situation selection, attention modulation, and appraisal—described above. Discussion of the other five empathic motives posited in the model (e.g., avoiding costs or approaching affiliation) is similarly organized.

**Situation selection.** Observers who believe empathy will hurt tend to *select themselves out* of empathy-inducing situations. In one of the clearest tests of this prediction, Davis and colleagues (1999) used individual-difference measures of personal distress—the negative affect observers feel when in the presence of target suffering—to predict observers' preferences for different volunteering opportunities. Both in college students' hypothetical predictions and in community members' actual volunteering, personal distress predicted observers' avoidance of targets' suffering (e.g., their unwillingness to work with disfigured patients or victims of sexual assault). In a clever, related experiment, Pancer (1988) posted an unmanned table in a busy university walkway; the table contained an appeal to donate to charity featuring either an image of a suffering child or a healthy child. Pancer then measured the physical distance passersby kept from the table while walking. Observers maintained a wider berth from the table containing an image of a suffering, as compared to a healthy, child, consistent with avoiding empathic pain (see also Snyder, Kleck, Strenta, & Mentzer, 1979). A third example of situation selection comes from research on depression. Observers report a desire to avoid interactions with depressed, as compared to nondepressed, individuals in the future (Coyne, 1976; Howes & Hokanson, 1979; Strack & Coyne, 1983), consistent with a motive to avoid catching depressed targets' negative affect.

**Attention modulation.** Observers who expect empathy to be painful also *shift their attention* away from targets' states. For instance, Cameron, Harris, and Payne (2014) probed observers' belief that empathizing with suffering targets would be affectively exhausting and found that expectations of exhaustion predicted observers' tendency to *dehumanize* targets (by denying them complex internal states; see below for more on this phenomenon). Observers also shift attention away from targets' internal states in potentially threatening situations. Simpson, Ickes, and Blackstone (1995; see also Simpson, Orina, & Ickes, 2003) documented such an effect in the domain of empathic accuracy. Observers watched their romantic partners rate the attractiveness of either average looking (low threat) or very attractive (high threat) others and inferred their partners' thoughts and feelings. Observer inferences were compared to spouses' own self-reported experiences. Observers exhibited reduced accuracy under high threat—when accurately understanding their spouses' feelings might be painful—consistent with motivated attentional shifting.

In a second, very different example, Koopmann-Holm and Tsai (in press) examined American and German responses to others' bereavement. American observers tend to focus on positive content (e.g., happy memories of the lost loved one) as opposed to negative content (e.g., the pain of the loss itself). Critically, this cultural bias in attention is mediated by Americans' desire to avoid negative affect, and manipulations that reduced this avoidance motive also reduced Americans' tendency to “focus on the positive” in painful situations.

**Appraisal.** Observers who wish to avoid pain might also *appraise* target emotions differently to make them more manageable. As described above, observers could approach this strategy in at least three ways: (a) down-regulating the emotion they perceive in





Table 1 (continued)

Motive	Strategy		Appraisal
	Situation selection	Attention	
Approach capitalization	<p>Kashdan &amp; Roberts (2004) Harker &amp; Keltner (2001) K. D. Smith, Keating, &amp; Stotland (1989) Barraza (2011) Diener &amp; Fujita (1995) Mathes &amp; Kahn (1975) Morelli, Lieberman, Telzer, et al. (2014) Zaki, Lopez, &amp; Mitchell (2014)</p>	<p>Castano &amp; Giner-Sorolla (2006) Olsson et al. (2014) Leidner et al. (2010) Bruneau &amp; Saxe (2012) Demoulin et al. (2009) Merola &amp; McGlone (2011) Osofsky, Bandura, &amp; Zimbardo (2005)  Isaacowitz, Wadlinger, Goren, &amp; Wilson (2006a) Isaacowitz, Wadlinger, Goren, &amp; Wilson (2006b) Devlin, Zaki, Ong, &amp; Gruber (in press) Dutra et al. (2014)</p>	<p>Olson, Banaji, Dweck, &amp; Spelke (2006) Olson, Dunham, Dweck, Spelke, &amp; Banaji (2008) Taylor, Lerner, Sherman, Sage, &amp; McDowell (2003) Harker &amp; Keltner (2001) King &amp; Napa (1998)</p>
Approach affiliation	<p>Schachter (1959) Gump &amp; Kulik (1997) Maner et al. (2007)</p>	<p>Lakin, Chartrand, &amp; Arkin (2008) Pickett, Gardner, &amp; Knowles (2004) Gardner, Pickett, Jefferis, &amp; Knowles (2005) DeWall, Maner, &amp; Rouby (2009) C. M. Cheng &amp; Chartrand (2003) Estow, Jamieson, &amp; Yates (2007) Waytz &amp; Epley (2012) Huntsinger, Lun, Sinclair, &amp; Clore (2009) Epley, Waytz, Akalis, &amp; Cacioppo (2008) Ickes, Stinson, Bissonnette, &amp; Garcia (1990) Snodgrass (1992) Kraus, Cote, &amp; Keltner (2010) Bavelas, Black, Lemery, &amp; Mullett (1986) Gump &amp; Kulik (1997) Neuberg &amp; Fiske (1987) Erber &amp; Fiske (1984) Snodgrass (1985)</p>	<p>Nelson et al. (2003) Maner, DeWall, Baumeister, &amp; Schaller (2007)</p>
Approach desirability		<p>Thomas &amp; Maio (2008) Ickes, Gesn, &amp; Graham (2000) Graham &amp; Ickes (1997) K. Klein &amp; Hodges (2001) Hall &amp; Schmid Mast (2007) Hall et al. (2009)</p>	<p>Harmon-Jones, Peterson, &amp; Vaughn (2003) Tarrant, Dazeley, &amp; Cottom (2009)</p>

Table 2  
Expansion of Table 1 Offering Brief Summaries of Each Relevant Study

Motive	Strategy	Study	Operationalization of empathic motive	Result
Avoid pain	Situation selection	Coyne (1976)	Target depression	Observers were less willing to engage in future interactions with depressed targets
Avoid pain	Situation selection	Davis et al. (1999)	Observers' individual differences in anticipated distress while volunteering	Anticipated distress decreased willingness to take part in volunteering
Avoid pain	Situation selection	Pancer, McMullen, Kabatoff, Johnson, & Pond (1979)	Charitable appeals manned by a disabled, as compared to nondisabled, confederate	Observers physically avoided contact with a disabled confederate
Avoid pain	Situation selection	Pancer (1988)	Charitable appeals including pictures of needy children versus no such pictures	Psychologically painful appeals prompted observers to keep greater distance
Avoid pain	Situation selection	Snyder, Kleck, Strenta, & Mentzer (1979)	Observers' choice to encounter, or not encounter, a handicapped target	Observers selected situations in which they would not have to encounter a handicapped target
Avoid pain	Situation selection	Strack & Coyne (1983)	Target depression	Observers were less willing to engage in future interactions with depressed targets
Avoid pain	Attention modulation	Cameron & Payne (2011)	High versus low numbers of needy targets	Intention to regulate emotion increased identifiable victim effect (blunted response to groups of targets)
Avoid pain	Attention modulation	Cameron, Harris, & Payne (2014, Study 3)	Observers' expectation that empathizing with a target will be affectively exhausting	Expectations of exhaustion led observers to dehumanize suffering, as compared to nonsuffering, targets
Avoid pain	Attention modulation	Simpson, Ickes, & Blackston (1995)	Observers' romantic partner rates attractive (high-threat) or average (low-threat) others	Threat produced lower empathic accuracy
Avoid pain	Appraisal	Brock & Buss (1962)	Observers' sense of choice in delivering shocks to targets	Observers induced to feel personally responsible, as opposed to nonresponsible, for shocks appraised shocks as less painful
Avoid pain	Appraisal	Y. Cheng et al. (2007)	fMRI recorded while physicians who perform acupuncture view targets pierced with needles versus touched with q tips	Physicians demonstrate reduced engagement of the pain matrix while viewing targets in pain
Avoid pain	Appraisal	Decety, Yang, & Cheng (2010)	ERP recorded while physicians view targets experiencing painful or nonpainful stimulation	Physicians' early ERP components did not differentiate between target pain and nonpain
Avoid pain	Appraisal	Glass (1964)	Observers' sense of responsibility for the shocks that targets receive	Observers induced to feel personally responsible, as opposed to nonresponsible, for shocks appraised targets as less friendly
Avoid pain	Appraisal	Gruman & Sloan (1983)	Targets' experience of mild, moderate, or severe disease	Observers derogated targets more when they were sick, as compared to healthy; derogation increased with illness severity
Avoid pain	Appraisal	Koopmann-Holm & Tsai (in press)	Observers' choice of sympathy cards to send to a bereaved acquaintance as a function of observer culture (American vs. German)	American participants chose cards that frame loss positively; effect mediated by those individuals' desire to avoid negative affect

(table continues)

Table 2 (continued)

Motive	Strategy	Study	Operationalization of empathic motive	Result
Avoid pain	Appraisal	Lerner & Simmons (1966)	Observers' belief that they would have to continue watching a target receive shocks, versus not have to continue watching target shocks	Observers under prolonged exposure to target pain derogated targets more than those expecting shorter exposure
Avoid pain	Appraisal	Lerner & Matthews (1967)	Observers' responsibility for shocks they witness a target receiving	Responsible observers derogated targets more than nonresponsible observers
Avoid pain	Appraisal	Marqué et al. (2003)	Physicians' and patients' estimates of patient pain	Physicians systematically underestimated targets' pain
Avoid pain	Appraisal	Meyerowitz, Williams, & Gessner (1987)	Observers' belief that a target's illness is controllable or uncontrollable	Observers derogated targets more when targets suffer from uncontrollable, as opposed to controllable, illnesses
Avoid pain	Appraisal	D. Miller (1977, Study 2)	Observers' belief in the persistence of a target family's suffering	Observers high in belief in a just world helped targets less when target suffering was described as persistent, as compared to temporary
Avoid pain	Appraisal	Nelson, Klein, & Irvin (2003)	Observers' sense of cognitive exhaustion while watching targets' response to suffering	Exhausted vs. nonexhausted observers judged targets' affect as inappropriate, prompting lowered empathic concern
Avoid pain	Appraisal	Simons & Piliavin (1972)	Observers' belief that a target's suffering will persist versus not persist	Individuals induced to believe in a just world derogated targets more when target suffering promises to persist
Avoid pain	Appraisal	Sloman, Rosen, Rom, & Shir (2007)	Nurses' versus patients' estimates of patient pain	Nurses systematically underestimated targets' pain
Avoid cost	Situation selection	Andreoni, Rao, & Trachtman (2011)	Salvation army representatives directly asking (or not directly asking) for donations	Observers avoided representatives directly asking for donations
Avoid cost	Situation selection	Broberg, Ellingsen, & Johannesson (2007)	Dictator game in which observers have option to split money with target versus opting out of the game entirely	Observers were willing to pay to avoid the moral responsibility associated with the game
Avoid cost	Situation selection	Dana, Cain, & Dawes (2006)	Dictator game in which observers have option to split money with target versus opting out of the game entirely	Observers were willing to pay to avoid the moral responsibility associated with the game
Avoid cost	Situation selection	DellaVigna, List, & Malmendier (2012)	Door-to-door charitable donation requests preceded by either a warning or no warning	Warnings prompt avoidance of solicitation and lower donation
Avoid cost	Situation selection	Knutsson, Martinsson, & Wollbrant (2012)	Recycling stations with option to donate proceeds to charity (or no such option)	Observers recycled less overall when machines offer donation opportunity
Avoid cost	Situation selection	Lazear, Malmendier, & Weber (2012)	Observers in dictator game given option to opt out of game	Sharing dropped when observers have option to avoid dictator game
Avoid cost	Situation selection	Pancer et al. (1979)	Public information about a charity paired with request for donation or no request	Observers physically avoided information paired with a donation request
Avoid cost	Situation selection	Shaw, Batson, & Todd (1994)	Listening to a disadvantaged target with either a later opportunity to donate or no such opportunity	Observers avoided emotional descriptions of the target in the face of donation opportunities
Avoid cost	Attention modulation	Cameron & Payne (2011)	Viewing disadvantaged targets prior to donation opportunities (or no such opportunity)	Observers demonstrated a stronger identifiable victim effect in the face of donation opportunities
Avoid cost	Appraisal	Napier, Mandisodza, Andersen, & Jost (2006)	Observers' reaction to racial inequity highlighted by Hurricane Katrina	Observers responded to inequity through system justification (qualitative analysis)



