The ends of empathy:

Constructing empathy from value-based choice

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Abstract

Empathy, or the ability to understand and resonate with the experiences of others, has long been considered by philosophers and scientists to be an important part of human morality. We present a new framework that explains empathy as resulting from motivated decisions. Drawing on models of cybernetic control, value-based choice, and constructionism, we suggest that empathy shifts depending on how people value and prioritize conflicting goals. We generate novel predictions about the nature of empathy from the science of goal pursuit, and address its apparent limitations. Empathy appears less sensitive to suffering of large numbers and out-groups, leading some to suggest that empathy is an unreliable ethical guide. Whereas these arguments assume that empathy is a limited-capacity resource, we suggest that apparent limits of empathy reflect byproducts of domain-general goal pursuit. Arguments against empathy reflect a misguided essentialism: they mistake our own choices to avoid empathy for intrinsic features of empathy, treating empathy as a capricious emotion in conflict with reason. We suggest that empathy results from a *rational decision*, even if its rationality is bounded, as in many decisions in everyday life. Empathy may only be limited if we choose to avoid pursuing empathic goals.

"Empathy isn't just something that happens to us—a meteor shower of synapses firing across the brain—it's also a *choice* we make: to pay attention, to extend ourselves. It's made of exertion, the dowdier cousin of impulse."

–Leslie Jamison (2014), *The Empathy Exams*

In the summer of 2016, empathy went viral. The world learned about Harambe, a silverback gorilla in the Cincinnati Zoo who was shot and killed by zookeepers in an attempt to save the life of a child who had fallen into his enclosure. In the aftermath of the incident, people around the world expressed support for Harambe in a variety of ways, ranging from social media posts to charitable donations to Harambe tattoos. Empathy for Harambe became a meme in its own right. On the other hand, many people appeared to lack empathy for the zookeepers, the child, and the child's mother, to the point that some even issued death threats. This example reveals a broader point about empathy (and the lack thereof): it can feel effortless, contagious, a *passion* to which we are subject, rather than something we choose or control.

Empathy—our ability to understand and resonate with the experiences of others—is typically considered an emotion, which can entail the conceptual baggage that many people associate with emotion. People often see emotions as passions that are out of our control, as something that happen to us. This idea has much precedent. The term derives from the Greek *empatheia,* which takes feeling or passion (*pathos*) and directs it at or into (*em*) someone else; this was adapted to the German *Einfühlung* ("feeling into"), and translated into English as *empathy* (Wispe, 1987). These traditions emphasize continuity of empathy with emotions, and in so doing, cast empathy as passive rather than active. Of course, many accounts suggest that emotions are active constructions, not passive elicitations (e.g., Barrett, 2013; Cameron, Lindquist, & Gray, 2015; Cunningham & Kirkland, 2012); nevertheless, the analogy between empathy and emotion draws in stereotypes of emotional processes as generally automatic and uncontrollable. By framing empathy as a passion to which people are subjected as *patients,* these

approaches minimize the idea that people can be *agents* of their own empathy and suggest a particular way of explaining why empathy waxes and wanes. If empathy is compelled rather than chosen, then variation in empathy must be due to intrinsic features of empathy itself, rather than the motivations, goals, and values of the people who make empathic decisions.

In the current paper, we present a new framework that highlights this neglected idea that empathy can be chosen rather than compelled. We draw upon principles of cybernetic control, value-based choice, and constructionism to present a motivational account of empathy. Rather than treating empathy as an emotion that is present or absent, we suggest that empathy is the product of a *dynamic decision process* that iterates over time as people integrate competing goals. It's not that people have empathy and then simply decide to use or regulate it in certain ways; rather, we suggest that the process of empathizing itself reflects a value-based decision that occurs quickly and unconsciously over time as people assign subjective value to competing considerations. These can include many of empathy's benefits, such as building social relationships and upholding moral norms, and many of empathy's costs, such as expending material resources and opening oneself to risk of harm.

The central contribution of our framework is shifting attention from empathy *per se* to the motivations, goals, and values that decision-makers weigh during empathy-relevant situations. Empathy, according to this approach, is constructed as the output of a number of considerations. Paradoxically, we maintain that in order to understand empathy, we need to focus on the various inputs that construct empathy and less on empathy itself. Our approach is constructionist because it emphasizes how empathy, like other emotions and mental states, are active inferences that we make about the world in order to act effectively (Barrett, 2017). It also resists the tendency to essentialize empathy as a natural kind, and instead focuses on domain-level principles of

valuation and goal pursuit that undergird empathy and other mental processes (see also Decety &
Cowell, 2014a, on the role of domain-general processes in empathy).

Our motivational framework is designed to answer a foundational question about
empathy: to what extent is the scope of empathy fixed or flexible, amenable to individual control
and regulation? As we will discuss, there have been some initial forays into addressing the
motivation-capacity distinction (e.g., Keysers & Gazzola, 2014) and particular motivations (e.g.,
Zaki, 2014), but no work that has attempted to understand the how, when, and why of motivated
empathy regulation. Our approach revises understanding of features of empathy, such as
insensitivity to mass suffering and out-groups, that are often taken to indicate that empathy is a
limited-capacity resource. Does empathy erode because we are *unable* to feel or because do not
want to pursue empathic goals? Is it what we feel, or what we do, that is important? If boundaries
of empathy reflect basic tradeoffs inherent to goal pursuit, and are flexible rather than fixed, then
this qualifies ongoing debates over the utility of empathy. Rather than focusing on whether
empathy is a good or bad experience, we should consider how and why people *choose* to regulate
their empathy in different ways. Next, we outline our framework, then describe how it generates
novel predictions and can explain empathy lapses and conclude by suggesting what this model
entails for debates about empathy's use in everyday life.

Defining Empathy and Choice

Empathy is a difficult construct to define (Batson, 2009), to the point that some have
suggested that the term be dispensed with entirely (Decety & Cowell, 2014a), whereas others
think the term can provide a useful umbrella to cover a range of related processes sharing a
common mechanism (e.g., perception-action coupling; de Waal & Preston, 2017). We suggest
the boundaries of what counts as empathy are fuzzy, as it may not be a natural kind: consistent

with constructionism (Cameron et al., 2015; Kirkland & Cunningham, 2012), empathy is likely to share a number of domain-general processes with other mental states. We focus primarily on experience sharing, the "emotional empathy" that involves resonating with the experiences of others. Although experience sharing has earlier precursors in more rudimentary forms of mirroring and contagion (de Waal & Preston, 2017), we focus here on the more full-blown, "true empathy" (Preston & Hofelich, 2011) that entails resonance with another's state with the maintenance of a self-other distinction (de Vignemont & Singer, 2006). Experience sharing is distinguished from perspective-taking (i.e., "cognitive empathy") and compassion (Decety & Cowell, 2014; Singer & Klimecki, 2014), although in everyday situations these are likely co-active (Zaki & Ochsner, 2012) given the mechanism they share (de Waal & Preston, 2017). We focus on experience sharing because it is usually seen as automatic and not a matter of choice, and because it has been the target of critique (e.g., Bloom, 2016; Prinz, 2011). However, given that motivation pervades all forms of cognition (Cunnigham & Zelazo, 2007), our framework could be extended to cover motivational variation in compassion and perspective-taking as well.

We stipulate that whether we empathically resonate with others results from how we prioritize competing goals—some of which are more focused on self (e.g., avoiding material cost), some of which are more focused on others (e.g., maintaining social relationships). We suggest that the entire decision sequence—both the prioritization of some goals over others as well as the affective consequence of resonating with another person—qualify as "empathy". This framing collapses classical Western distinctions between emotion vs. reason (Kirkland & Cunningham, 2012; Pessoa, 2008) and automaticity vs. control (Van Bavel, Xiao, & Cunningham, 2012). Although it might seem counter-intuitive to consider empathy as resulting from choice rather than as a passive automatic reaction, we suggest that this reflects a restrictive

definition of *choice* that excludes the implicit and unconscious processes that shape subjective valuation of goals. Next, we outline principles of cybernetic control and value-based decision-making to illustrate what we mean by choice and how empathy can be an example of it.

Control as Choice and Valuation

When we say that empathy results from value-based choice, you might think of dilemmas such as *Sophie's Choice*, in which a mother must choose which of her two children will be put to death lest they both be killed. Although some empathic choices may be like this, with conscious deliberation, we submit that they are not represent the majority. Consider, by contrast, the surgeon who spontaneously exhibits little empathy for her patients (Decety, Yang, & Cheng, 2010), or the pedestrian who quickly crosses the street to avoid a homeless man (Pancer et al., 1979). These too are choices, even if there is little consciousness involved.

We use *choice* to represent domain-general goal pursuit as captured in cybernetic models of control (e.g., Carver & Scheier, 1998; Gross, 2015; Moors, Boddez, & De Houwer, 2017; Saunders & Inzlicht, 2018) and value-based choice (e.g., Berkman, Hutcherson, Livingston, Kahn, & Inzlicht, 2017; Hutcherson et al., 2015). Cybernetic models define control as managing priorities to facilitate goal pursuit (e.g., Carver, 2015; Carver & Scheier, 1990, 1998; Wiener, 1948): *choice* means valuing and selecting some goals over others (see also Fujita, Trope, Cunningham, & Liberman, 2014). Such models have been used across disciplines to capture goal pursuit in any system in which a goal-environment discrepancy can be represented (e.g., robots; Carver, 2015). Intriguingly, if empathy can be defined functionally as goal pursuit, then it can be instantiated in agents that lack the biology or consciousness seemingly required for empathy.