Table 2 (continued)

Motive	Strategy	Study	Operationalization of empathic motive	Result
Avoid cost	Appraisal	Rhodes & Brickman (2011)	Children told about intergroup interactions under conditions of material abundance or scarcity	Scarcity (and thus competition) increased endorsement of ingroup preferences
Avoid cost	Appraisal	Wakslak, Jost, Tyler, & Chen (2007, Study 1)	Individual differences in system justification	Higher system justification predicted lower distress at disadvantaged victims, less support for redistributive policy
Avoid cost	Appraisal	Wakslak et al. (2007, Study 2)	Induction of system justification through "rags to riches narrative"	Induced system justification lowered distress at disadvantaged victims, less support for redistributive policy
Avoid interference	Situation selection	Schumann et al. (2014)	Opportunity to listen to or fast-forward through racial ingroup/outgroup members' emotional story	Observers with a fixed theory of empathy spent less time listening to outgroup, as compared to ingroup, stories
Avoid interference	Situation selection	Vaes, Paladino, Castelli, Leyens, & Giovanazzi (2003, Study 4)	Participants exposed to ingroup and outgroup targets who do or do not describe uniquely human emotions	Observers exhibited behavioral avoidance tendencies to outgroup members who expressed complex emotion
Avoid interference	Attention modulation	Bastian & Haslam (2010)	Ascriptions of humanness following ostracism by a target	Observers dehumanized targets by whom they have been ostracized
Avoid interference	Attention modulation	Bruneau & Saxe (2012)	Brain imaging while observers see competitive versus distant outgroup members in pain	Observers reported less compassion for suffering of competitive outgroup and evinced blunted neural resonance in response to distant outgroup targets
Avoid interference	Attention modulation	Castano & Giner-Sorolla (2006)	Observers infer the emotions of outgroups who are the victims of ingroup violence/accidents	Ingroup responsibility predicted observers' inhumanization of outgroup targets
Avoid interference	Attention modulation	Cuddy, Rock, & Norton (2007)	Attribution of emotions to victims of Hurricane Katrina	Observers ascribed fewer secondary emotions to outgroup targets; this predicted lack of willingness to help victims
Avoid interference	Attention modulation	Demoulin et al. (2009)	Observers' estimates of outgroup targets' primary and secondary emotions	Inhumanization of outgroup targets tracked observers' ingroup identification
Avoid interference	Attention modulation	Esses, Veenvliet, Hodson, & Mihic (2008)	Self-reported SDO, dehumanization of, and attitudes about outgroup targets	High-SDO observers dehumanized outgroup targets more, leading to negative attitudes about outgroup
Avoid interference	Attention modulation	Gutsell & Inzlicht (2010)	EEG recording while observers feel sadness and observe sadness in ingroup versus outgroup targets	Observers exhibited neural resonance for ingroup, but not outgroup, targets
Avoid interference	Attention modulation	Hackel et al. (2013)	Perception of mind in ingroup and outgroup target faces morphed from inanimate to animate	Observers required more animacy in outgroup, as compared to ingroup, faces before ascribing them mental states
Avoid interference	Attention modulation	Harris & Fiske (2006)	Brain imaging of attributions to ingroup and extreme outgroup targets	Observers engaged areas associated with mentalizing less in response to outgroup targets
Avoid interference	Attention modulation	Harris & Fiske (2007)	Brain imaging of attributions to ingroup and extreme outgroup targets	Observers engaged areas associated with mentalizing less in response to outgroup targets
Avoid interference	Attention modulation	Hein et al. (2010)	Brain imaging while watching ingroup and outgroup targets in pain	Observers exhibited less neural resonance to outgroup, as compared to ingroup, pain

(table continues)

Table 2 (continued)

Motive	Strategy	Study	Operationalization of empathic motive	Result
Avoid interference	Attention modulation	Hodson & Costello (2007)	Behavioral indices of interpersonal disgust sensitivity, self-reported dehumanization and attitudes toward outgroup targets	Dehumanization mediated the relationship between observers' disgust sensitivity and negative attitudes about outgroup targets
Avoid interference	Attention modulation	Leidner et al. (2010)	Participants told about Iraqi victims of torture at the hands of observers' own group	Observers' glorification of ingroup predicted diminished perception of target families' suffering
Avoid interference	Attention modulation	Leidner et al. (2010)	Participants told about Iraqi victims of torture at the hands of observers' own group	Observers rated outgroup targets as experiencing less secondary, but equal primary, emotion compared to ingroup targets
Avoid interference	Attention modulation	Leyens et al. (2000)	Explicit ratings of primary and secondary emotions experienced by in- and outgroup targets	Observers were less likely to select cards associating outgroup targets with secondary emotions
Avoid interference	Attention modulation	Leyens, Rodriguez, Demoulin, Paladino, & Rodriguez (1999)	Watson card-sort task including emotions for in- and outgroup members	Threat and dehumanization independently predicted Israelis' support of retaliatory aggression against Palestinians
Avoid interference	Attention modulation	Maoz & McCauley (2008)	Israeli views of and support of policy toward Palestinians	Observers used infrahumanizing language in their description of outgroup targets' emotions
Avoid interference	Attention modulation	Merola & McGlone (2011)	Use of language describing primary and secondary emotions in blog posts written by prolife and prochoice advocates	Observers engaged areas associated with self-referential cognition less in response to outgroup targets
Avoid interference	Attention modulation	Mitchell, Macrae, & Banaji (2006)	Brain imaging while drawing inferences about ingroup and outgroup targets	Observers exhibited reduced neural resonance when witnessing undesirable as compared to desirable target reward
Avoid interference	Attention modulation	Mobbs et al. (2009)	Brain imaging while watching socially desirable or undesirable targets receive reward	Observers extinguished fear learning more slowly based on observation of outgroup, as compared to ingroup, targets
Avoid interference	Attention modulation	Olsson et al. (2014)	Vicarious conditioning based on ingroup or outgroup target experience	Guards dehumanized prisoners, an effect accentuated in executioners
Avoid interference	Attention modulation	Osofsky, Bandura, & Zimbardo (2005)	Prison guards' understanding of death-row inmates' internal states	Observers were quicker to associate secondary (complex) emotions with ingroup, as compared to outgroup, targets
Avoid interference	Attention modulation	Paladino et al. (2002)	Implicit association task pairing emotions with in- or outgroup members	Observers exhibited reduced neural resonance when witnessing cooperative, as compared to competitive, target pain
Avoid interference	Attention modulation	T. Singer (2006)	Brain imaging while watching cooperative or competitive targets in pain	Structures associated with face processing were more responsive to ingroup, as compared to outgroup, faces
Avoid interference	Attention modulation	Van Bavel et al. (2008)	Brain imaging while observers passively viewed minimal ingroup and outgroup targets	

Table 2 (continued)

Motive	Strategy	Study	Operationalization of empathic motive	Result
Avoid interference	Attention modulation	Van Bavel et al. (2011)	Brain imaging while observers passively viewed minimal ingroup and outgroup targets	Structures associated with face processing were more responsive to ingroup, as compared to outgroup, faces
Avoid interference	Attention modulation	Viki et al. (2012)	Ratings of sex offenders' humanity and attitudes toward their treatment	Observers dehumanized sex offenders, and dehumanization predicted lower support for rehabilitation
Avoid interference	Attention modulation	Viki et al. (2013)	Ratings of Muslims' humanity and support for torturing Muslim prisoners of war	Perceived threat and dehumanization of Muslim targets predicted support for torture
Avoid interference	Attention modulation	Viki & Abrams (2003)	Attributions of emotions to men and women, as a function of observer sexism	Hostile sexism predicted lower attribution of positive secondary emotions to women
Avoid interference	Attention modulation	Xu, Zuo, Wang, & Han (2009)	Brain imaging while watching ingroup and outgroup targets in pain	Observers exhibited less neural resonance to outgroup, as compared to ingroup, pain
Avoid interference	Appraisal	Boardley & Kavussanu (2010)	Ego involvement in sports competition	An ego- as opposed to task-involved motivational set increased antisocial behavior toward competitive targets; an effect mediated by moral disengagement
Avoid interference	Appraisal	Cikara, Botvinick, & Fiske (2011)	Brain imaging while watching ingroup and outgroup sports team playing well or poorly	Brain activity associated with reward was engaged by competitive target playing poorly and cooperative target winning
Avoid interference	Appraisal	Cikara Bruneau, van Bavel, & Saxe (2014, Study 2)	Reading story about cooperative and competitive targets experiencing positive and negative events	Observers reacted positively to outgroup targets' negative events and negatively to their positive events, compared to ingroup targets
Avoid interference	Appraisal	Cikara, Bruneau, van Bavel, & Saxe (2014, Study 2)	Reading story about cooperative, competitive, and neutral targets experiencing positive and negative events	Observers reacted positively to outgroup targets' negative events and negatively to their positive events, compared to ingroup and neutral targets
Avoid interference	Appraisal	Cikara & Fiske (2012)	Reading story about ingroup versus outgroup members experiencing negative events	Observers displayed subthreshold smiles while reading about outgroup targets' suffering
Avoid interference	Appraisal	de Quervain et al. (2004)	Brain imaging while observers punish targets who have acted unfairly	Brain activity associated with reward was engaged by causing loss to unfair targets
Avoid interference	Appraisal	Gaunt et al. (2005)	Observers' forecasts of the intensity and duration of in- and outgroup targets' suffering following a defeat in soccer	Observers downplayed the intensity of outgroup targets' suffering, especially with respect to secondary emotions
Avoid interference	Appraisal	Hein, Silani, Preuschoff, Batson, & Singer (2010)	Brain imaging while watching fans of same or competitive sports team receiving shocks	Brain activity associated with reward was engaged by competitive target receiving shocks, an effect that tracked observers' ingroup identification
Avoid interference	Appraisal	Kavussanu (2006)	Performance vs. mastery climate in soccer competition	Sense of competitive performance climate increased antisocial behavior toward outgroup targets
Avoid interference	Appraisal	Gilead & Liberman (2014, Studies 1–2)	Primed participants with caregiving-related images (infants) versus no such prime	Caregiving priming increased derogation of outgroup members in the face of outgroup threat