According to cybernetic principles, goal-oriented decisions operate in feedback loops that involve 1) setting goals, 2) monitoring for discrepancies between goals and current states of the

environment, and 3) implementing behavior to minimize these conflicts (Carver, 2015). First, an

agent must set a goal: a representation of a desired future state (Gollwitzer & Bargh, 1999;

Mann, de Ridder, & Fujita, 2013; Kruglanski et al., 2002). Second, the agent monitors for

conflicts between the goal and the current state of the environment. Third, because conflicts are

aversive (Inzlicht, Bartholow, & Hirsh, 2015), any detected conflicts lead the agent to implement

behavior change that reduces such discrepancies. The loop iterates until the discrepancy is

eliminated. For instance, imagine the case of the child struggling to swim in a shallow pond

(Singer, 1972). When you first notice the situation, you are likely confused and unclear about

what the child needs. If the situation activates a goal to understand the child's experiences, this

creates a conflict between the goal and your lack of knowledge. Noticing this conflict will be

aversive, even if only slightly, and should motivate you to reduce it—in this case, by attempting

to empathize with the child. There are other ways to reduce this conflict, such as shifting away

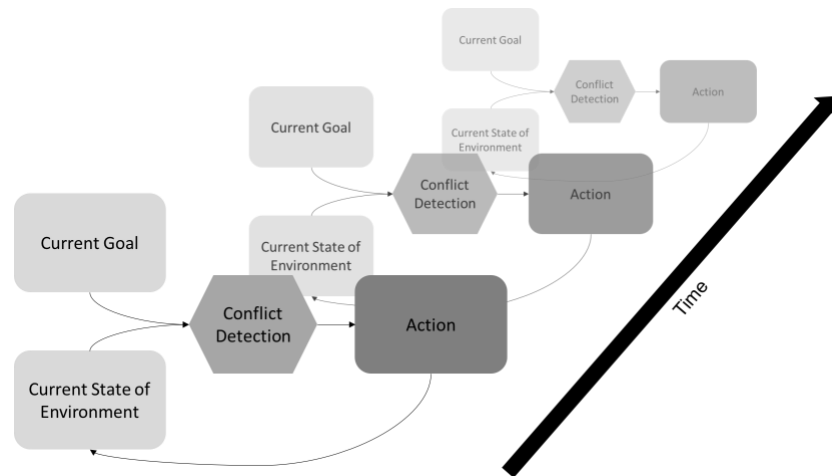from the goal to empathize. Figure 1 depicts a cybernetic loop extending over time.

Figure 1. A basic cybernetic loop, iterating until the discrepancy is resolved (cf. Gross, 2015).

Cybernetic principles explain how people select between competing lower-level goals to

pursue higher-level goals. This feature differentiates our framework from previous motivated

empathy approaches, by explaining *how* different motivations interact to produce empathy.

Figure 2 depicts a hierarchical cybernetic control model (e.g., Carver & Scheier, 1998; Gross, 2015; Saunders & Inzlicht, 2018): Goal pursuit at lower levels can satisfy or frustrate goal pursuit at higher levels. Empathizing with another person may satisfy the long-term goal to be moral but obstruct the long-term goal to minimize effort. Moreover, feelings of effort during lower-level goal pursuit can signal that other goals may be more pressing (Carver, 2015; Hockey, 2013; Inzlicht, Schmeichel et al., 2014; Kurzban, 2016; Saunders, Milyavskaya, & Inzlicht, 2015; Saunders & Inzlicht, 2018). If people believe that pursuing the current lower-level goal is satisfying higher-level goals and not overly effortful, they may increasingly value this goal; but if not, then devaluation of this goal may occur. Subjective value integrates across metrics to indicate the degree to which a course of action is rewarding (cf. Hutcherson et al., 2015) and is used to prioritize competing goals (Berkman et al., 2017; Shah et al., 2002).
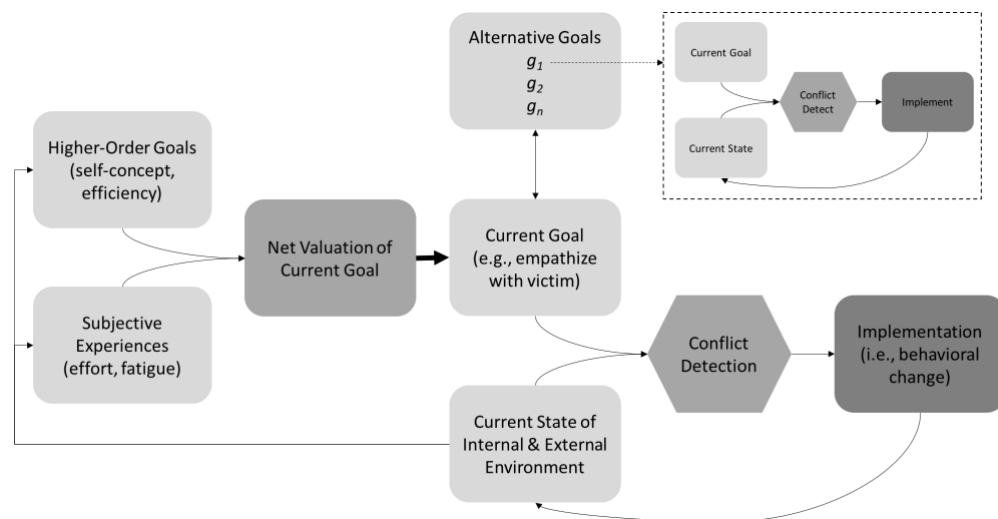

Figure 2. *Hierarchical model of cybernetic control (see also Saunders & Inzlicht, 2018). The lowest level involves pursuit of a current goal. The current goal is compared against the environment. If conflict is detected, behavioral change is implemented until the conflict is resolved. Lower-level goal pursuit feeds into higher-order goal selection, depicted on the left. The current environment shapes subjective experiences (e.g., effort) and pursuit of higher-order goals (e.g., efficiency). Effort can signal that the current goal is suboptimal; intrinsic importance of the current goal can signal that it is worth pursuing. If the value of the current goal is high, the current goal may be re-engaged; if value of the current goal is low, an alternative goal may be selected. The call-out box represents an alternative goal; if priorities are shifted to this alternative, it will become more relevant and receive greater attention during goal pursuit.*

According to cybernetic models, multiple lower-order control loops can be active simultaneously but must be prioritized relative to each other. These alternative goals are depicted in the upper right of Figure 2 with the call-out box indicating a similar lower-level control loop for an alternative goal, g_1 (e.g., the goal to avoid costs of time and money). Continuing with the shallow pond case, if attempting to empathize with the child is deemed to conflict with higher-order goal pursuit (maybe you think empathy interferes with moral principles), or if empathy feels too effortful, you may devalue empathy and shift to an alternative goal such as g_1: getting to your job interview on time. On the other hand, if empathy is important to your self-concept, then empathy is consistent with this higher-level goal, leading you to increasingly value the lower-level goal and devote further attention to pursuing it (and away from thoughts of how costly empathizing might be). Importantly, in selecting between lower-level goals, people need not be thinking of increasing empathy *per se*. In response to the shallow pond case, one person's conflict might be between maintaining social reputation and getting to an interview on time, and which of these wins out will determine whether that person empathizes or not.

The cybernetic approach allows for processes often discussed in constructionist models, such as core affect and conceptualization (e.g., Barrett, 2013; Cameron, Lindquist, & Gray, 2015; Lindquist, 2013). Many cybernetic approaches suggest that core affect (e.g., valence, arousal) can reflect both valuation of the current state of the world (Gross, 2015) as well as the pace of goal pursuit relative to other possibilities for action (Carver & Scheier, 1998). Similarly, conceptualization can shape the valuation of a goal over time as more information about a situation is brought to bear to iteratively reprocess its meaning (Cunningham & Zelazo, 2007). This can explain not just whether people prioritize empathic goals in a binary, "winner-take-all" fashion, but also variation in intensity and duration of empathic resonance. Our framework is

inherently temporal (see also Kirkland & Cunningham, 2012), emphasizing how goal pursuit is continuously managed over time. As noted above, experiences during goal pursuit (e.g., effort, aversiveness), and the conceptual meaning assigned to them, can shape whether people continue to prioritize empathic goals or not, and so the intensity and duration of empathy as an affective outcome will depend on the success of goal pursuit and other goals that might be in competition.

Thus far, we have been discussing the goal to empathize—i.e., the desire to share in someone else's internal states—as one among many lower-level goals that might be active in social situations, the balance of which can shape whether people end up resonating with others' experiences. Empathizing provides information about others' mental states, which can be used to facilitate social interactions—as with other environmental opportunities, people can choose to get and use the information, or they can choose to pursue alternative goals. We take *empathy* to include not only prioritization of empathic goals, but also the consequence of resonating with another person. Empathic outcomes, such as affective resonance, need not be the product of an explicit goal to empathize: oftentimes, people are not likely aiming to increase empathy for its own sake, but rather for the sake of other goals (Zelazo & Cunningham, 2007).

Goals are likely to vary in terms of how consistent they are with the goal pursuit of other agents within the situation. For instance, imagine a situation in which you can console a friend who didn't get a job interview. One empathic goal might be the desire to resonate with the other person's experiences. Another empathic goal might be to improve that person's well-being by trying to make them feel better; oftentimes, the goal to help will entail empathic resonance as a means to achieve that aim. This need not involve taking on that person's goal pursuit—i.e., striving to a get job—but takes the other person's welfare as a focus. Another kind of empathic goal might involve vicariously taking on that person's goal pursuit as your own, as you offer

advice for how to reconcile the discrepancy between the state of the environment (i.e., person lacks job) and desired goal (i.e., person wants job), perhaps through brainstorming ways to improve her resume. We suggest that to the degree that goals are more aligned with the goal pursuit of another person, they can be loosely qualified as "empathic", and tend to (but do not always) have the affective consequence of resonating with the other person's experiences.

We use the qualifier "empathic" because these are situations and goals that are implicated in many other, non-empathic forms of decision-making, and we do not claim there be to some goals that are uniquely tied to empathy. This may seem to create some conceptual ambiguity because we are suggesting that the decision process should be considered a constitutive feature of empathy. Indeed, people can pursue a variety of goals that pertain to other emotional states such as anger, fear, and so forth; from an instrumental emotion regulation framework (Tamir, 2009, 2016), people have goals to pursue different emotions which will should implicate a similar, cybernetic decision logic (see also Gross, 2015; Moors et al., 2017). Given that similar goal selection processes can implicate in seemingly very different emotional outcomes (e.g., empathy, anger), it might seem counter-intuitive to posit that the goal selection process itself is a constitutive feature of empathy. We agree that domain-general goal selection implicates in a host of emotional and non-emotional outcomes, and do not claim otherwise; nevertheless, goal selection may explain a larger portion of the variance in empathic resonance as an outcome than previously accounted for, and in our view characterizing this decision sequence as *part of* empathy helps to emphasize this point. The premise of the current framework is that the scope of empathy varies as some of these goals are prioritized over others, but there is not something unique about empathy that demarcates this form of goal pursuit from others.

The current framework suggests that consideration of competing goals plays a large part in how empathy, as we typically think of it, waxes and wanes in everyday life. Principles of goal pursuit can structure our understanding of *how* different motivations interact to produce empathic outcomes. Motivation can be thought of as encompassing goals—i.e., desired future states—and the vigor with which organisms approach these desired states (Inzlicht, Schmeichel, & Macrae, 2014). Goals are central to motivation, and our model helps to understand how goals/motives are prioritized and then pursued. Empathy might best be considered as a tool or a means to an end, and ends vary substantially across people and within the same person over time. Having empathy as a tool is likely better than having no tool at all, and the key question is how people actively construct and relate to empathy as a means for social living.