(table continues)



Table 2 (continued)

Motive	Strategy	Study	Operationalization of empathic motive	Result
Avoid interference	Appraisal	Gilead & Liberman (2014, Study 3)	Participants walking with children (caregiving primed) or no children (no caregiving prime)	Caregiving priming increased derogation of outgroup members in the face of outgroup threat
Avoid interference	Appraisal	Lanzetta & Englis (1989)	Viewing competitive or cooperative targets reacting to shock and reward	Observers demonstrated counterempathic responses opposite to those exhibited by competitive, but not cooperative, targets
Avoid interference	Appraisal	Rhodes & Brickman (2011)	Children told about intergroup interactions under conditions of material abundance or scarcity	Scarcity (and thus competition) increased endorsement of ingroup preferences
Avoid interference	Appraisal	Riva & Andrighetto (2012)	Appraisals of physical pain and emotional suffering to in- and outgroup targets	Observers appraised outgroup members as experiencing equal pain but lower levels of suffering
Avoid interference	Appraisal	T. Singer et al. (2006)	Brain imaging while observers watched fair or unfair targets receiving shocks	Brain activity associated with reward engaged by unfair target receive shocks (only for male observers)
Avoid interference	Appraisal	Takahashi et al. (2009)	Brain imaging while observers encounter misfortune suffered by targets who have more possessions than the observer	Observers experienced jealousy toward targets and engaged brain activity associated with reward in response to targets' misfortune
Avoid interference	Appraisal	Tarrant, Branscombe, Warner, & Weston (2012, Study 1)	Perception of terrorist suspect tortured by one's ingroup vs. another group	When torture was carried out by observers' own group, observers reported lower empathy for target and viewed torture as more justified
Avoid interference	Appraisal	Tarrant et al. (2012, Study 2)	Perception of terrorist suspect tortured by one's ingroup vs. another group	When torture was carried out by observers' own group, observers derogated targets and viewed torture as more justified
Avoid interference	Appraisal	Trawalter et al. (2012)	Appraisal of in- and outgroup target physical pain	White observers believed Black targets felt less pain following physical injury
Avoid interference	Appraisal	van der Schalk et al. (2011)	Mimicry of emotions displayed by in- and outgroup targets' facial expressions	Observers displayed counterminimality of outgroup targets, displaying fear in response to anger and aversion in response to fear
Avoid interference	Appraisal	Weisbuch & Ambady (2008)	Affective priming in response to ingroup and outgroup target emotional facial expressions	Negative affect displayed by outgroup targets primed positive emotion in observers, and vice versa
Approach capitalization	Situation selection	Barraza (2011)	Individuals' affective expectations and intention to volunteer	Observers who expected to feel positively when volunteering reported higher willingness to volunteer
Approach capitalization	Situation selection	Diener & Fujita (1995)	Informant ratings of targets' resources and personality as a function of target positive affect and subjective well-being	Observers' ratings of target attractiveness tracked targets' general positive affect
Approach capitalization	Situation selection	Harker & Keltner (2001)	Observers' ratings of targets' traits and likely sociability based on yearbook photos	Target positive affect predicted observers' positive evaluation of target personality and positive affect while interacting with target
Approach capitalization	Situation selection	Kashdan & Roberts (2004)	"Getting to know you" interaction between strangers	Individuals' state positive affect predicted their partner's attraction/interest

Table 2 (continued)

Motive	Strategy	Study	Operationalization of empathic motive	Result
Approach capitalization	Situation selection	Mathes & Kahn (1975)	Observer ratings of attractiveness as a function of target happiness	Observers' ratings of target attractiveness tracked targets' happiness
Approach capitalization	Situation selection	K. D. Smith, Keating, & Stotland (1989)	Observers believe that they would be able to view targets' responses to their (observers') helpful acts	Observers engaged in more altruistic behavior when they believe they will have access to targets' responses
Approach capitalization	Situation selection	Morelli, Lieberman, Telzer, et al. (2014)	Observers individual differences in the experience of positive empathy, or sharing others' positive states	Individuals' levels of positive empathy tracked their tendency to act prosocially
Approach capitalization	Situation selection	Zaki, Lopez, & Mitchell (2014)	Neural marker of observers' vicarious sharing of targets' rewarding experience	Neural markers of vicarious reward predicted prosocial behavior in a dictator game across individuals
Approach capitalization	Attention modulation	Devlin, Zaki, Ong, & Gruber (in press)	Observers' accuracy about targets' experiences while telling positive and negative autobiographical stories	Observers' trait positive affect predicted inaccuracy (underestimation) of targets' negative, but not positive, affect
Approach capitalization	Attention modulation	Dutra et al. (2014)	Observers' perception of and accuracy about romantic partners' feeling during a naturalistic interaction	Observers' mania symptoms predicted reduced and inaccurate perception of targets' negative affect and inflated perception of their positive affect
Approach capitalization	Attention modulation	Isaacowitz, Wadlinger, Goren, & Wilson (2006a)	Older and younger observers' attention to emotional facial expressions	Older observers exhibited preferential attention to positive faces, as assessed through eye tracking
Approach capitalization	Attention modulation	Isaacowitz, Wadlinger, Goren, & Wilson (2006b, Study 1)	Older and younger observers' attention to emotional facial expressions	Older observers exhibited preferential attention to positive faces, as assessed through eye tracking
Approach capitalization	Attention modulation	Isaacowitz et al. (2006b, Study 2)	Older and younger observers' performance on dot probe task with emotional facial expressions as cues	Older observers exhibited preferential cuing by positive, as compared to negative, faces
Approach capitalization	Appraisal	Harker & Keltner (2001)	Attributions about targets differing in their amount of displayed positive affect	Observers attributed more positive traits to happier targets
Approach capitalization	Appraisal	King & Napa (1998)	Observers' assessments of fictitious targets based on target vignettes about their life	Observers rated happy targets as living a more moral life and as being more likely to go to heaven
Approach capitalization	Appraisal	Olson, Banaji, Dweck, & Spelke (2006, Study 1)	Children's feelings toward lucky and unlucky targets	Observers liked lucky targets more than unlucky targets
Approach capitalization	Appraisal	Olson, Dunham, Dweck, Spelke, & Banaji (2008, Studies 1–3)	Children's attributions about the prosociality of lucky and unlucky targets	Observers inferred that targets to whom random positive events occur are more prosocial than less lucky targets
Approach capitalization	Appraisal	Olson et al. (2008, Studies 4–6)	Children's attributions about the niceness of lucky and unlucky targets	Observers inferred that targets to whom random positive events occur are kinder than less lucky targets
Approach capitalization	Appraisal	Taylor, Lerner, Sherman, Sage, & McDowell (2003)	Informant assessment of targets as a function of target self-enhancement	Target self-enhancement predicted others' perception of target mental health and positive attributes
Approach affiliation	Situation selection	Maner et al. (2007, Study 2)	Participants receive rejecting or accepting personality feedback, then choose to complete a task alone or with others	Rejection increased individuals' desire to complete a subsequent task with others, as opposed to alone
Approach affiliation	Situation selection	Schachter (1959)	Participants' preference for being with others prior to a neutral or anxiogenic task	Individuals reliably sought out the company of others when induced to feel anxious

(table continues)

Table 2 (continued)

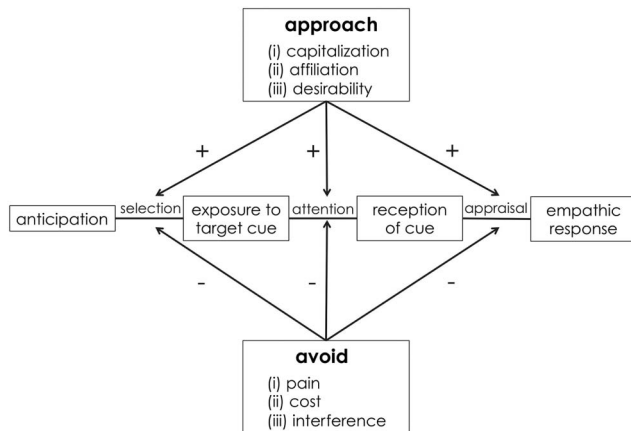
Motive	Strategy	Study	Operationalization of empathic motive	Result
Approach affiliation	Attention modulation	Bavelas, Black, Lemery, & Mullett (1986)	Possibility of eye contact with a target who experiences a painful event	Observers mimicked targets more when targets could see their (observers') responses
Approach affiliation	Attention modulation	C. M. Cheng & Chartrand (2003, Study 1)	Individual difference in self-monitoring	Self-monitoring predicted nonconscious mimicry of peer targets' movements
Approach affiliation	Attention modulation	C. M. Cheng & Chartrand (2003, Study 2)	Individual difference in self-monitoring	Self-monitoring predicted mimicry of high-power, but not low-power, targets
Approach affiliation	Attention modulation	DeWall, Maner, & Rouby (2009)	Observers' attention to social cues under the threat of rejection or no such threat	Observers threatened with exclusion attended preferentially to positive target cues
Approach affiliation	Attention modulation	Epley, Waytz, Akalis, & Cacioppo (2008, Study 1)	Individual differences in loneliness	Observer loneliness predicted anthropomorphism of gadgets
Approach affiliation	Attention modulation	Epley et al. (2008, Studies 2-3)	Observers induced to feel lonely through sham personality feedback or loneliness-inducing movie clip	Loneliness predicted belief in agentic supernatural being, ascription of mental states to dogs, and identification of faces in ambiguous images
Approach affiliation	Attention modulation	Erber & Fiske (1984)	Observers' belief that they would or would not complete a later cooperative task with targets	Belief in future interaction increased attention to inconsistent information about targets
Approach affiliation	Attention modulation	Estow et al. (2007)	Individual difference in self-monitoring	Self-monitoring predicted nonconscious mimicry of targets' movements
Approach affiliation	Attention modulation	Gardner, Pickett, Jeffers, & Knowles (2005)	Individual differences in loneliness	Observer loneliness tracked memory for social events and accuracy for targets' nonverbal emotion expression
Approach affiliation	Attention modulation	Gump & Kulik (1997)	Waiting to complete an axiogenic task with a target believed to be completing the same task	Observers looked at and mimicked targets more when they believed targets would complete the same task as observers
Approach affiliation	Attention modulation	Humsinger, Lun, Sinclair, & Clore (2009)	Affect contagion with targets whom observers expect to share goals and outcomes with or targets with whom they expect no such sharing	Expected shared goals increased observers' affect contagion
Approach affiliation	Attention modulation	Ickes, Stinson, Bissonnette, & Garcia (1990)	Target characteristics and observer self-reported interest in target	Target attractiveness and observer interest predicted observer accuracy
Approach affiliation	Attention modulation	Kraus, Cote, & Keltner (2011)	Observer socioeconomic status	Low-status observers more accurately identified target affect
Approach affiliation	Attention modulation	Neuberg & Fiske (1987)	Observers' belief that they will or will not interact with targets	Belief in future interaction increased attention to individuating information and reduced reliance on category information
Approach affiliation	Attention modulation	Pickett, Gardner, & Knowles (2004, Study 1)	Individual differences in the need to belong (NTB)	NTB predicted accurate identification of emotions from facial and vocal expression
Approach affiliation	Attention modulation	Pickett et al. (2004, Study 2)	Individual differences in NTB and recall of prior social exclusion	Both trait NTB and exclusion predicted empathic accuracy
Approach affiliation	Attention modulation	Snodgrass (1992)	Interpersonal sensitivity as a function of observers' subordinate or dominant role in an interaction	Subordinate observers exhibited higher interpersonal sensitivity than dominant observers



Table 2 (continued)

Motive	Strategy	Study	Operationalization of empathic motive	Result
Approach affiliation	Attention modulation	Shodgrass (1985)	Observer status relative to targets	Low-status, as compared to high-status, observers were more sensitive to targets' affect; controlling for status eliminates gender differences
Approach affiliation	Attention modulation	Waytz & Epley (2012)	Observers primed with close friends and family vs. distant acquaintances	Priming close, as compared to distant, others produced subsequent dehumanization of outgroup targets
Approach affiliation	Appraisal	Maner, DeWall, Baumeister, & Schaller (2007, Studies 3-4)	Observers' prior experience of social rejection vs. no rejection	Following rejection, observers appraised targets as friendlier and more sociable
Approach affiliation	Appraisal	Nelson et al. (2003)	Observers' belief that they will or will not interact with targets repeatedly	Typical appraisal of outgroup targets' emotions as inappropriate disappeared under belief of future interaction
Approach desirability	Attention modulation	Graham & Ickes (1997)	Framing empathic accuracy tasks as explicitly about empathy or providing no such frame	Women outperformed men in empathic accuracy tasks only when they were framed as empathy relevant
Approach desirability	Attention modulation	Hall et al. (2009)	Manipulation of desirability through gender norms, payment, forewarning observers that accuracy will be tested, or exhorting observers to exert effort	Desirability manipulations increased accuracy only for verbal, but not nonverbal, target cues
Approach desirability	Attention modulation	Hall & Schmid Mast (2007)	Manipulating female- and male-relevant goal prior to social memory and accuracy tasks	Women outperformed men only for female-relevant target information and in the presence of female-relevant goals
Approach desirability	Attention modulation	Ickes, Gesn, & Graham (2000)	Framing empathic accuracy tasks as explicitly about empathy or providing no such frame	Women outperformed men in empathic accuracy tasks only when they are framed as empathy relevant
Approach desirability	Attention modulation	K. Klein & Hodges (2001, Study 1)	Giving observers an empathy-salient task prior to an empathic accuracy task	Prior empathy-relevant tasks increased women's, but not men's, later empathic accuracy
Approach desirability	Attention modulation	K. Klein & Hodges (2001, Study 2)	Offering payment for empathic accuracy	Payment incentives increased both men's and women's empathic accuracy and eliminate Study 1 gender differences

Note. ERP = event-related potential; NTB = need to belong; SDO = social dominance orientation.



**Figure 1.** Schematic detailing empathic approach and avoidance motives and regulatory strategies through which they affect empathic episodes as they unfold. Positive and negative signs indicate the directional effects of empathic motives on the deployment of empathy at different processing stages (through situation selection, attention modulation, and appraisal).

targets, (b) reappraising targets themselves as deserving their suffering, and (c) reconstructing targets' negative affect as signaling a positive outcome.

There is almost no work on observers' use of the first or third strategy to avoid empathic pain, but Nelson, Klein, and Irvin (2003) documented an intriguing, related effect of fatigue on observers' appraisal of target affect. Participants were given a cognitively taxing task, then read descriptions of targets reacting to negative events, and were asked how appropriate targets' emotions were given the situation (Houston, 1990). Fatigued perceivers rated targets' emotions as less appropriate, potentially reflecting a motive to avoid empathy.

A richer literature suggests that observers avoid pain by reappraising targets as deserving of their misfortune, thus protecting observers' belief in the world as orderly and fair (Hafer & Begue, 2005; Lerner, 1980; Lerner & Miller, 1978). Interestingly, this strategy appears most common when targets' suffering could most impact observers. For instance, observers who are the source of targets' physical pain (Brock & Buss, 1962; Glass, 1964; Lerner & Matthews, 1967); who believe targets' suffering is relatively intense, uncontrollable, or persistent (Gruman & Sloan, 1983; Meyerowitz, Williams, & Gessner, 1987; Simons & Piliavin, 1972); or who know they will have to continue watching targets suffer (Correia & Vala, 2003; Lerner & Simmons, 1966) derogate victims most intensely.

## Avoiding Cost

**Theory.** In addition to its emotional strain, empathy can also produce material costs. The affective burden of others' suffering (Cialdini, Brown, Lewis, Luce, & Neuberg, 1997; Cialdini & Kenrick, 1976; de Waal, 2008) and top-down concern for others' states (Batson, 1991, 2011) often impel observers to help targets in costly ways (e.g., through charitable donation). Brain activity related to experience sharing (Hein et al., 2010) and mentalizing (Masten, Morelli, & Eisenberger, 2011; Waytz, Zaki, & Mitchell, 2012) further predicts observers' later costly helping.

Once observers have empathized with a target, helping—even when it is costly—may be the *least* costly option observers have at their disposal. This is because inaction in such cases can cause observers added discomfort through vicarious suffering or guilt at not helping (Baumeister, Stillwell, & Heatherton, 1994). To the extent that observers anticipate this state of affairs, they might be motivated to *avoid costs* by reducing or preempting empathic responses.

### Evidence.

**Situation selection.** Observers indeed avoid situations in which empathy could be costly. College students keep a larger distance from charity information tables if they include requests for monetary donations (Pancer, McMullen, Kabatoff, Johnson, & Pond, 1979), supermarket shoppers avoid Salvation Army solicitors more if they audibly ask passersby to please give (Andreoni, Rao, & Trachtman, 2011), and residents open their doors less often if they are informed via flyer that a solicitor from a charitable organization will pay them a visit (DellaVigna, List, & Malmendier, 2012). Ironically, empathy-inducing requests can repel people from otherwise helpful behavior. For instance, when a major retail chain in Sweden installed new recycling machines featuring the option to donate bottle deposits to charity, recycling at those stores *decreased*, consistent with shoppers' motives to avoid a charitable "ask" (Knutsson, Martinsson, & Wollbrant, 2013).

In a clever extension of this phenomenon to game theory, Dana, Cain, and Dawes (2006) asked participants to play a dictator game in which individuals unilaterally decided how to split money between themselves and another person. Although individuals tend to give nontrivial amounts in dictator games (Engel, 2011), Dana et al. found that when given the opportunity, individuals paid small amounts of money to avoid having to play the dictator game altogether, consistent with a motive to avoid costly moral responsibility (see Broberg, Ellingsen, & Johannesson, 2007; Lazear, Malmendier, & Weber, 2012, for similar effects).

Is avoidance of costly prosociality tantamount to avoidance of costly empathy? On the one hand, empathy is a key driver of prosocial behaviors (Andreoni, 1990; Andreoni & Miller, 2002; Batson, 1991; Batson & Shaw, 1991; Eisenberg & Miller, 1987). On the other hand, the foregoing evidence does not directly demonstrate that observers avoid target *emotions* in potentially costly settings. Shaw, Batson, and Todd (1994) more directly explored this idea by telling observers they would or would not have later opportunities to donate to a homeless person and then giving observers a choice between listening to an empathy-inducing or neutral appeal from that target. As predicted by a motivated model, observers in the costly condition were more likely to avoid empathy-inducing appeals.

**Attention modulation.** There is no direct evidence that costs *shift attention* away from target affect. However, one interesting indirect demonstration surrounds the identifiable victim effect (IVE), under which observers are more likely to report empathy and donate money toward single victims of tragedy—especially if those victims are identified via names, faces, or the like—than toward larger numbers of less identified victims (Small & Loewenstein, 2003). The IVE is often assumed to arise from observers' inability to vividly imagine the mental states of individuals who are part of a group (Waytz & Young, 2012). However, observers who know they will have costly opportunities to donate to victims,

as compared to no such opportunity, demonstrate a heightened IVE (Cameron & Payne, 2011). This suggests that motives to avoid costs might spur the IVE by decreasing attention to multiple victims' suffering.

**Appraisal.** No work has directly demonstrated that individuals change their *appraisal* of target suffering to mitigate future costs to observers, but interesting indirect evidence for such strategies has emerged from work on system justification. For instance, in the face of economically disadvantaged targets, observers often endorse system-justifying ideologies such as “rags to riches” themes emphasizing individual control over their outcomes, or the belief that the poor are especially happy (Jost & Thompson, 2000; Napier, Mandisodza, Andersen, & Jost, 2006). These narratives reduce negative affect in response to disadvantaged targets' suffering and license observers to dismiss costly policies such as wealth redistribution (Kay & Jost, 2003; Wakslak, Jost, Tyler, & Chen, 2007). In an interesting developmental analogue to this effect, Rhodes and Brickman (2011) found that children who learned about coexisting social groups that faced limited, as opposed to plentiful, resources (rendering sharing more costly) rated antisocial behavior between these groups as more justifiable.

In sum, these findings suggest that individuals are motivated to down-regulate costly empathy. However, direct explorations of this idea remain lacking, pointing to clear and interesting avenues for future research.