Our framework posits that to map motivated empathy, we need to understand (1) what the goals are for a given person in a given situation and (2) how that person hierarchically structures these goals relative to each other. One advantage of our approach is that it accounts for idiographic variation in empathic choices, both across people and within the same person over time. In general, people prioritize goals that they identify with (Inzlicht, Legault, & Teper, 2014), which are placed higher in their goal hierarchies. For example, someone high in trait empathy might place greater importance on empathy as a goal, making them less likely to shift to an alternative goal in the face of conflict. Moreover, goal selection depends on the choice set. The logic of opportunity costs suggests that decision-makers compute costs and benefits of a course of action relative to alternatives (Kurzban et al., 2013). In the shallow pond example, choosing to empathize may preclude other goals such as maintaining equanimity or minimizing effort. Opportunity costs can manifest in the experience of effort (Hockey, 2013; Kurzban, 2016), signaling that other courses of action may be more valuable (Inzlicht, Schmeichel et al., 2014).

This call to map and understand interactions between motives has precedent within the study of empathy (e.g., Batson, 2011), which we build upon and extend through principles of goal pursuit.

In addition to precisely rendering how goals are activated, structured, and selected in light of goal progress, our approach speaks to how value is assigned to competing goals over time. Drawing on models of value-based choice (e.g., Berkman et al., 2017; Hutcherson et al., 2015; Smith & Ratcliff, 2004), our framework posits that empathic choices occur based upon integration of value for different goals. In situations with competing goals, people continuously compute subjective value for each goal, as the balance of costs and benefits associated with each option (Cunningham et al., 2007; Van Bavel et al., 2012). Net value accumulates for each option, leading to a choice when 1) value for one option crosses a sufficient threshold or 2) time runs out, leading to people to choose the option with higher value. The chosen option is a function of the starting point in value accumulation, the rate of value accumulation, a person's threshold for value to accumulate before a decision is made, and situational factors such as amount of time. Figure 3 displays value accumulation over time for competing goals. Thus, in addition to understanding what the goals are and how they are organized hierarchically, our approach suggests modeling how value accumulates dynamically to model choices in real time.
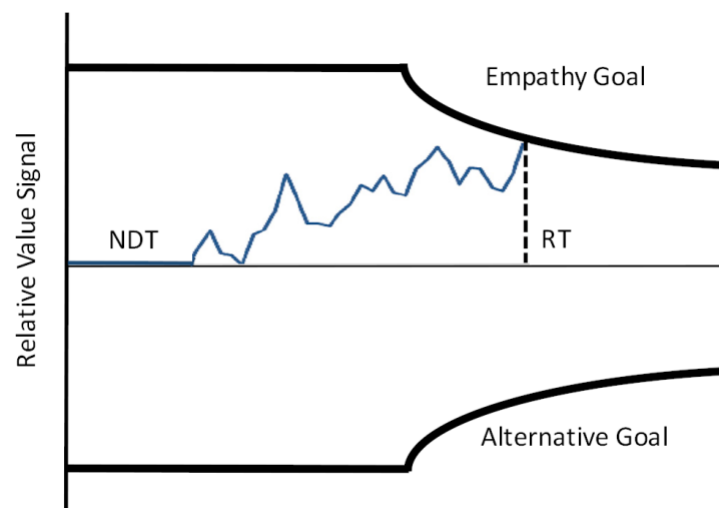
Figure 3. Integration of subjective values over time for two choice options (cf. Hutcherson et al., 2015). The net value of each option accrues over time as new information accumulates, until the value for one option crosses a person's threshold or time to make a choice ends. The Y axis displays relative value signal for competing options. NDT refers to non-decision time before value accumulation begins. RT refers to response time to make the decision. Starting intercepts and rates of value accumulation may differ across individuals and situations, as will the thresholds at which enough value has accumulated to make a choice and the relative time afforded to make a decision.

Our framework posits that motivations play a fundamental role in shaping empathy, but it still might be asked where, exactly, motivation has its impact. Is motivation primarily relevant when selecting between goals, in regulating empathy once it has been elicited, or in deciding whether to translate empathy into behavior? We suggest that motivation pervades cognition (Zelazo & Cunningham, 2007), meaning that motivation and goals play a critical role throughout the entire decision process. Capacity explanations overlook how motivation can powerfully suffuse and shape cognitive processes of perception, attention, and representation (Brewer & Harasty, 1996; Cunningham & Brosch, 2012; Inzlicht & Schmeichel, 2012; Van Damme, Legrain, Vogt, & Crombez, 2010). Motivation is reflected in a person's baseline goal hierarchy, and also in how that person prioritizes competing goals given relevant demands, based upon valuation of these goals over time, and then persists in pursuing those goals, or not. As noted above, once empathic resonance is taking place, the person might continually update whether empathic goals are worth sustaining, which might lead to different emotion regulation strategies being employed. Given that cognition is goal-directed, forward-looking, and focused on action, we can expect goals, values, and preferences to have an effect throughout.

Our discussion of empathy might seem counter-intuitive because "choices" and "goals" are often assumed to be conscious and deliberate, whereas many prosocial emotions and behaviors appear to occur intuitively and automatically. From a cybernetic perspective, there is no need to posit that any of the goal conflict resolution and subjective valuation depicted above

occurs consciously. There may be times when some of these conflicts rise to the level of conscious awareness, as when there is more competition between the goals and more need to process relevant value information carefully (Cunningham & Zelazo, 2007). Valuation of competing goals occurs quickly, automatically, and without full awareness. It might be argued that the term "choice" is problematic because it imports assumptions of conscious agency; however, we submit that this is an aesthetic preference about the boundaries of a term, and that expanding the definition of choice to incorporate principles of value-based decision-making is useful because it integrates psychological and neuroscientific approaches.

A similar point applies to "goal". For example, according to the Offspring Care Model (Preston, 2013), animals have immediate desires to protect helpless offspring, and such helping occurs quickly and unconsciously. Although some frameworks claim that genetic predispositions should be not be thought of as goals (Gesiarz & Crockett, 2015), we suggest this is a restrictive definition which requires the contestable assumption that goals must, by definition, be conscious. Even though these desires can be determined by genetic considerations, they can still be considered goals as desired future states of the world that motivate behavioral change.

In summary, our framework defines *choice* as valuing some goals more than others, in a process of goal prioritization that facilitates action. By choosing to attend to certain goals, these become more affectively salient for guiding decisions, and you feel empathetic as a consequence. By expanding *choice* to include implicit aspects of control and valuation, we imply that empathy is, at its core, fundamentally flexible as a domain-general person-environment relationship.

Theoretical Integration and Differentiation

Here, we clarify how the empathy captured by the current framework relates to other models of empathy, and in addition, previous approaches to motivated empathy.

Relation to other models of empathy. The current framework is consistent with approaches that separate experience sharing, compassion, and perspective-taking (e.g., Decety & Cowell, 2014a; Zaki & Ochsner, 2012). Consistent with previous treatments, we suggest that experience sharing as an *outcome* of goal pursuit involves vicariously taking on the state of another person (de Vignemont & Singer, 2006; Maibom, 2014; Zaki, 2014) in a manner that is more related to the other's situation than one's own (de Waal & Preston, 2017). We favor a process model approach (e.g., Preston & de Waal, 2002): rather than focusing on empathic outcomes alone and classifying them into different categories with stark separations, we are identifying a general range of empathic phenomena that share a common mechanism—in this case, goal selection and its affective consequences (see also Batson, 2009, and Decety, 2011, on the diversity of processes that can fall within the category "empathy").

Our focus on goal selection as a central *mechanism* of empathy is both different from, and consistent with, some prior approaches. For example, the Perception-Action Model suggests that organisms automatically access their own stored representations to better understand others' experiences, with this neural self-other overlap being the common mechanism uniting empathic phenomena from the simplest mirroring up to more elaborate forms of perspective-taking (i.e., the "Russian doll model of empathy"; de Waal & Preston, 2017). However, the model allows that the operation of this mechanism can be modulated by attention and motivation, which might be depend on interdependence between observer and target (de Waal & Preston, 2017). The strength of empathic coupling depends on the richness of representations, which would likely be weaker for unfamiliar targets (Preston & de Waal, 2002). It also depends on competing goals: as noted by de Waal and Preston (2017), empathy is "subject to filters, appraisals, and inhibitions that prevent it from being expressed when it would be maladaptive" (p. 503) and "conflicting

individual goals will prevent the activation of shared representations from proceeding to compassion, concern, or altruistic action" (p. 504). Our approach is also consistent with Batson's (2011) influential theory of empathic concern and altruistic motivation. In that approach, empathic concern is defined as "other-oriented emotion elicited by and congruent with the perceived welfare of someone in need" (Batson, 2011, p. 11), which is broadly consistent with our definitions of empathic goals and experience sharing as an outcome. Like Batson (2011), we place emphasis on motivational precursors to empathy (e.g., Shaw, Batson, & Todd, 1994). We build on these approaches by adding more specificity to how goal evaluation and selection may shape resonance with another person's internal states.

As mentioned above, our framework extends beyond conscious, deliberative decisions to the kinds of implicit subjective valuation typically studied in decision neuroscience (e.g., Berkman et al., 2017; Hutcherson et al., 2015). Some treatments of automatic and controlled empathy suggest that experience sharing (and its more basic precursors, such as contagion and mirroring) usually falls within the realm of automatic processing, whereas more elaborate forms of empathy such as perspective-taking and compassion may require more effortful control (e.g., Eisenberg, 2000; Hoffman, 2000; Preston & de Waal, 2002). Additionally, for experience sharing, control is usually thought to be relevant for motivational modulation of prior empathic responses (Decety, 2011; Hodges & Wegner, 1998; Lamm, Btson, & Decety, 2007). By contrast, we avoid dualities between automaticity and control (e.g., "System I" and "System II"; Slovic, 2007). Motivational influences are orthogonal to automatic-controlled dichotomies (Cunningham & Zelazo, 2007; Van Bavel et al., 2012), and value-based choice can occur automatically or deliberatively (Lebreton et al., 2009; Sullivan et al., 2015). Control, defined above as effective goal pursuit, can manifest in processes that transpire quickly, unconsciously, and efficiently. As

such, experience sharing can be said to involve effort-based control that does not merely reflect post hoc modulation of an initially triggered empathic response. Even as empathy can be automatic and motivated, it can also involve experiences of effort which signal that alternative courses of action may be preferable (Kurzban et al., 2013).

Our approach encompasses both "early appraisal" and "late appraisal" models of empathy (de Vignemont & Singer, 2006). Late appraisal models posit that empathy is automatically elicited by default, with modulation occurring afterward through regulation of attention and emotion. Although such response-focused emotion regulation plays a role in some empathic choices, which our approach can account for, this is but a subset of empathic choices. Early appraisal models posit that empathy is not the default: rather, whether or not empathy is elicited depends on implicit and unconscious appraisals of context. Many models of empathy give a role to early appraisal processes: for example, the Perception-Action Model posits that increased interdependence between empathizer and empathy target can increase attention toward and representation of others' experiences, enhancing empathy (Preston & de Waal, 2002). Similarly, spontaneous empathy responses are shaped by social factors such as stigma (Decety, Echols, & Correll, 2010; Singer et al., 2006). Thus, according to many influential models of empathy, automatic empathic resonance need not be exclusive of goal-based regulation and control, and our framework builds on these prior approaches by further specifying how the goals are balanced and selected in cases of conflict.

Relation to previous accounts of motivated empathy. The current approach builds upon previous treatments of motivated empathy in important ways. Some models have examined how costs and benefits are weighed when deciding whether to help (e.g., Dovidio et al., 1991; Keltner et al., 2014), but have not applied the same logic to the construction of empathy itself.

The general distinction between motivation and capacity for empathy has received increasing

recent attention (e.g., Keysers & Gazzola, 2014). When such approaches have been more

specific, it has been in cataloguing different motivations (Zaki, 2014) and emotion regulation

strategies (de Vignemont & Singer, 2006; Hodges & Biswas-Diener, 2007). For example, Zaki

(2014) lists suffering, material costs, and interference with competition as motives that inhibit

empathy, and positive affect, affiliation, and social desirability as motives that support empathy

(for broader taxonomy of motives related to emotion regulation, see Tamir, 2016). While such a

list is very useful in enumerating the ways that motivation matters, what these treatments leave

unaddressed is *how* and *why* motivation maters and how competing motives are prioritized. Our

approach is novel in focusing on how goals are structured, valued, and selected over time and in

the development of new methods for measuring empathy (Cameron et al., 2017). We build upon

Keysers and Gazzola (2014)'s distinction between capacity—as an upper limit on empathy—and

propensity, or the willingness to empathize in a particular situation. We suggest that goal

selection can provide increased precision about when and why people have a propensity to

empathize, and usefully reframe many apparent capacity deficits as propensity effects.

Equally important, previous approaches to motivated empathy do not tend to

systematically engage with debates about the limitations of empathy, both as a psychological

construct and as an ethical guide. In the current paper, we deconstruct this question about the

limits of empathy for human morality. Empathy can facilitate or inhibit goals depending on the

context and what people's goals happen to be; the question of whether empathy is good or bad is

somewhat nonsensical because the value of empathy is defined subjectively.

Moving beyond essentialism about empathy. Our framework shifts from thinking

about empathy as an emotion to thinking about empathy as a decision process. What we call

empathy reflects a dynamic, iterative process of goal prioritization which entails affective consequences. In turn, many features ascribed to empathy reflect byproducts of domain-general goal pursuit. It would be tempting to focus on a particular aspect of this decision and pick it out as the "real" empathy. We could spotlight affective consequences of goal pursuit, which can include sharing experiences of another person. By contrast, the Empathic Choice Model suggests that focusing on affective consequences alone neglects critical decisional precursors.

At the same time, it might be tempting to essentialize some configuration of goal selection and call that empathy. We suggest that empathic goals are broadly congruent with another person's welfare, but allow great flexibility in what these might look like, as noted above. Vicariously taking on someone else's goal pursuit as your own is consistent with many descriptions of empathy. But people often prioritize goals that, incidentally, have the byproduct of increasing empathy as an affective outcome. Focusing only on a certain configuration of decisional inputs misses a key part of empathy, as consequences feed back into decision-making over time. We are *not* saying that empathy is merely the process of goal selection, and that empathy reduces to a particular set of priorities. Lastly, we are not saying that empathy is merely prosocial behavior, or that empathic choices necessarily lead to prosocial actions. It is well established that helping decisions can result from motivated choices (e.g., Dovidio et al., 1991; Hamilton, 1964). Although empathic goals can include the goal to help someone else, which can entail empathic resonance as a consequence, this doesn't mean empathy *is* behavior.

One implication of our model is that there is nothing special about empathy distinguishing it from other emotions or more general goal pursuit. The contours of empathy are likely to reflect the tradeoffs inherent to all sorts of goal pursuit in everyday life. We suggest there are many advantages to treating empathy in this constructionist, domain-general fashion.

First, we avoid traditional dualities between emotion and reason. Rather than casting empathy as an emotion contrary to reason (e.g., Bloom, 2016, 2017a), we suggest that, as an extended process of goal pursuit, empathy is interwoven with reasoning and decision-making, which to be sure, can often be bounded in its rationality. Pitting empathy as an emotion against reason picks out one part of the process but is an incomplete view.

If empathy isn't a natural kind with its own essence, does that diminish its importance within moral life? We suggest that, on the contrary, understanding empathy as an extended decision highlights the complexity, variability, and nuance of the phenomenon, and may help increase empathy choice through targeted motivational interventions. Although it might be tempting to essentialize empathy so that it can be moralized, we resist this urge and suggest that, like any process, empathy is complex and variable enough that it can license a wide variety of ends, both good and bad. It might seem like the model reduces empathy to "dumb" domain-general processes. However, this feature of the model is a testament to the flexibility and relevance of empathy, because it allows that empathy can be the result of a *rational decision*, even if its rationality is occasionally bounded, as we see in many other decisions in everyday life.

Can You Run Out of Empathy?

Next, we turn to the problem that out framework was designed to address: is empathy a limited-capacity resource, as scientists and non-scientists often claim? Understanding empathy as resulting from value-based choice may seem non-controversial—it might seem obvious to think of empathy as a form of goal pursuit. Prior models have considered costs and benefits (e.g., Batson, 2011; Dovidio et al., 1991; Keysers & Gazzola, 2014), and motives that shape empathy (e.g., Preston & de Waal, 2002; Hodges & Biswas-Diener, 2009; Zaki, 2014). Some have discussed the need to study the role of more active forms of empathic action and motivations that

cause it (Preston, 2013), and the ways in which empathy can rest on generic decision and reward systems that balance costs and benefits (Genevsky, Vastfjall, Slovic, & Knutson, 2013).

Nevertheless, we suggest that the type of question that titles this section—can you run out of empathy?—reflects a common assumption that pervades discussions about empathy, and which has not been systematically addressed by prior motivated empathy approaches. These claims are used often enough, either substantively or rhetorically, to warrant serious scientific consideration, particularly for unpacking theoretical assumptions about empathy. Empathy is often characterized as a limited-capacity resource, with fixed limits that cannot be changed: e.g., "Empathy is a limited resource" (Decety & Cowell, 2014b, p. 337); "It is impossible to empathize with seven billion strangers, or to feel toward someone you've never met the degree of concern you feel for a child, a friend, or a lover" (Bloom, 2013); "Empathy is a zero-sum game… just as even the most determined athlete cannot escape the limits of the human body, so too we cannot escape the limits of our moral capabilities" (Waytz, 2016); "Our capacity to feel sympathy for people in need appears limited" (Vastjfall, Slovic, Mayorga, & Peters, 2014). If empathy is a limited resource that depletes, this may explain why people often show reduced empathy for statistical victims and out-groups (Bloom, 2016, 2017a; Prinz, 2011; Slovic, 2007; Waytz, 2016): there simply isn't enough to go around.

Capacity explanations have intuitive appeal: empathy does not extend to everyone, because we *cannot* extend empathy to everyone. Despite this appeal, such accounts have been criticized for lacking explanatory depth, for doing little theoretical work (Navon, 1984), and for being tautological (e.g., why do people lack empathy in many situations? Because empathy is limited; How do we know empathy is limited? Because people lack empathy in many situations). Capacity explanations attempt to account for how empathy varies, but often leave

under-specified *why* and *how* this comes to be the case. If empathy is a static emotion, then perhaps it makes sense to ask when it depletes. But if empathy results from an active choice over time, the question loses its force and coherence. Can you run out of a decision? Here, we unpack the assumption that empathy is a limited-capacity resource and specify how our framework presents a markedly different way of thinking about the nature of empathy.

These accounts are united by the idea that something about empathy—whether empathy itself, or processes that support empathy such as attention and working memory—is a passive resource that can be quickly exhausted. Empathy is viewed from the perspective of a gas tank, with a meter indicating how much empathy is left to use up. We suggest that empathy be viewed from the perspective of a driver, who can make active decisions about whether to accelerate, slow down, or if needed, change course. Put another way, empathy isn't the fuel that allows driving to happen: *it's the very act of driving*.

Capacity accounts come in many flavors, and it is important for such accounts to clarify the way in which empathy is limited. According to a strict resource claim, once empathy is depleted to a low enough level there is nothing that can be done to increase it, even if one is motivated to do so (e.g., Small, Loewenstein, & Slovic, 2007). A second type of resource claim invokes motivation as a *moderator* of a limited resource: when people feel that their ration of empathy is being depleted, they might decide not to expend empathy resources any further (e.g., empathy as "zero-sum", Waytz, 2016). On this type of resource account, motivation has an influence on empathic outcomes via the management and conservation of a resource (for a similar argument in relation to self-control, see Baumeister & Vohs, 2007).

In contrast to these resource accounts, a third type of claim invokes motivation as a *mediator*: the appearance of a limited resource in terms of empathic outcomes does not reflect

actual resource depletion or management, but rather balancing of competing goals. Whereas

empathy critics rely upon strict resource or motivation-as-moderator accounts, our framework is

a motivation-as-mediator account. This last type of account is not a resource account at all, as it

stipulates that the limited resource is more apparent than real, reflecting dynamic allocation of

priorities to different demands rather than depletion or management of a literal resource (for a

similar argument about self-control, see Inzlicht & Schmeichel, 2012).

Capacity models suggest that empathy is limited at the *input* to goal pursuit: in certain

contexts, as when faced with mass suffering, there is simply no empathy to work with in the first

place. Our approach suggests, in contrast, that empathy *seems* limited at the *output* to goal

pursuit: in certain empathy-relevant contexts, people prioritize competing goals and sometimes

that will mean empathy is devalued. But it does not have to turn out this way—empathy, or the

lack thereof, is not inevitable. Limits of empathy may be more apparent than real, and shift as a

function of what goals we want to pursue.

At first, incorporating goal conflict resolution into discussions of empathy might seem

obvious: many of us have likely faced situations in which we have to decide whether to stop and

help someone or keep walking. However, we suggest that the role of control and choice runs

much deeper. People might be mistaking the results of their own goal prioritization as features of

empathy itself, misattributing empathic choices to the workings of a limited resource. It's not

merely that we have control to override initial emotional biases (e.g., Zaki, 2017); rather, choice

may *create* biases in empathy in the first place. What appear to be limits are shifting of priorities.