### Avoiding Interference With Competition

**Theory.** Empathy can be detrimental when it interferes with intergroup competition. A linebacker who shares the pain of players he tackles, for instance, might do his job poorly. Data on competitive interactions bear out this intuition. Empathy—in particular, experience sharing—reduces individuals' success in hostile negotiations (Galinsky, Maddux, Gilin, & White, 2008) and intergroup competition (Cikara & Paluck, 2013). Observers should thus be motivated to *avoid interference* with competition by reducing empathy in intergroup contexts, especially when they need to or have already harmed outgroup members. Such avoidance indeed characterizes competitive settings and conflicts. In one such case, following the attacks on Pearl Harbor, Winston Churchill wrote a letter to inform the Japanese ambassador in London that Great Britain had declared war on Japan. The tone of Churchill's letter—polite and respectful—drew angry reactions from the public, consistent with a desire to avoid empathizing with an enemy (Folger & Pugh, 2002). In a more recent example, conservative Israelis espoused an explicit desire to *not* feel empathy in their interactions with Palestinians (Tamir, 2013).

A motivated model predicts that intergroup motives to decrease empathy should be at least partially driven by a sense of competition. In many cases, group membership itself creates such competition, for instance, when individuals perceive their own group as superior to others (Tajfel, 1982; Tajfel & Turner, 1979). However, bolstering ingroup identity need not always produce outgroup derogation (Brewer, 1999), implying that zero-sum competition should act above and beyond group identity in motivating empathy avoidance (Cikara, Bruneau, van Bavel, & Saxe, 2014). As such,

I discuss both general effects of group membership and moderating effects of competition on empathy avoidance.

#### Evidence.

**Situation selection.** Almost no work has directly tested the idea that intergroup motives cause observers to *select themselves out* of contact with outgroup targets' emotions, but one recent study provides preliminary evidence in this direction. Schumann et al. (2014) presented White observers with audio recordings in which another college student ostensibly described a difficult emotional event. Observers were further told that they could fast-forward the tape as much as they liked, providing a measure of observers' willingness to spend time engaging with the target's emotions. This was crossed with a manipulation of the target's race as Black or White. Interestingly, observers spent less time listening to outgroup, as compared to ingroup, targets, but this was only the case for observers with a fixed, as compared to malleable, theory of empathy (discussed further below). In the future, paradigms like this should be used to establish whether individual differences in prejudice or competitive settings accentuate avoidance of outgroup emotions.

**Attention modulation.** In stark contrast to the lack of data on situation selection, a wealth of evidence demonstrates that observers *divert attention* away from outgroup targets' internal states. For instance, observers learn less about reward or punishment contingencies by watching ethnic outgroup, as opposed to ingroup, targets receive shocks in a classical conditioning paradigm, consistent with a motivated account of vicarious conditioning (Olsson et al., 2014).

Another key example of attention modulation surrounds the phenomena of *dehumanization* and *infrahumanization*, or the denial of complex internal states to outgroup members (Haslam & Loughnan, 2014; Leyens et al., 2000). De- and infrahumanization can be thought of as circumscribed reductions in mind perception through which perceivers fail to weigh evidence that outgroup targets experience secondary emotions such as hope and jealousy or uniquely human internal states (Cuddy, Rock, & Norton, 2007; Epley et al., 2013; Harris & Fiske, 2006; Haslam & Loughnan, 2014; Leyens et al., 2000; Merola & McGlone, 2011; Vaes, Paladino, Castelli, Leyens, & Giovanazzi, 2003; Waytz et al., 2010). As mentioned above, mind perception serves as a precursor to mentalizing and experience sharing, and as such, motivated reductions in mind perception should diminish empathy. This is consistent with Bandura, Barbaranelli, Caprara, and Pastorelli's (1996) conception of dehumanization as licensing moral disengagement and callous, unempathic behavior toward outgroup members, as reflected in items such as “Some people have to be treated roughly because they lack feelings that can be hurt” (p. 374).

Dehumanization indeed appears to produce inattention to outgroup targets' minds. In one especially clever study of intergroup mind perception, Hackel, Looser, and Van Bavel (2013) capitalized on demonstrations of a tipping point at which observers decide that a face—when morphed from an inanimate doll to a human—reflects a mind (Looser & Wheatley, 2010). Hackel et al. found that this tipping point is higher for faces belonging to an outgroup, as opposed to ingroup, target, suggesting that observers require more bottom-up evidence of animacy in order to attend to outgroup members' minds. Priming measures further suggest that dehumanization affects atten-



tion to outgroup minds at an implicit level. For instance, images of objectified women reduce accuracy and speed in identifying words associated with humanness (Vaes, Paladino, & Puvia, 2011), whereas words associated with nonhuman animals speed recognition of racial outgroup targets (Goff, Eberhardt, Williams, & Jackson, 2008).

Consistent with a motivated model, inattention to outgroup minds intensifies under conditions of competition. For instance, individuals high in social dominance orientation (Esses, Veenliet, Hodson, & Mihic, 2008; Hodson & Costello, 2007) and those who identify highly with their group (Demoulin et al., 2009) experience strong competitive motives and are also more likely to dehumanize outgroup members. Situational features that intensify intergroup competition also prompt dehumanization. Perceptions that an outgroup is threatening (Maoz & McCauley, 2008; Viki, Osgood, & Phillips, 2013) or that a target does not like an observer (Bastian & Haslam, 2010), as well as reminders of ingroup violence toward an outgroup (Castano & Giner-Sorolla, 2006; Čehajić, Brown, & González, 2009; Leidner, Castano, Zaiser, & Giner-Sorolla, 2010; Tarrant, Branscombe, Warner, & Weston, 2012), all foster dehumanization.

Neuroscientific data converge on a similar view of blunted attention to outgroup targets' minds. Harris and Fiske (2006, 2007) demonstrated that the medial prefrontal cortex, a region associated with mentalizing, is engaged when observers attend to most social targets, but not to targets from derogated outgroups. Neural resonance with pleasure and pain is likewise dampened in response to outgroup targets (Avenanti et al., 2010; Gutsell & Inzlicht, 2010; Mobbs et al., 2009; Xu et al., 2009). Finally, when observers are assigned to a competitive minimal group, they exhibit preferential processing of ingroup, as compared to outgroup, members in the fusiform gyrus (Van Bavel, Packer, & Cunningham, 2011), a region associated with attending to faces.

**Appraisal.** Observers also *appraise* the emotions of outgroup members in ways that reduce empathy. This is consistent with moral disengagement theory (Bandura, 1999; Bandura et al., 1996), which holds that individuals justify harming targets by (a) minimizing the amount of suffering they believe targets experience and (b) derogating targets as deserving of this suffering (Staub, 1990). Observers avail themselves of these two strategies when faced with outgroup targets' affective states. For instance, Trawalter et al. (2012) recently documented that White observers believe Black targets suffer less physical pain from comparable injuries than White athletes, and Riva and Andrighetto (2012) found that observers perceived ethnic outgroup, as compared to ingroup, targets as experiencing less severe social and emotional pain. Similarly, Osofsky, Bandura, and Zimbardo (2005) demonstrated that prison guards—and especially executioners—minimize their perception of death-row inmates' suffering.

Observers also disengage from empathy by actively derogating outgroup targets, thus reappraising their suffering as just. Such reappraisal characterizes negotiation, war, and sports, and is bolstered by observers' sense of competition with targets. For instance, in athletic contexts, *goal involvement* describes players' personal investment in winning (following Nicholls, 1989). Goal involvement—whether measured or manipulated—in turn

predicts moral disengagement during competition (Sage & Kavussanu, 2007). Competition likewise increases moral disengagement among minimal groups (Rhodes & Brickman, 2011) and during violent conflicts (Leidner et al., 2010; Maoz & McCauley, 2008).

Finally, under competition, observers often appraise targets' suffering positively and even enjoy target misfortune. Such *counterempathy* is widespread: Targets' emotions elicit opposite reactions from observers as measured through self-report (Cikara et al., 2014; Yamada & Decety, 2009), facial expressions (Cikara & Fiske, 2012; van der Schalk et al., 2011; Weisbuch & Ambady, 2008), autonomic arousal (Lanzetta & Englis, 1989), and brain activity (Yamada, Lamm, & Decety, 2011). Counterempathy accompanies many competitive contexts, including negotiations (Martinovski, Traum, & Marsella, 2007), minimal groups (Masten, Gillen-O'Neel, & Brown, 2010), zero-sum interactions (Lanzetta & Englis, 1989), and sports fandom (Cikara, Botvinick, & Fiske, 2011; Hein et al., 2010; Levine, Prosser, Evans, & Reicher, 2005).

In sum, these data suggest that intergroup interactions—especially those that involve direct competition—induce observers to deploy attention and appraisal in ways that help them overcome empathy. Future work should examine whether observers also down-regulate intergroup empathy through sheer avoidance of outgroup members' affect.

Importantly, although a motivated model suggests that competition should drive observers to modulate their attention *away* from outgroup targets' emotions, this need not always be the case. Competition often requires individuals to pay close attention to outgroup targets, as reflected in the famous instruction (often attributed to Sun Tzu) to “keep your friends close but your enemies closer.” Some competitive interactions might require observers to engage mentalizing but not experience sharing, thus understanding their competitors' states without vicariously sharing them (Galinsky et al., 2008; Gilin, Maddux, Carpenter, & Galinsky, 2013; Mead & Maner, 2012). Future work should test this prediction and explore the role of competitive motives in differentially affecting empathic subprocesses.

## Approaching Capitalization

**Theory.** Several motives also render empathy beneficial and thus might drive observers to approach empathic engagement. First, in direct contrast to the affective costs produced by sharing others' suffering, observers emotionally benefit from sharing targets' positive states. This was not lost on Adam Smith (1790/2002), who suggested that observers who no longer enjoy something (e.g., a book they have read repeatedly) can reinstate positive affect by sharing it with someone to whom it is new: “We enter into the surprise and admiration which it naturally excites in him, but which it is no longer capable of exciting in us . . . and we are amused by sympathy with his amusement which thus enlivens our own” (p. 9). Behavioral (K. D. Smith, Keating, & Stotland, 1989), neuroimaging (Mobbs et al., 2009; Zaki & Mitchell, 2013), and field (Fowler & Christakis, 2008) studies bear out Smith's predictions that observers take on targets' positive emotions. It follows that targets' positive experiences should serve as attractor

states, motivating people to approach and *affectively capitalize* on empathy's benefits through positive empathy (Morelli, Lieberman, Telzer, et al., 2014; Morelli, Lieberman, & Zaki, 2014).<sup>3</sup>

According to a motivated model, observers should take advantage of positive empathy by selecting themselves into situations involving others' positive states, attending selectively to targets' positivity, or appraising targets' positive affect as intense and well deserved.

#### Evidence.

**Situation selection.** Two lines of study offer indirect evidence that observers do seek out targets' positive affect through situation selection. First, positive affect attracts people. Among the litany of well-being's adaptive consequences (Lyubomirsky, King, & Diener, 2005), observers find happy, as compared to unhappy, targets to be more physically (Diener & Fujita, 1995; Mathes & Kahn, 1975) and socially attractive (Kashdan & Roberts, 2004). Observers also believe that interactions with happy, as compared to unhappy, targets will be more rewarding (Harker & Keltner, 2001). These data suggest that target positivity draws observers in. They also serve as a complement to evidence (described above) that people avoid interacting with depressed targets (Coynne, 1976).

Second, observers appear especially prone to prosociality when they believe their good deeds will offer opportunities to capitalize on targets' positive emotion. In one classic demonstration, K. D. Smith et al. (1989) found that observers' likelihood of acting prosocially increased when they believed they would have opportunities to see how their help impacted targets, consistent with prosociality as an attempt to increase vicarious joy (but see Batson et al., 1991). Likewise, Barraza (2011) found that individuals' desire to volunteer tracked the amount of positive affect they believed prosocial actions would bring them. Connecting these findings, Morelli, Lieberman, Telzer, et al. (2014) and Zaki et al. (2014) found that individuals' tendency to share others' positive affect—as indexed by self-report and neural resonance—tracks their engagement in prosocial behaviors, suggesting that capitalization drives prosociality.

**Attention modulation.** Despite evidence that people generally *shift their attention* toward desirable and goal-relevant features of their environment (Balcetis & Dunning, 2006; Taylor & Brown, 1988), much less evidence suggests that observers specifically attend to targets' positive emotional cues in order to capitalize on them. That said, individuals who are motivated to feel positively do focus on others' positive cues. For instance, older adults—who evince a general desire to draw satisfaction from close social relationships (Carstensen, 1995)—preferentially attend to positive, as opposed to negative, faces (Isaacowitz, Wadlinger, Goren, & Wilson, 2006a, 2006b). Using an empathic accuracy approach, Gruber and colleagues documented similar effects in observers high in trait positive affect and mania risk. Individuals in both of these groups were selectively *inaccurate* about social targets' negative, but not positive, affect (Devlin, Zaki, Ong, & Gruber, in press; Dutra et al., 2014), consistent with a similar rose-colored attentional shift. Although indirect, these data suggest that a motivation to feel positively might drive observers' attention toward positive social cues with which they can empathize.

**Appraisal.** Little research has probed the extent to which people capitalize on others' emotions by *appraising* targets' positive affect as more intense. However, in a positive analogue to

derogation of suffering targets, the belief in a just world motivates observers to view targets who experience good fortune and positive affect as deserving of their fate. For instance, Olson, Banaji, Dweck, and Spelke (2006; see also Olson, Dunham, Dweck, Spelke, & Banaji, 2008) demonstrated that even young children attribute positive traits (e.g., friendliness and kindness) to targets who receive random windfalls. Numerous studies demonstrate that adults likewise heap praise on happy targets, judging them as having more positive personality traits, being more moral, and even being more likely to go to heaven than less happy targets (Harker & Keltner, 2001; King & Napa, 1998; Taylor, Lerner, Sherman, Sage, & McDowell, 2003). According to a motivated model, judging targets as deserving of positive outcomes allows observers to intensify their empathy and capitalize on targets' positive affect. Future work should directly examine whether people purposefully intensify their perceptions of others' positive affect and whether doing so facilitates capitalization.

### Approaching Affiliation

**Theory.** Even when empathy is painful, people often seek it out. Anytime an observer chooses to engage with a distressed friend or family member, he or she voluntarily subjects him- or herself to negative affect. Although paradoxical from a hedonic perspective, such behavior becomes sensible when considered in the broader scheme of human motivation (Higgins & Pittman, 2008). People commonly report the maintenance of strong personal relationships as a primary life goal (Baumeister & Leary, 1995; Gable, 2006; Ryff & Keyes, 1995), consistent with the evolutionary pressures of group living (see above).

A motivated model holds that observers should seek empathy even when it is painful, provided that such empathy allows them to *approach affiliation* and strengthen social bonds. Furthermore, observers should be most motivated to empathize with others when they feel socially isolated and thus crave affiliation. Finally, affiliative motives should be most salient when targets are desirable (e.g., high-status or socially close) affiliative partners.

Although I focus on cases in which affiliative motives increase the deployment of empathic processes, some of these effects might simply fall out of generalized social approach tendencies (Gable, 2006). That is, observers motivated to connect with others might not deliberately empathize but rather experience empathy as a side effect of seeking contact with targets. That said, it is interesting (and consistent with motivated empathy) that observers often strive for social connection by engaging more deeply with targets' internal states.

#### Evidence.

**Situation selection.** Existing studies provide only sparse and indirect measures of affiliative *situation selection*. For instance, when coping with stressors (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986; Rimé, Mesquita, Boca, & Philippot, 1991; Taylor et al., 2000) or experiencing happiness (Gable &

<sup>3</sup> Gable and colleagues (e.g., Gable & Reis, 2010) used the term *capitalization* to describe targets' attempts to maximize positive emotion (e.g., after receiving good news) by sharing their states with others. My use of this term is aligned with Gable's and represents the other side of a dyadic process through which sharing positive events enhances the well-being of both sharer and audience.

Reis, 2010), people reliably seek out social contact. In his classic studies of affiliation, Schachter (1959) informed students that they would receive either nonpainful (low-threat) or very painful (high-threat) shocks and then asked students whether they wished to wait for these shocks alone or in the company of others. Threat increased students' desire to wait with others, but this effect only held when those others would also experience painful shocks. This suggests that individuals under stress seek out not only social contact per se but contact with others' emotions. Decades later, Maner, DeWall, Baumeister, and Schaller (2007) found that individuals who had been socially excluded—a manipulation that heightens the need for social connection—also preferred to complete future tasks with others, as opposed to alone. Future work should more clearly establish whether and when affiliative goals drive observers to seek out targets' emotional cues in particular, in addition to social contact more generally.

**Attention modulation.** A more robust literature documents at least three ways in which affiliative goals *shift observers' attention* toward target emotions. First, attention to and mimicry of social targets fluctuate alongside observers' need for social contact, consistent with a need for engagement with others (C. M. Cheng & Chartrand, 2003; Pickett, Gardner, & Knowles, 2004). Decreasing social connection by rejecting observers increases their mimicry of targets (Lakin, Chartrand, & Arkin, 2008) and their accuracy about social targets' thoughts and feelings (Gardner, Pickett, Jefferis, & Knowles, 2005; Pickett et al., 2004). In an interesting expansion on this finding, DeWall, Maner, and Rouby (2009) demonstrated that rejection drives attention specifically to positive social cues (e.g., smiling faces), again consistent with a motivated shift toward affiliative opportunities. Stable individual differences in loneliness, need to belong, and decreased socioeconomic status, all of which increase psychological need for others, likewise increase accuracy for social cues (Kraus, Cote, & Keltner, 2010; Pickett et al., 2004) and anthropomorphism of nonsocial entities (Epley, Waytz, Akalis, & Cacioppo, 2008; Waytz, Cacioppo, & Epley, 2010). By contrast, satiating social need—for instance, by asking people to think about their close ties to friends and family—increases subsequent dehumanization of outgroup targets (Waytz & Epley, 2012).

Second, observers' belief that they can affiliate with targets intensifies empathic behavior. In a clever demonstration of this effect, Bavelas, Black, Lemery, and Mullett (1986) gave observers the impression that they were or were not in a target's line of sight; the target then injured himself and grimaced. Observers who believed they were visible to targets mimicked the target's pained expression more than those who believed they were occluded, suggesting that empathic mimicry, instead of being an automatic response to targets, can be a deliberate communicative signal of affiliation.

Other evidence for affiliative modulation of attention emerges from work on *outcome dependency*, or observers' beliefs that they will continue working or share outcomes with a social target. Outcome dependency increases observers' attention to individuating information about targets (Erber & Fiske, 1984; Newberg et al., 2001), their tendency to look at and mimic targets' affective cues (Gump & Kulik, 1997), and even their tendency to take on the moods they *believe* targets feel before meeting them (Huntsinger, Lun, Sinclair, & Clore, 2009). Finally, observers attend more to desirable affiliation partners: When encountering targets who are

physically attractive (Ickes, Stinson, Bissonnette, & Garcia, 1990), powerful, or otherwise high status (Snodgrass, 1985, 1992), observers evince heightened nonverbal sensitivity and empathic accuracy.

**Appraisal.** Although very little work has addressed whether affiliative motives also shift observers' *appraisals* of target affect, two investigations provide indirect evidence of such an effect. First, Nelson et al. (2003) found that although observers who are fatigued tend to find targets' affective displays inappropriate, this effect disappears when observers expect to interact with targets afterward. Second, Maner et al. (2007) found that observers induced to feel isolated find targets to be friendlier and more sociable. These data are consistent with motivated construal of target emotions, but they clearly only provide an early step in assessing the impact of affiliative desires on appraisal.

### Approaching Desirability

**Theory.** Even when empathizing affords neither good feelings nor opportunities to connect with others, it can nonetheless benefit observers through its *desirability*. People tend to view empathy as a positive trait (Schumman et al., 2014) and further tend to view themselves as reliably above average on many desirable traits, including empathy-relevant qualities such as generosity (Epley & Dunning, 2000). People benefit psychologically from this positive self-image (Taylor & Brown, 1988). As such, observers should relish opportunities to confirm their identity as high-empathy individuals, especially under contexts that highlight empathy's desirability.

Desirability refers to two related but distinct phenomena. First, empathy might be *personally* desirable, or consistent with observers' own values. To the extent that this is the case, consistency with one's values should be experienced as affectively fulfilling (Higgins, 1987; Sherman & Cohen, 2006) and can be a source of meaning even when it is painful (Frankl, 1963/1985). Second, even if individuals do not value empathy themselves, they may understand it as a *socially* desirable trait favored by others. If so, then evincing empathy should serve observers' strategic purpose of enhancing their social status. Under a motivated model, both of these characteristics should induce a motive to *approach the desirability* associated with empathizing.

#### Evidence.

**Situation selection.** As with the other approach motives described here, evidence about the effects of desirability is highly skewed: To my knowledge, no work has directly examined whether this motive drives observers to select situations in which they are likely to encounter target emotions.

**Attention modulation.** Past research has, however, documented effects of desirability on attention to target cues. The majority of this work focuses not on personal desirability (e.g., adherence to observers' own values) but rather on social norms promoting empathy. For instance, Tarrant, Dazeley, and Cottom (2009) demonstrated that the typical bias to empathize more with ingroup, as compared to outgroup, targets is eliminated when observers are told that their ingroup values empathy. Interesting analogues to social desirability are also documented in the domain of gender. Folk intuition suggests that women are more empathic than men (Ickes, 2003), and women often do score higher than men on self-reported empathy scales (see, e.g., Davis, 1983).



However, gender effects on empathy tasks are fragile and likely reflect the role of norms on motivated attention (Snodgrass, 1985, 1992). That is, women might outperform men on empathy tasks only when they believe such tasks tap skills associated with female gender roles and are thus motivated to do well (Briton & Hall, 1995). This is generally consistent with the idea of *stereotype lift*, under which individuals from groups associated with superior performance on a task do better on such tasks when reminded of their group identity (Walton & Cohen, 2003).