To highlight the differences between capacity and motivational accounts of empathy, we

draw an analogy between empathy and self-control. Recent models posit that apparent capacity

limits on self-control are driven by strategic shifts in motivation, rather than a finite pool of

resources (Inzlicht & Schmeichel, 2012; Inzlicht, Schmeichel, & Macrae, 2014; Kool & Botvinick, 2014; Kurzban et al., 2013; Molden et al., 2012). According to the shifting priorities model (or process model) of self-control (Inzlicht & Schmeichel, 2012; Inzlicht, Schmeichel, et al., 2014), self-control deficits can be explained as a tradeoff between goals. Specifically, there is a tradeoff between goals related to exploitation, labor, and obligation (i.e., "have-to" goals), and goals related to exploration, leisure, and self-gratification (i.e., "want-to" goals; see Inzlicht, Schmeichel, et al., 2014). Initial exertions of self-control that are viewed as obligatory, and maintained for some time, lead to shifts in priorities away from continued exertion on "have-to" tasks and toward "want-to" tasks, such that people will perceive, attend, remember, and emotionally respond to goals that are more leisurely and self-gratifying (Inzlicht & Schmeichel, 2012). Continued effort and exertion on externally mandated goals, that is, will eventually lead to goal re-prioritization, such that people eventually become more attuned and responsive to other goals that are more in line with autonomous desires. Apparent limits of self-control, in this view, reflect choices to avoid effort and not capacity limits, at least, at the level usually assumed.

We suggest that empathy can be understood similarly—what has the appearance of fixed, bounded limits on empathy may be the result of flexible, motivated choices. This empirical point is important because it can change how people understand and relate to empathy. If empathy is bounded by capacity, then individuals are powerless to overcome biases in empathy (Slovic, 2007). But if empathy is, like any other situated behavior, bounded by the need to prioritize some goals over others, then the need to blame empathy disappears and the conversation can turn to how people resolve competing goals.

Advancing the Science of Empathy

The current framework suggests that principles of goal pursuit can structure our examination of empathic decisions. Next, we derive novel predictions about empathy.

The Perceiver's Goals

According to cybernetic models, control relies on three processes: setting goals, monitoring for conflicts, and goal-directed behavior (Inzlicht, Legault, et al., 2014).

Setting Goals.

Goal specificity. Setting a goal creates a discrepancy from one's current state that initiates control (cf. Inzlicht, Legault et al., 2014). Goal pursuit is more successful when people set challenging but reachable goals (Latham & Locke, 1991). One person might set a vague goal to "be more empathic", which might lack specificity. Another person might set more concrete goals, such as "the next time a homeless person asks me for help, I will stop and listen." With more well-defined goals, it is easier to notice goal progress and goal conflicts, and have a sense of efficacy. Increasing the specificity of empathic goals should increase empathic choice.

Goal structure. Goals are typically characterized within associative networks, with different levels of goals, and the means to achieve them, linked in a knowledge structure (Kruglanski et al., 2002). Like other goals, empathic goals should be subject to the same principles of goal structure and shape empathic choice. One example of how goal structure might shape empathy choice is that vertically connected links (e.g., a means to satisfy a given goal) facilitate one another, whereas laterally connected links (e.g., different means to satisfy a given goal, or competing goals) inhibit one another (Kruglanski et al., 2002).

Goal hierarchies. Goals are arranged hierarchically. A corollary of this point is that people are more successful and persistent at goals that are personally meaningful, even in the face of effort costs (Inzlicht, Legault et al., 2014; Deci & Ryan, 2000). On the assumption that

people who are higher in trait empathy are more likely to value empathy intrinsically, they should place higher value on empathic goals and be more likely to prioritize them in conflicts. A related prediction is that if empathy-supporting goals can be re-framed to be aligned with autonomous, self-identified goals, this should increase the likelihood of empathic outcomes. For instance, although there is a gender gap in empathic behavior, this can be erased when empathic outcomes are aligned with self-interested goals (Willer, Wimer, & Owens, 2015). The converse is that non-autonomous goals are likely to be sacrificed during goal conflicts (Legault, Gutsell, & Inzlicht, 2011). Externally imposing empathic demands may backfire, leading people to disengage and shift to more personally meaningful goals.

Noticing Goal Conflicts.

Conflict monitoring. Once people set goals to pursue, they need to be attentive to conflicts between those goals and states of the environment. People who are more aware of goal conflicts should be more likely to engage in goal-based tradeoffs that create empathy deficits. For instance, our framework predicts that people higher in mindfulness (Holzel et al., 2011) should be better able to recognize conflicting goals during empathic situations. Of course, mindful individuals need not be empathic—greater clarity might result in empathy being de-prioritized if it is low on a person's goal hierarchy. People higher in trait empathy might construe empathy as an intrinsic, autonomous goal, and notice and care about conflicts between empathic and non-empathic goals (e.g., Legault & Inzlicht, 2013). People who are more likely to enter into empathic situations should be more cognizant of the relative costs and benefits of doing so. Ironically, the people who might be most prone to empathize might be most aware of the risks, and in some cases, weigh those risks as more important than empathic goals

Contextual influences on goal salience. Importantly, situational factors can make some goals more salient than others. Consider two thought experiments. In shallow pond (Singer, 1972), as you are on a way to give a job interview, a small child falls into a pond and is unable to swim. In UNICEF (Unger, 1996), you receive a brochure soliciting a donation to save starving children overseas. People often feel empathy for the drowning child, but not the starving children. In both cases, there are likely to be short-term conflicts between empathic goals and competing considerations (e.g., effort, time). Differences in urgency and vividness in the shallow pond case may make empathic goals more salient, leading them to be prioritized. This point is consistent with some approaches which suggest that salience of distress cues increase likelihood of capturing attention and in turn foster empathy (Preston & de Waal, 2002).

Implementing Goal-Directed Behavior.

Shifting priorities. The final step involves implementing behavioral change. The current framework draws upon the same domain-general control mechanisms involved in the shifting priorities model of self-control (Inzlicht, Schmeichel et al., 2014). In that model, sequential applications of self-control lead to changes in priorities: Exerting self-control at one time-point leads people to prioritize less effortful goals at subsequent time points. Exerting empathy in one situation might similarly change how competing goals are prioritized in subsequent empathic situations. To date, little work has examined sequences of empathic choices in this manner.

The nature of carryover effects across empathic encounters should vary as a function of how the empathic encounters are construed. To the degree that the initial act of empathy is construed as an intrinsically valued and autonomous goal—e.g., as it might be for those high in trait empathy—then empathy-inhibiting goals should be less salient early on, and later as well. In contrast, those for whom an initial act of empathy seems especially costly should perceive

those costs as salient in subsequent empathic situations. Experimental manipulations can change expectations about empathy. For instance, construing empathy as a skill that can be improved leads people to exert more effort to feel empathy (Schumann, Zaki, & Dweck, 2014), suggesting a shift in priorities of empathy-supportive goals. Variation in perceived effort of empathy may shape decisions to prioritize empathic goals; in other words, motivated empathy avoidance may be more common among people for whom empathy feels like a laborious "ought" rather than a leisurely "want". Even if empathy is viewed as effortful, providing extrinsic motivational incentives should offset shifting priorities (e.g., Muraven & Slessarava., 2003). Moreover, there are clearly cases where effort is taken as a signal of high rather than low value (Olivola & Shafir, 2013; Inzlicht, Shenhav, & Olivola, 2018), suggesting that effort attached to empathic goals could in some cases be turned from a liability into a benefit, if effort is re-framed as personally or socially valuable and thus taken as an indication to sustain rather than shift empathic goals.

Finally, empathic decision-making should factor in outcomes of empathic interactions. Learning that beneficiaries of aid are ungrateful, or not really in need (Gilbert, 2007), might attach negative valence to empathic goals that leads them to be de-prioritized in subsequent situations. Providing people with feedback about the benefits of empathic actions supports continued prosocial behavior (Grant & Sonnentag, 2008). Indeed, changing expectations about likelihood of help from an out-group member can eliminate intergroup empathy gaps (Hein et al., 2015). Thus, the valence of feedback should matter for how subsequent goal conflicts in empathic situations are resolved, and how goals are structured.

Logic of opportunity costs. Empathy appears to confer an evolutionary advantage, as it leads us to care for our kin who share our genetic material, and cooperate reciprocally with others (Preston, 2013). Yet it is important for people to make empathic choices strategically.

Indiscriminate empathy is unwise at an evolutionary level—because it may lead to prioritizing

the needs of non-kin—and at a proximal level, as it may lead to exploitation (Batson & Ahmad,

2001; Stellar, Feinberg, & Keltner, 2014). Indeed, some approaches suggest that empathy may

sometimes be felt as over-arousing and difficult in order to prevent "promiscuous" empathizing

(Hoffman, 2000). For empathy to have evolved as a stable social strategy, it should be calibrated

to its costs and benefits, such as whether the target is trustworthy and likely to cooperate in the

future (Axelrod & Hamilton, 1981; DeSteno, 2015).

Models of goal pursuit suggest that phenomenal feelings of effort and aversiveness can

act as signals that a current goal or course of action is suboptimal compared to available

alternatives (Kurzban, 2016), which in turn can shape whether people persist in that goal or shift

to another. This point means that the effort costs of empathy may be *relative,* fundamentally

contingent on the available choice set. Compared to using a smart-phone, empathy may seem

quite effortful and challenging; but compared to exercising, empathy may seem less aversive. In

terms of implementing behavioral change, the logic of opportunity costs suggests that

manipulating the choice set should matter for predicting empathic choices.

Our framework suggests that many cases in which empathy appears to fail may reflect

empathic goals being seen as more effortful than alternative courses of action—for example,

empathy for an out-group member might seem particularly challenging, leading that goal to be

de-prioritized and leading to an intergroup empathy gap. However, if the alternative to empathy

is made comparably effortful, then such preferences to avoid empathy might disappear or even

reverse. For example, if empathizing with an out-group member is contrasted against enacting

costly punishment, which might also be viewed as effortful, then empathy may become the

preferred course of action. Limits of empathy may not exist in empathy per se; rather, they exist *in the world*, in interactions between persons and their environments.

Alternative ways to resolve goal conflicts. Goal conflicts can motivate shifting priorities to different goals. Yet people can also relieve negative affect from goal conflict by affirming other values and identities, regardless of whether they are related to the goal conflict at hand (Proulx, Inzlicht, & Harmon-Jones, 2012). For instance, people who feel a conflict between a short-term empathic goal and the long-term goal of minimizing effort might affirm group identities, and so relieve negative affect without changing how their goals are prioritized. The Empathic Choice Model predicts that if participants are provided with an opportunity to affirm other values or identities in the face of a challenging empathic situation, they should be less likely to devalue empathic goals during situations involving goal conflict.

The Target's Goals

Aside from the perceiver's goals, the goals being pursued by the target of empathy should also shape empathy choice. As noted earlier, empathic goals can be defined as being broadly consistent with the goal pursuit of another person, whether this means having an explicit goal to empathize or vicariously taking on the goal pursuit of that person. When people decide whether to continue pursuing their own lower-order goals, as opposed to taking on the goal pursuit of others, the similarity between these pursuits may shape the likelihood of doing so (Kruglanski et al., 2002). For example, if a perceiver can readily identify the desired goal that another person is pursuing—i.e., recognizing that the other person is trying to get up after falling down—or the relevant means of goal attainment, his may increase the likelihood of resonating and intervening.

The degree to which perceiver and target goal pursuits align overlap may explain seemingly built-in features of empathy such as being less sensitive to mass suffering (Cameron

& Payne, 2011) and outgroups (Cikara & Fiske, 2011). If it is more difficult to represent the goals of people from another group, or the goals of many people, it may become more difficult to pursue those goals yourself (as suggested by the Perception-Action Model; Preston & de Waal, 2002; Hofelich & Preston, 2011). Similarly, breakdowns in understanding another person's goal pursuit may lead to empathic inaccuracy (Ickes, 1997). A perceiver might misunderstand the goal a target is trying to pursue, or the means of goal pursuit, or the target's own understanding of goal progress. Mistaking any of these aspects of another person's goal pursuit could produce maladaptive empathy, in the sense of being suboptimal or harmful to the target (Oakley, 2013). And, importantly, dissimilarity of goal pursuit need not always lead to empathic inaccuracy; under the appropriate motivational incentive, people can choose to pursue goals that may be dissimilar (Klein & Hodges, 2001).

Similarity between first-person and third-person goal pursuit may also shape the effort costs of resonating with others' goals. To the degree that what another person is trying to do parallels your own goals, it may be easier to vicariously pursue their goals (Loersch, Aarts, Payne, & Jefferis, 2008). Vicarious goal pursuit should entail the same considerations of tradeoffs and opportunity costs: to the degree that you can more readily adopt the goals of people who are similar to you, you may also be more susceptible to their displays of fatigue (Ackerman et al., 2009) and satiation (McCulloch et al., 2011).

Finally, perceivers might consider the pace and appropriateness of the target's goal pursuit. Much as perceivers notice the pace of their own goal pursuit, perceivers too might consider whether a target's pace of goal pursuit is insufficient. A related concern is whether perceivers deem targets' goal pursuit to be appropriate. To the degree that perceivers view targets as pursuing the wrong goals, or having the wrong second-order reactions to the pursuit of

first-order goals, this might discourage vicarious goal pursuit (see Szczurek, Monin, & Gross, 2012 on rejection of "affective deviants"). In summary, when prioritizing competing goals, decision-makers must not only balance their own goals, and the costs of different courses of action, but also the goals of potential targets of empathy.

Refining Measurement of Empathy Choice

Most research on motivated empathy examines empathic outcomes, such as emotion ratings or behaviors (e.g., donation, intervention). We suggest that although such work is important, it does not attend to the empathy regulation processes that *shape* these outcomes (see also Isaacowitz & Blanchard-Fields, 2012). Relatively little research has focused on how people *choose* empathy. One side effect of this neglect of empathy regulation is that variation in empathy is considered passive, rather than active. By focusing primarily on outcomes, and not on choice, much past research overlooks how choice processes intervene to create such outcomes.

According to our approach, experiences of empathy as effortful should typically provide a psychological signal that empathy is suboptimal (Kurzban, 2015), and motivate people to prioritize different goals. To more fully understand how principles of goal pursuit apply to empathic choices, future work should provide people with opportunities to select into empathy-eliciting situations (i.e., situation selection; Gross, 2015) as a measure of motivation to empathize (for initial approach, see Cameron et al., 2017). Situation selection is relevant for empathic decisions—for example, early work on motivated empathy found that people avoided situations entailing high empathy when they anticipated high helping costs resulting from empathy (Shaw et al., 1994; see also Pancer et al., 1979). This spontaneous, free-choice approach to measuring motivated empathy would dovetail with approaches to effort avoidance in cognitive neuroscience (e.g., Kool et al., 2010; Inzlicht, Bartholow, & Hirsh, 2015). Such an approach

would allow more precise claims about when, why, and how people choose to approach or avoid empathy. Indeed, recent work finds that people are less willing to exert effort on behalf of others (vs. oneself) for reward, and that this general preference associates with trait social motivation and psychopathy (Lockwood et al., 2017). However, this work does not speak to whether empathy itself is seen as effortful; building on this work, the Empathic Choice Model suggests that it will be important to specify when, how, and why people prioritize effort over other factors when making empathic decisions about others (Inzlicht & Hutcherson, 2017).

The Empathic Choice Model interfaces with computational approaches to decision-making (e.g., Hutcherson et al., 2015; see also Crockett, 2016). The model predicts that valuation of competing goals over time can be modeled precisely, using techniques such as drift diffusion modeling. Applying computational modeling can quantify causes of individual and situational variation in empathy. People differ in their starting points in the value accumulation process (Hutcherson et al., 2015); for instance, people high in trait empathy might favor empathic goals to begin with, and so bias value accumulation toward empathic goals. People also differ in thresholds for value accumulation (Hutcherson et al., 2015): reflecting speed-accuracy tradeoffs, thresholds capture how much evidence is needed before committing to an option. Some people might need certainty that benefits of an empathic goal outweigh the costs. Others may not need the same certainty, allowing that quicker decisions may entail greater risks of mistakes (Berkman et al., 2017; Hutcherson et al., 2015). Thus, modeling allows decomposition of at least two ways in which people might be motivated to avoid empathy: being biased to avoid empathic goals in the first place and needing more certainty before committing to empathic goals. Situational factors include drift rate and decision time. Drift rate is the pace at which value information accumulates and is situationally driven. For instance, value information might accumulate more

quickly for an empathic goal involving your own child than for a stranger. Decision time varies across and may explain how empathy choices interface with intuitive prosocial acts (Zaki & Mitchell, 2013). These four factors—starting point, decision threshold, drift rate, and decision time—can interact. Drift rate may differ between your child and a stranger, but this may only lead to parochial empathy if there is time for drift differences to impact choice. People more inclined toward empathic goals to begin with, or who need less evidence to select empathic goals—perhaps people higher in trait empathy—may be less susceptible to drift rate or decision time effects. Formal modeling can further refine understanding and prediction of empathy.

Explaining the Scope of Empathy

Next, we discuss how our framework can explain features of empathy that are often treated as intrinsic limitations, such as innumeracy and parochialism. These contextual variations in empathy are often taken to be intrinsic, basic features of empathy itself—i.e., biases *in* empathy. Such empathy deficits are often used as descriptive premises in ethical arguments against empathy, with the added premise that there's not much of anything that people can do to change these biases. On the further assumption that we should only ethically prescribe empathy for moral action if people are capable of feeling it ("ought implies can"; Flanagan, 1991), these empathy gaps appears to present a major challenge for empathy as a source for moral action. By contrast, our approach reframes the scientific and ethical debate about empathy. Although there is plenty of evidence for empathic insensitivity to mass suffering and out-groups, the explanation of *why* these effects emerge need not rely on a limited-capacity resource. Instead, these empathy deficits may be byproducts of people's choices to prioritize some goals over others. We suggest the target for discussion should be how people choose to relate to empathy, not empathy itself.

Empathy and Innumeracy

First, does empathy scale up? From a utilitarian perspective in which each life has added value, empathy should rise proportionally to those in need. This appears to be what people predict (Dunn & Ashton-James, 2008) and what some morally prefer (Dickert et al., 2014). Yet in the challenging contexts that may seem to require a strong prosocial response—such as disasters and genocides—empathy decreases as the number of victims rises (for a review of this phenomenon, see Cameron, 2017). Empathy appears insensitive to statistical victims (Friedrich & McGuire, 2010; Small, Loewenstein, & Slovic, 2007), and to multiple identified victims (Cameron & Payne, 2011; Dickert, Kleber, Peters, & Slovic, 2011; Dickert, Sagara, & Slovic, 2009; Kogut & Ritov, 2005; Markowitz, Slovic, Västfjäll, & Hodges, 2013; Rubaltelli & Agnoli, 2012; Smith, Faro, & Burson, 2013). These findings have been observed for empathy (Kogut & Ritov, 2005), compassion (Cameron & Payne, 2011; Dickert & Slovic, 2009; Västfjäll et al., 2014), and prosocial behavior (Galak, Small, & Stephen, 2011; Slovic, Västfjäll, Erlandsson, & Gregory, 2017), and have led some to conclude that empathy is incapable of scaling up.

From a capacity explanation, empathy cannot scale because it is a limited-capacity resource that cannot be extended to everyone (Slovic, 2007). For example, Slovic (2007, p. 90) suggests that "Our capacity to feel is limited. To the extent that valuation of life-saving depends on feelings driven by attention and imagery... [it] begins to decline at $N = 2$ and collapses that some higher value of N that becomes simply 'a statistic'". It may be argued that empathy was never meant to respond to larger numbers, given that humans evolved in small groups; however, the effect emerges even for two victims (Västfjäll et al., 2014), suggesting that this supposed evolutionary limit cannot fully explain the effect. Moreover, capacity claims suggest this is not merely a lack of readiness to feel empathy for large numbers, but moreover, that we are *incapable* of doing so, and the bias is fixed and irreversible (e.g., "we are psychologically wired

to help only one person at a time", Slovic & Slovic, 2015; "One can empathize with a single individual, and perhaps two or three, but not a thousand or a million, and so empathy is *inherently* innumerate", Bloom, 2016, emphasis added).

Our framework can explain the innumeracy of empathy without appealing to a limited capacity. In mass suffering situations, there will be a number of lower-level goals in competition with empathic goals for multiple victims. These could include increased financial costs, decreased feelings of efficacy—helping large numbers may seem more of "a drop in the bucket"—and increased affective costs, such as emotional exhaustion, aversion, and effort. Which lower-level goals are prioritized will turn on individual goal hierarchies and the subjective experiences associated with the lower-level goals. If helping multiple victims is a more difficult goal to achieve, then associated effort and frustration of this goal pursuit may motivate shifting priorities to non-empathic goals. Moreover, higher-level goals of maintaining moral standards and minimizing effort might shape how people value the lower-level goal of empathy for multiple victims. People, in other words, might refrain from feeling for a large group because they anticipate that such feelings will have little impact. What appears to be a fixed limit on empathy may be flexible, depending on what goals people choose to pursue.