Consistent with this idea, Ickes, Gesn, and Graham (2000) and Graham and Ickes (1997) demonstrated that women's empathic accuracy advantage only holds if task performance is overtly framed as measuring empathy. Hall et al. (2009) documented similar effects, though only for accuracy about verbal social cues. K. Klein and Hodges (2001) further demonstrated that gender effects in an empathic accuracy task were eliminated when participants were paid for their performance. Thomas and Maio (2008) eliminated gender differences in accuracy by inducing heterosexual men to believe that women found social sensitivity to be attractive. These findings further suggest that desirability effects on empathic attention are fungible, motivated either by gender roles or by desirability induced through other social and monetary incentives.

**Appraisal.** Evidence for desirability-based *appraisal* also remains sparse. In one indirect but relevant study, Harmon-Jones, Peterson, and Vaughn (2003) reminded observers of their valuation of empathy and then induced them to remember (or not remember) a time that they had failed to be empathic. Observers reminded of their past empathic failures donated more time and money to distressed targets after this induction, consistent with a desire to compensate for past failures by engaging empathically (Zhong, Liljenquist, & Cain, 2009).

**Summary.** The foregoing evidence makes two broad points. First, data testing a motivated model of empathy are lopsided. For instance, scientists have robustly documented effects of pain avoidance and intergroup competition motives on appraisal of target affect, but they have left almost wholly unexplored whether perceivers also respond to these motives by selecting situations in order to avoid target affect entirely. By contrast, extant work strongly suggests that observers' motives to affiliate with targets and comply with social norms drive attention to targets' internal states but leaves unclear whether these motives also drive perceivers to up-regulate their appraisal of target emotions.

Second, where predictions made by a motivated model have been tested, they typically have been borne out. Evidence from diverse research domains suggests that motives powerfully and systematically drive observers to approach or avoid empathy through multiple regulatory strategies. These data make a strong case for expanding current models of empathy to place motivation in a central role. Incorporating motivation into the science of empathy holds far-reaching implications for both basic and applied science, to which I now turn.

### Implications of a Motivated Model

A motivated model synthesizes several related but often independent literatures to explain how empathy can be experienced as automatic while also varying fundamentally as a function of context. The basic insight—that adaptive motives pervade social affect

and determine when observers empathize—holds many implications for the scientific understanding of empathy. Here I discuss three such implications: (a) for basic theories of empathy, (b) for understanding psychiatric illnesses that feature reductions in empathy, and (c) for advancing empathy-building intervention science.

### Implications for Basic Theory

**Connections with existing theoretical models.** The idea that motivation affects social cognition and behavior is not new. Numerous models make contact with a motivated approach to empathy. Prior reviews have emphasized the context dependency of empathy, for instance, in intergroup settings (Cikara, Bruneau, & Saxe, 2011; Haslam, 2006; Haslam & Loughnan, 2014). Others have noted that neural resonance, far from being ubiquitous, is modulated by the contexts under which observers encounter targets (Bernhardt & Singer, 2012; Hein & Singer, 2008). Finally, a number of reviews have highlighted motivational effects on empathy-relevant constructs such as mimicry (Chartrand, Maddux, & Lakin, 2005; van Baaren, Janssen, Chartrand, & Dijksterhuis, 2009) and interpersonal accuracy (Funder, 1995; Ickes, 2011; J. Smith et al., 2011). A motivated model extends these contributions by specifying which motives prompt observers to seek out or avoid empathy and how they enact these motives through regulatory strategies.

A motivated model also extends prior theoretical work by providing a mechanism for explaining variance in empathy across situations. For instance, Preston and de Waal (2002) explained the well-known effects of similarity and closeness on empathy by stating that social distance modulates the *richness* with which observers represent targets' internal states. Representational richness, in turn, drives experience sharing and empathic behavior. However, in this model (and other, similar approaches), the mechanisms through which social factors alter representational richness remain underspecified. A motivated approach suggests that social distance and related constructs first alter observers' motives to empathize or not. These motives in turn drive strategies that allow observers to purposefully alter the richness with which they represent target states.

**Motivation and automaticity.** Evidence for empathy's motivated characteristics does not supplant the idea that empathy can be and often is automatic. Empathic processes are best understood as reflecting dense, bidirectional interactions between motivations and automatic affective reactions. For instance, experience sharing might initially develop in children as a ballistic, undifferentiated response to the emotions of all targets. However, over time, children learn and internalize social rules, such as group membership, that produce motives to feel empathy in some cases but not others (Dunham, Baron, & Banaji, 2008; Rhodes & Brickman, 2011). These motives can "tune" social and affective processes even if those processes begin as relatively stable and automatic (Greene, 2013; Tomasello, 2009).

Likewise, motives need not suppress or enhance automatic empathic processing from the outside. They can instead alter—over a long time course—the characteristics of observers' automatic responses to targets. Consider the case of an emergency-room physician. The first time she faces a patient with a gruesome wound, this doctor may need to purposefully down-regulate expe-

rience sharing in order to do her job. However, the 1,000th time she encounters a patient, such conscious modulation might no longer prove necessary. Instead, her long-term goals might make their way into the structure of her automatic empathic responses, obviating the need for an active motive to operate every time she encounters target distress. Again, this reflects the broader idea that motives and regulatory strategies not only operate on emotions that have already been experienced but also alter the initial generation of emotion in many cases.

**Self- versus other-oriented motives.** Finally, although empathy is an interpersonal phenomenon, I have focused primarily on the personal costs and benefits that shift observers' desires to engage empathically. People are of course also driven by their desire to benefit or harm social targets (Bolton & Ockenfels, 2000; Camerer & Thaler, 1995). These social preferences likely combine with personal motives to drive observers toward or away from empathy. Moral disengagement in intergroup competition is one example of such an effect, but there are many others. For instance, if an observer hears about a natural disaster in a far-flung destination and wishes to benefit the victims of that disaster, she may purposefully expose herself to affective cues (e.g., news reports or firsthand accounts) likely to spur empathy. As described above, paternalistic helping often requires observers to take the opposite tack: Observers must reduce their empathy for a target's current emotion in order to benefit them in the longer term, thus enacting an other-oriented empathic avoidance motive.

Other-oriented motives to experience or avoid empathy are consistent with Batson's (1991, 2011) seminal empathy-altruism hypothesis. On Batson's view, observers help others because they experience powerful other-oriented concern for targets' well-being (empathic concern) as opposed to self-oriented negative affect (personal distress). A motivated model extends this view to suggest that other- and self-oriented motives might further drive observers' motives to engage in empathy in the first place.

Another relevant construct when considering other-oriented empathic motives is compassion (cf. Goetz et al., 2010). Compassion is an approach-oriented state in which observers focus on targets' suffering with the goal of reducing that suffering. Unlike experience sharing, compassion does not necessitate that observers feel emotions congruent with those of targets. Consistent with this idea, the experience of compassion does *not* produce indices of experience sharing, such as neural resonance (Klimecki, Leiberg, Lamm, & Singer, 2013; Klimecki, Leiberg, Ricard, & Singer, 2014; Weng et al., 2013), and it is subjectively associated with positive, as compared to negative, affect. Broadly speaking, compassion and empathic concern can be thought of as observers *feeling for* social targets without *feeling as* those targets do.

Compassion and empathic concern connect strongly with a motivated empathy framework. This is because empathic approach motives (e.g., the goal to experience empathy for ingroup members) likely share evolutionary roots with compassion. For instance, the same caregiving instincts that give rise to compassion (cf. Goetz, Simon-Thomas, & Keltner, 2010; Preston, 2013) likely also prompt perceivers to increase their general engagement with targets' emotions through experience sharing and mentalizing.

**Empathy's (dis)utility.** Finally, a number of scholars have recently suggested that empathy represents a faulty source of moral judgments and prosocial behavior (Bloom, 2013; Loewenstein & Small, 2007; Pizarro, Detweiler-Bedell, & Bloom, 2006; J.

Prinz, 2011a, 2011b).<sup>4</sup> These writers pointed out that emotional responses to targets often produce indefensible decisions, such as helping individuals more than groups and favoring similar versus dissimilar targets. On this view, optimal moral decision making requires impartiality, which empathy—and especially experience sharing—hampers. Indeed, affective reactions often prevent people from making moral decisions that maximally benefit others (Greene & Haidt, 2002), and individuals high in trait empathy are most likely to exhibit affective biases in their moral decision making (Gleichgerricht & Young, 2013).

This argument is compelling and sound in many cases, but a motivated model suggests that it is also incomplete. To the extent that empathy is automatic and uncontrollable, it cannot serve as a reliable guide for moral decision making. But if empathy is at least partially under observers' motivational control, then observers should be able to guide their empathic responses so as to maximally benefit others. In fact, P. Singer (2010) promoted just such utilitarian tuning of empathy by encouraging observers to focus on the suffering of targets they cannot and may never encounter personally, thus regulating empathy in a manner consistent with individuals' moral principles.

A motivated model does not suggest that empathy should be the only source of moral decision making, but it does suggest that interpersonal emotions need not get in the way of such decision making either. Instead, empathy can serve as a vital psychological prompt to improving others' well-being.

## Implications for Understanding and Treating Psychiatric Disorders

A motivated model can enrich scientific understanding of psychiatric illnesses that feature deficits in empathic processes. Two such illnesses—autism spectrum disorders (ASD) and psychopathy—have received an enormous amount of research attention. In both cases, popular theories hold that individuals suffering from these illnesses might be incapable of properly deploying mentalizing or experience sharing. A motivated model of empathy complements this idea by suggesting that ASD and psychopathy might also be characterized by atypical reductions in *motives* to think about or share social targets' states.

**Autism.** Broadly speaking, theorists characterize ASD through difficulties in mentalizing and social interaction (Baron-Cohen, 1994). Theoretical models commonly hold that these symptoms reflect reduced *capacity* for this empathic subcomponent. For instance, the most famous term used to describe mentalizing deficits in ASD, *mindblindness*, draws comparison to an insurmountable sensory impairment. In his classic book by the same name, Baron-Cohen (1994) gave readers an evocative description of what mindblindness might be like:

At the top of my field of vision is the blurry edge of a nose, in front are waving hands. . . . Around me bags of skin are draped over chairs, and stuffed into pieces of cloth, they shift and protrude in unexpected ways. . . . Imagine that these noisy skin bags suddenly moved towards you, and their noises grew loud, and you had no idea why, no way of explaining them or predicting what they would do next. (p. 5)

<sup>4</sup> This idea connects interestingly with the outrage prompted by President Obama when, in nominating Sonia Sotomayor to the Supreme Court, he named empathy as a valuable quality for a judge (Brooks, 2009).