A growing number of studies reveal motivational influences on whether empathy is innumerate, consistent with the predictions of the Empathic Choice Model (see Cameron, 2017 for further discussion). If empathy is of limited capacity, with these limits being the source of compassion collapse, then motivational factors should have little relationship with empathy for multiple victims. Yet innumeracy bias in empathy goes away when people believe that helping will be less costly (Cameron & Payne, 2011) and more effective (Sharma & Morwitz, 2016), suggesting that financial and effort costs matter. Values matter as well: innumeracy does not

emerge for environmentalists (i.e., who may place more value on animal welfare; Markowitz et al., 2013) or collectivists (i.e., who may place more value on large numbers; Kogut, Slovic, & Västfjäll, 2015). Recent work replicates motivational approaches to compassion collapse (Ministero et al., 2018): actively instructing people to engage in perspective-taking eliminates the collapse of empathic concern, and encouraging people to self-affirm their values eliminates the collapse of the desire to help large numbers, the latter pattern suggesting a process of goal re-prioritization. More broadly, while a capacity explanation may seem to explain diminishing empathic returns for larger numbers, it seems less able to explain why empathy would *decrease*. If empathy collapses because of basic limits, it should stabilize but not decrease. The decrease may imply active disengagement of empathic goals rather than a depleted empathic capacity.

In summary, innumeracy may reflect motivated choice: goals that support empathy for multiple victims may be experienced as effortful or fatiguing, or conflict with other goals and so be devalued. Innumeracy need not be "hard-wired" (Slovic & Slovic, 2015), because introducing higher-level goals can motivate people to increasingly value empathy for multiple victims. It's certainly still possible that it's *easier* or more *natural* to empathize with one than many, but ease/effort as a motivator shouldn't be conflated with the inability to empathize in these contexts.

Empathy and Partiality

Second, does empathy scale outward? From a utilitarian perspective, each life should be valued impartially. Although there is variability in whether this is what people actually prefer (Graham et al., 2014), parochialism has often been discussed as one of the most troublesome challenges for empathy. Yet in the contexts that might be mediated by finding common ground (Greene, 2013), empathy is dampened for people who are dissimilar (e.g., Avenanti et al., 2010; Azevedo et al., 2013; Bruneau, Cikara, & Saxe, 2017; Contreras-Huertas et al., 2013; Gutsell &

Inzlicht, 2010, 2012; Hein et al., 2010; for reviews, see Batson & Ahmad, 2009; Cikara,

Bruneau, & Saxe, 2011; Dovidio et al., 2010; Echols & Correll, 2012). Is empathy constrained to

the in-group because we are unable, or rather, *unwilling* to empathize?

As with innumeracy, the capacity explanation is that empathy doesn't expand outward

because it is a limited resource (Decety & Cowell, 2014b; Waytz, 2016). There are good reasons

(i.e., kin care; Preston, 2013) to believe that empathy is more attracted to similar targets, as there

will be richer representations of them (Preston & de Waal, 2002), a potentially greater return on

social investment (DeSteno, 2015), and it might enhance the solidarity of the in-group during

intergroup competition (Cohen et al., 2006). As put by Decety & Cowell (2014b, p. 337-338):

"Given that empathy has evolved in the context of parental care and group living, it has some

unfortunate features… Children do not display empathic concern toward all people equally."

Waytz (2016) likens empathy to a zero-sum resource: "Empathy toward insiders—say, people on

our teams or in our organizations—can limit our capacity to empathize with people outside our

immediate circles… This uneven investment creates a gap that's widened by our limited supply

of empathy: As we use up most of what's available on insiders, our bonds with them get

stronger, while our desire to connect with outsiders wanes." The ethical implications seem clear

to some: as put by Prinz (2011), "empathy pushes partiality into prejudice" (p. 229).

Unlike with innumeracy, there is greater diversity in how capacity explanations express

whether parochialism is intrinsic to empathy. Although some describe it as a basic "feature"

(Decety & Cowell, 2014b; Prinz, 2011), others suggest that parochialism is not intrinsic to

empathy per se, but rather, that group preferences can shape how empathy is directed in a way

that is difficult to control (Bloom, 2016; Montgomery, Kappes, & Crockett, 2017). Although

some empathy critics suggest that partiality can be overcome (Bloom, 2016; Prinz, 2011), others

are less optimistic (Montgomery et al., 2017), and there is the further position that even if people are *capable* of empathy for out-groups, this may not be something they willingly engage in on a frequent basis (Prinz, 2011). However, if parochial empathy represents a propensity, rather than a capacity limit, this is on the way to a motivational account (Keysers & Gazzola, 2014). It is more parsimonious to suggest that intergroup goals shape how empathy is regulated, rather than saying that empathy itself is partial, which mistakes the referent and creates confusion about interventions and ethical implications. If intergroup preferences shape empathy, then these seem to be the more reasonable focus for discussion, and not empathy itself.

Our framework can explain parochialism without appealing to a limited resource. Once again, the question is how people select between competing goals, and here there may be greater attention to social goals such affiliation and competition. To the degree that empathic goals for out-groups are inconsistent with higher-level goals to be moral in relation to one's in-group, this may suppress empathy; but if moral norms are to be non-prejudiced, then empathy for out-groups may be valued (e.g., Tarrant, Dazeley, & Cottom, 2009). Critically, how people value competing goals can change. People exhibit more empathy for out-groups when they believe that empathy is malleable (Schumann et al., 2014) and less exhausting (Cameron, Harris, & Payne, 2016), and when they think their peers value empathy (Nook et al., 2016). Parochial empathy can be undone by changing how people think about others—i.e., by expanding group boundaries (Dovidio et al., 1997; Nier et al., 2001), individuating out-group members (Bruneau, Cikara, & Saxe, 2015), and changing expectations about help from out-groups (Hein et al., 2015). As beliefs about out-groups change, people balance goals differently.

More broadly, a capacity explanation seems unable to explain why parochial empathy would emerge for minimally defined out-groups. It seems unlikely that a mere manipulation

would render people incapable of empathy for someone who was previously no different from them. What is more likely is that priorities shift once a social target is categorized as dissimilar (Van Bavel & Cunningham, 2009; Van Bavel, Packer, & Cunningham, 2008). Critically, parochial empathy is only a problem for the ethical status of empathy on the assumption that everyone *wants* impartiality. But motivations to control prejudice vary (Plant & Devine, 1998), and should not be conflated with limits on empathy. There is ideological variation in whether people moralize out-group hostility, and in whether empathy is extended beyond the in-group (Waytz, Iyer, Young, & Graham, 2016); for example, liberal (vs. conservative) Israelis report greater desire to feel empathy for out-groups (i.e., Palestinians), which in turn predicts empathy for Palestinians (Porat, Halperin, & Tamir, 2016). As with innumeracy, it may be easier or more natural to empathize with similar others; but even if out-group empathy feels more effortful, that shouldn't be conflated with inability to expand empathy outside our tribes. Some people are motivated to expand the scope of empathy beyond their in-groups, and others are not. Intergroup empathy gaps are not inevitable and may turn on how people *want* to relate to out-groups.

Summary on Empathy Deficits

Our framework suggests that empathy deficits result from an unwillingness to pursue empathic goals, rather than an inability to do so. It is important to reiterate how this view is distinct from capacity-based explanations of such effects. After all, empathy critics do mention how empathy can be felt as effortful and exhausting—which we agree that it can be, depending on the context. However, the current framework shifts the *causal locus* of such deficits away from empathy itself and onto our own value-based choices. Capacity theorists are not claiming that people are unwilling to engage in empathy for large numbers and out-groups because they view empathy in these contexts as effortful and then select less challenging goals; indeed, we

agree that this can happen quite often and that people might very well perceive empathy for large

numbers and out-groups as more difficult. Rather, the capacity claim is that people are *unable* to

feel empathy in such contexts regardless of goal selection, which is why empathy is then argued

to be ethically problematic. This is why studies which show motivational shifting of empathy's

apparent limits speak against capacity accounts of empathy.

The current framework can also explain variation in trait empathy, which may be

particularly relevant given recent declines (Hannikainen, Machery, & Cushman, 2018; Konrath

et al., 2011) and cultural differences (Chopik, O'Brien, & Konrath, 2017). Trait empathy can be

construed as a consistent propensity to attend to and empathize with others, where this means

stably prioritizing empathic goals. Understanding generational shifts in empathy may require

consideration of competing goals that are salient and selected given shifts in attitudes and values.

Related trait correlates of empathy may be usefully recast through the lens of goal selection. For

example, gender differences in empathic accuracy are eliminated when both men and women are

provided with incentive for empathizing correctly (Klein & Hodges, 2001). It is likely that power

and status effects on empathy (e.g., Piff et al., 2012; Stellar et al., 2012; Van Kleef et al., 2008)

turn on whether empathy is seen as useful or inhibitory for maintaining these advantages. As

with minimal groups, manipulations of power (or status or other such factors) likely shift how

goals are prioritized, rather than changing ability to empathize (Hogeveen, Inzlicht, & Obhi,

2014). For instance, Arbuckle and Cunningham (2012) found that among participants higher in

psychopathic tendencies, creating a minimal shared group membership increased prosocial

decisions toward another person, suggesting that these individuals could be motivated to care,

and not simply be unable to care (see also Hepper et al., 2014; Meffert et al., 2013). Of course,

there are likely to be trait effects that reflect capacity bounds rather than changes in goals and

propensities (Keysers & Gazzola, 2014). Finally, goal selection is relevant for explaining empathy in caregiving contexts, as in medicine (Gleichgerccht & Decety, 2011; Haque & Waytz, 2012) and parenting (Manczak, Delongis, & Chen, 2016). By reinterpreting the basis of contextual and trait differences in empathy, the Empathic Choice Model can spur new research questions about how value-based choices expand and contract the scope of empathy.

<div align="center">**Against Empathy?**</div>

In this concluding section, we discuss what our approach suggests for normative debates about empathy in everyday life.

The Logic of Arguments Against Empathy

Empathy seems to have limits on its utility for moral and social life, or so the argument goes. We agree that empathy can have both benefits and costs—indeed, this is the very crux of a motivated empathy account—but that a proper account of how these conflicting goals shape empathy does not license strong normative conclusions. Understanding empathy deficits need not require positing a limited resource. Arguments about the limits of empathy risk reifying our own choice behaviors as limitations of empathy itself. What appears to be a problem about empathy becomes an expected byproduct of complex tradeoffs inherent to goal pursuit.