This description, in addition to being bleak, also shares with much other work on ASD (Dapretto et al., 2006; Leslie, 1994; Leslie, Friedman, & German, 2004) a focus on reduced capacity to empathize as a key feature of this disorder. Although likely not the intention of these researchers, such language implies that individuals with ASD might have a constitutional “cap” on how well they can reason about others’ minds.

A motivated model suggests a different view of ASD. As opposed (or in addition) to reflecting *inabilities* to understand or share others’ emotions, ASD might be characterized by reduced *motivation* to engage empathically. This idea has recently gained traction. For instance, Chevallier, Kohls, Troiani, Brodtkin, and Schultz (2012) suggest that individuals with ASD, as compared to typically developing individuals, may experience social stimuli as less motivationally salient. This is supported by data demonstrating that these individuals demonstrate a blunted orienting response to social cues (Dawson, Meltzoff, Osterling, Rinaldi, & Brown, 1998) and reduced behavioral and neural responses to rewarding stimuli (Kohls et al., 2013) and social reward in particular (Delmonte et al., 2012; Kohls, Chevallier, Troiani, & Schultz, 2012; Lin, Rangel, & Adolphs, 2012).

A motivated model also suggests that when individuals with ASD are motivated to process social cues, their social cognitive acuity should come to approximate those of typically developing individuals. At least some evidence supports this prediction. For instance, when individuals with ASD are explicitly oriented to social cues or when they encounter motivationally relevant social targets such as caregivers, they demonstrate typical behavioral performance (Kahana-Kalman & Goldman, 2008; Senju, Southgate, White, & Frith, 2009) and levels of activity in brain regions associated with mentalizing and social attention (K. Pierce, Haist, Sedaghat, & Courchesne, 2004; Wang, Lee, Sigman, & Dapretto, 2007). Furthermore, pairing social behaviors (e.g., eye gaze and joint attention) with external reinforcements—thus jump-starting the motivational relevance of such behaviors—successfully increases social attention among individuals with ASD (Hwang & Hughes, 2000; Whalen & Schreibman, 2003).

**Psychopathy.** Psychopathy is often considered a mirror reverse of ASD because individuals with psychopathy—unlike those with ASD—can mentalize about targets but typically fail to share targets’ experiences and thus engage in callous and antisocial behavior (Blair, 2005; Blair, Jones, Clark, & Smith, 1997). Like ASD, psychopathy has been characterized as a stable inability to share others’ states rooted in structural and functional neural abnormalities (Decety, Chen, Harenski, & Kiehl, 2013; Glenn & Raine, 2009; Spiecker, 1988).

However, as with ASD, deficits in motivation, as opposed to ability, appear to characterize psychopathy. In one recent study, Arbuckle and Cunningham (2012) found that self-reported psychopathic traits tracked reduced prosociality when observers interacted with strangers but not when they interacted with members of their own group. Building on this finding, Gervais, Kline, Ludmer, George, and Manson (2013) demonstrated that self-reported psychopathic traits predicted individuals’ likelihood of defecting against a social target in a game theoretic task only when that target evinced low social value, either by being irritating or holding little common ground with the participant. Meffert, Gazzola, den Boer, Bartels, and Keysers (2013) found that prisoners with psychopathy, as compared to healthy controls, exhibited reduced neural resonance in response to social targets in pain.

However, when given explicit instructions to empathize, these same prisoners exhibited levels of neural resonance comparable to that of control participants. This dovetails nicely with a recent study demonstrating similar effects of instructions on individuals high in trait narcissism (Hepper, Hart, & Sedikides, 2014).

This groundswell of data calls for a reinterpretation of empathic deficits. Consistent with a motivated model, ASD and psychopathy likely represent decreased empathic approach motives or increased empathic avoidance motives. A motivated model of these disorders need not replace more traditional capacity-centered models. Instead, these views complement each other. Specifically, a lack of motivation early in development might cause individuals with ASD or psychopathy to chronically select themselves out of empathy-inducing situations, attend less to social cues, or appraise social cues in ways that reduce empathy. These chronic preferences, in turn, could reduce the amount of practice individuals have interpreting and responding to social cues. Finally, reduced time on task could limit these individuals’ ability later in the developmental time course (cf. Chevallier et al., 2012).

Future work should explore and specify exactly which empathic motives—as outlined above—are most affected in each disorder and how motivational reductions translate into later challenges to ability. Such work could both reframe basic scientific understanding of these disorders and update models of diagnosis and treatment.

## Implications for Interventions

A core question surrounding empathy is whether it represents an exhaustible or renewable psychological resource. Are individuals bound by hard limits on the amount they can empathize, or can they grow their empathic capabilities through training? Interesting sociological data support the idea that empathy might be flexible. Konrath, O’Brien, and Hsing (2011) recently documented *decreases* in college students’ self-reported empathy scores over the last 40 years. By contrast, Pinker (2011) suggested that large-scale reductions in violence throughout history follow from an *increase* in empathy, especially toward socially distant others. Although running counter to each other, these findings converge to suggest that empathy is malleable on a broad scale.

How, then, could one intervene to increase empathy? Empirically supported attempts to do so have come in at least four forms. First, Batson and many others have used perspective-taking exercises to increase observers’ empathy during experimental sessions (Ames, Jenkins, Banaji, & Mitchell, 2008; Batson, 1991, 2011; Coke & Batson, 1978; Davis, Conklin, Smith, & Luce, 1996; Stürmer, Snyder, & Omoto, 2005). Second, a few existing long-term interventions—typically targeted toward specialized populations such as physicians (Riess, Bailey, Dunn, & Phillips, 2012; Riess, Kelley, Bailey, Konowitz, & Gray, 2011) or individuals with autism (Golan & Baron-Cohen, 2006; Hadwin, Baron-Cohen, Howlin, & Hill, 1996)—focus on explicit training in mentalizing, for instance teaching perceivers associations between target facial expressions and emotions. A third strategy that has gained recent popularity adapts Buddhist practices of compassion meditation to increase subjective empathy, neural resonance, and prosociality (Klimecki et al., 2014; Leiberg, Klimecki, & Singer, 2011; Weng et al., 2013). Finally, although it has yet to be used in a concerted intervention, some evidence suggests that immersion in narratives,

for instance, through reading fiction, can enhance both mentalizing and experience sharing (Kidd & Castano, 2013; Mar & Oatley, 2008; Mar, Tackett, & Moore, 2010).

By and large, these approaches—especially the two most popular strategies, perspective-taking exercises and mentalizing training—reflect dominant theoretical models of empathy. For instance, perspective taking presumably increases the richness with which observers represent targets' states. Consistent with Preston and de Waal's (2002) model, this richness should increase observers' tendency to deploy automatic experience-sharing mechanisms. Likewise, if mentalizing is a skill that people will deploy whenever they are able, then simple training regimens should suffice to bolster such skills.

However, both of these approaches also exhibit critical limitations. For instance, little evidence supports the use of perspective-taking exercises to produce chronic or long-term change in empathy. Moreover, perspective taking may be least useful when it is most needed, such as in situations of conflict and competition. In such cases, observers might not wish to take others' perspective (Tamir, 2013), and doing so can actually worsen their impressions of outgroup members (Bruneau & Saxe, 2012) or increase their willingness to engage in immoral intergroup behavior (Epley, Caruso, & Bazerman, 2006; J. R. Pierce, Kilduff, Galinsky, & Sivanathan, 2013). Mentalizing training, by contrast, sometimes does produce long-term change, but these effects are often local, improving specific emotion-recognition skills without affecting empathy more broadly (Golan & Baron-Cohen, 2006; Hadwin et al., 1996; Hadwin, Baron-Cohen, Howlin, & Hill, 1997).

**Motivation-based interventions.** The data reviewed here suggest a complementary target for intervention: increasing observers' *motivation* to engage empathically. Motivation-based interventions are not new and characterize both classic and modern social psychological approaches to increasing ethical, healthy, and adaptive behavior (Lewin, 1952; D. Miller & Prentice, 2013; Yeager & Walton, 2011). Such interventions modulate approach and avoidance motives through techniques such as social influence (Cialdini, 2007; Goldstein, Cialdini, & Griskevicius, 2008), cognitive dissonance induction (Aronson, Fried, & Good, 2002; Stone et al., 1994), and values affirmation (Cohen, Garcia, Apfel, & Master, 2006; Cohen, Garcia, Purdie-Vaughns, Apfel, & Brzustoski, 2009).

Similar approaches could be used as psychological levers to strengthen empathic motivation. For instance, normative information could increase empathy's social desirability, and dissonance reduction or affirmation could increase its personal value. At least two of these techniques have already been used in short-term laboratory studies. As reviewed above, empathy-positive social norms increase individuals' willingness to empathize with outgroup members (Tarrant et al., 2009), and prosocial norms likewise induce personal generosity (Fowler & Christakis, 2010; Nook, Ong, Morelli, Mitchell, & Zaki, 2014). Similarly, values affirmation increases individuals' willingness to compromise with targets with whom they disagree politically (Cohen et al., 2007).

Motivational interventions can also decrease avoidance of empathy, for instance, by helping observers down-regulate some of the emotions that typically render empathy unappealing. Such a strategy has recently been adopted in the domain of intergroup conflict. Halperin et al. (Halperin & Gross, 2011; Halperin, Porat, Tamir, & Gross, 2013) found that reappraisal of conflict-related

emotions increased Israeli observers' willingness to endorse humanitarian aid for and compromise with Palestinian targets. Likewise, more generally framing empathy, even when it produces negative affect, as useful to maintaining social bonds and managing conflicts might attenuate empathic avoidance motives (Tamir, 2009).

A final way to decrease empathic avoidance is through changing observers' beliefs about empathy. Ironically, evidence favoring empathy's automaticity might also suggest that it is stable and unchangeable. This mirrors the *entity mindset* that Dweck and colleagues find to induce avoidance of intellectual and social challenges (Dweck, 2006; Dweck & Leggett, 1988). By contrast, promoting the belief that (a) empathy is often challenging but that (b) empathic abilities are *not* fixed, but rather malleable, might reduce empathy avoidance, especially when empathy is most difficult. In a recent demonstration of this approach, Schumman et al. (2014) found that inducing a malleable theory of empathy increased observers' willingness to spend time listening to an outgroup members' emotional story and to engage in empathy even when it promised to be painful (e.g., listening to cancer patients in a support group).

## Conclusion

Empathy is a vital emotional force that scaffolds everything from close relationships to large-scale cooperation. People often experience empathy as unavoidable and automatic, but empathy is also powerfully context dependent, waxing and waning as a function of both personal and situational factors. Scientists have long recognized empathy's simultaneous automaticity and context dependency, but they have struggled to reconcile these countervailing findings. Highlighting empathy's *motivated* nature resolves this tension. As with other affective states, motives guide our willingness to empathize and shape the structure of empathic responding. Incorporating these motives into research and theory can restructure the way scientists conceive of empathy, opening numerous new directions for understanding when empathy fails and how to maximize empathy when it does not come naturally but is most needed.

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