Empathy is often cast as an affective experience that is present or absent, with any socially questionable variation—such as innumeracy and parochialism—attributed to the nature of empathy itself. But when casting empathy as a decision, the focus shifts away from what is wrong with empathy to how people evaluate competing goals. In keeping with constructionist views of the mind (e.g., Barrett, 2013; Cameron et al., 2015; Cunningham & Kirkland, 2012; Lindquist, 2013), we do not isolate empathy as uniquely problematic; rather than essentializing

empathy and asking what's wrong with it, we shy away from "emotion versus reason"

dichotomies and ask how domain-general processes explain the contours of empathy.

When considering the value of empathy, it is often tempting to generalize from specific

failures of empathy to the claim that empathy is wholly unreliable, and therefore problematic.

Yet even if empathy is fickle in some social situations, this does not mean that it is completely

unreliable. Even if empathy was limited, which we dispute, this may still be preferable to having

no empathy whatsoever to coordinate social functioning. Additionally, it is inconsistent to claim

that empathy is intrinsically biased, yet elsewhere say we simply use it unintelligently (e.g.,

Bloom, 2016); these are different claims about the structure of empathy, which have different

ethical implications. Finally, it is critical to separate empathy from empathic distress, which are

often conflated in discussions of empathy's utility. Experience sharing with others need not

transition into self-focused empathic distress, which can be exhausting (Singer et al., 2014). To

the degree that arguments against empathy are actually focusing on empathic distress, they miss

the mark, as very few have argued for the moral or social usefulness of empathic distress.

Does Empathy Erode Ethics?

One reason that no empathy is occasionally considered morally preferable to some

empathy is because of findings suggesting that empathy interferes with moral principles, creating

"moral myopia" (Prinz, 2011) that may "erode ethics" (Waytz, 2016). If empathy is intrinsically

biased and partial, this might seem at odds with the impartiality seemingly desired of moral

rules. In one much-cited example, when people are led to feel compassion for one child, they

give this child preferential treatment on an organ donor list even if it is procedurally unjust and

harms others (Batson et al., 1995). More recent work finds that trait and state compassion are

related to increased lying to prosocially benefit others (Lupoli, Oveis, & Jampol, 2017),

suggesting that compassion may interfere with moral rules against dishonesty. Empathy has also

been linked to hostility (Keller & Pfattheicher, 2013) and aggression (Buffone & Poulin, 2014).

According to the current framework, empathy varies as a function of how people balance

competing lower-level goals in the service of higher-level goal pursuit, such as maintaining

moral standards. Empathic goals will be valued if they are seen as supporting this higher-level

goal, and devalued if they are seen as inhibiting higher-level goals. In many cases, lower-level

empathic goals may facilitate higher-level moral goals. But in other cases, as when empathizing

with an out-group member would violate in-group moral norms (Haidt, 2012), there might be

conflict. The fact that there could be conflict does not mean that this will always be the case or

that it should be generalized as a feature of empathy, rather than a function of particular choice

contexts. We agree that the relationship between empathy and morality is complicated (Decety &

Batson, 2009; Decety & Cowell, 2014): it will vary across individuals and situations in a way

that does not allow easy main effect conclusions. As noted by Batson and colleagues (1995, p.

1043) in their much-cited work on empathy-justice conflicts, empathy may be neither moral or

immoral but rather *amoral,* with its relationship to principled moral action contingent on the

particular goals and viewpoints of the people involved.

Conflicts between empathy and moral principles, like many moral dilemmas, may be

unrepresentative (Gray & Schein, 2012). In everyday life, people may be able to satisfy empathic

and moral goals simultaneously: i.e. "if empathy can be evoked for the victims of injustice, then

these two motives can be made to work together rather than at odds" (Batson et al., 1995, p.

1053). Indeed, many prominent perspectives suggest that empathy grounds moral behavior

(Decety et al., 2016; de Waal & Preston, 2017; Tusche et al., 2016). Empathy can facilitate moral

goals by helping people understand which actions are morally appropriate, particularly in the

ambiguous situations that characterize everyday life (Masto, 2015). Empathy may help people understand social inequities in a manner that motivates them to act (Batson et al., 1995; Hoffman, 2000). Indeed, trait compassion is associated with increased reactivity to injustices (Decety & Yoder, 2015) and trait empathy is associated with increased condemnation of accidental harms (Patil et al., 2017). Moreover, brain networks associated with empathy for pain predict moral judgments about harmful outcomes (Patil et al., 2017), suggesting that blame judgments may be constructed, in part, from empathic appreciation of harmful outcomes.

Many scholars are less pessimistic about what empathy deficits imply for morality (Batson, 2011; Hoffman, 2000). For instance, Kauppinen (2015) agrees that empathy in its unregulated state may be problematic, but notes that people can regulate empathy to fit with the vantage point of an ideal "impartial spectator". Similarly, Hoffman (2000) has suggested that apparent limits of empathy are flexible, and thus not a problem for morality, because moral principles can be used to *overcome* these limits: "Empathy's limitations are minimized when it is embedded in relevant moral principles… the cognitive dimension of a moral principle… helps give structure and stability to empathic affects, which should make empathic affects less vulnerable to bias." This point is consistent with our framework: if lower-level empathic goals are put in service of higher-level goals to maintain standards, they should become more resistant to effort, and so be selected more often in cases of goal conflict. Not only can empathy and moral principles align, but the latter can be used as an anchor to make pursuit of empathic goals easier.

Critically, we can ask whose standard of morality is being used to evaluate the moral value of empathy? The standard is usually Western and liberal (Graham et al., 2013; Haidt, 2012). Even if empathy did inevitably bias moral behavior in an unfair direction—which we challenge—this is only problematic on the assumption that people want their moralities to be

universal rather than parochial, which many disagree with (Haidt, 2012). For example, many

people explicitly moralize in-group loyalty over out-group welfare (Graham et al., 2014),

implying that for some, partiality may be a feature, not a bug. In pre-industrial societies,

increased in-group loyalty associates with increased violence against out-groups (Cohen et al.,

2006). Moral norms are applied parochially to the local contexts in which reputation and

moralizing behaviors are most relevant (Fessler et al., 2015), and people who endorse group-

favoring moral norms choose to extend empathy in different ways (Waytz et al., 2016). Empathy

takes on specific goals given a person's choice of a moral standard—and given that standards are

flexible across cultures (Haidt, 2012) and relationships (Rai & Fiske, 2011), this complicates

strong interpretations of the relationship between empathy and morality.

What are the Alternatives?

Even if we were to accept that empathy was a limited-capacity resource, and that this

created moral problems—which we dispute—what are the alternatives to empathy? Some have

suggested that reasoning over moral principles may be a better basis for decision-making

(Bloom, 2016, 2017a; Slovic, 2007). Yet people reason in a motivated fashion to reach desired

conclusions (Kunda, 1990; Mercier & Sperber, 2011), and often precisely in moral contexts

where reasoning is encouraged (e.g., Stanley et al., 2017). Truly objective reasoning may require

effort, and be exhausting in ways that are comparable to empathy. Reasoning may be more likely

to follow from and justify empathy, or the lack thereof, rather than being an objective arbiter of

rationality (Haidt, 2001). This contrast between empathy and reasoning reflects an outdated

dichotomy, neglecting the ways that these processes interact, and hewing to classical categories

of mind such as *emotion* and *cognition* (Cunningham & Kirkland, 2012; Pessoa, 2008). Emotions

can be rational, even if they don't always involve reasoning (Damasio, 1994).

A related option is cognitive empathy, also referred to as mentalizing (Zaki, 2014) or perspective-taking (Todd & Galinsky, 2014). Some have suggested that cognitive empathy is value-neutral, and that how it effects pro-social or anti-social behavior is likely to depend on the goals of the decision-maker (Bloom, 2016, 2017a). We completely agree. But we think that the same logic should be applied to experience sharing, which, like any psychological process, can be used to either prosocial or antisocial ends depending on what the person wielding it wants to do. Rather than essentialize the morality of those consequences into the process, understanding a person's goals, values, and choices will provide more useful insights.

Others have suggested that more reliable foundations are anger (Prinz, 2011) and compassion (Bloom, 2016, 2017a; Jordan et al., 2016; Klimecki et al., 2014). Yet anger and compassion can be impacted by the same factors that influence empathy: for instance, people are less likely to punish transgressors who harm more victims (Nordgren & McDonnell, 2011). Similarly, the term *compassion collapse* is used because compassion, not just empathy, reduces in response to large numbers (Dickert & Slovic, 2009), and is susceptible to parochialism (Saucier et al., 2005) and can conflict with justice (Batson et al., 1995) and produce dishonesty (Lupoli et al., 2017). By the logic of arguments against empathy, these should also be dismissed.

Concluding Remarks

Empathy is often cast as a passive emotion, over which we have little control. In the current paper, we suggest that empathy results from an *active decision.* Drawing on principles of cybernetic control, value-based choice, and constructionism, our framework suggests that the scope of empathy varies as people prioritize competing goals. In our approach, there is nothing "special" about empathy: the scope of empathy reflects the same basic, domain-general tradeoffs in goal pursuit we make in all kinds of everyday decisions. Choice need not be conscious, and

includes fast, unconscious processes of subjective valuation. Empathy need not be a limited capacity resource, as is often assumed: apparent limits such as innumeracy and parochialism reflect motivated shifting of priorities as people choose to pursue different goals. By understanding the nature of people's goals—such as whether they intrinsically value empathic goals, and whether empathic goals support higher-level goals—we can better predict who will choose to empathize. Moreover, people might assume that empathy limits are compelled rather than chosen because empathic choices aren't usually *measured*: future work needs to assess empathy choices in real time, using behavioral paradigms and computational modeling, to better understand how people manage priorities and construct the limits of empathy.

Capacity explanations mistake our own choices as essentialized features of empathy itself, a tendency that is common in self-assessments of psychological phenomena (Barrett, 2009). Instead of treating empathy as an emotion that is in conflict with reason, we suggest that empathy is a *rational decision* that can be bounded like any other. Although it would easy to scapegoat empathy for its failings, the real issue might be our goals, values, and preferences, and these aren't unique to empathy. We're not simply saying that empathy is biased and people can correct these biases (Bloom, 2017b; Zaki, 2017). Our thesis is stronger: Empathic choices *create* the biases, which means limits are flexible, not fixed. This flexibility leads us to suggest that scientists use caution with rhetoric of "limits", "capacity", and "resources" around empathy. Such language can create a self-fulfilling prophecy, leading people to avoid empathy (Schumann et al., 2014). Conceptualizing empathy as a passive, depleting resource misconstrues the nature of empathy and may undermine it. It's easy to ask whether we can run out of empathy. But if empathy is a product of our own active decisions, then the real question should be why people choose to pursue different goals. The limits of empathy may be more apparent than real.

Acknowledgments

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