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Integrating Empathy and Interpersonal Emotion Regulation

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Abstract

When individuals experience empathy, they often seek to bolster others' well-being. But what do empathizers want others to feel? Though psychologists have studied empathy and prosociality for decades, this question has yet to be clearly addressed. This is because virtually all existing research focuses on cases in which improving others' well-being also comprises heightening their positive affect or decreasing their negative affect and helping them reach their own emotional goals. In this review, I argue that real-life empathic goals encompass a broader range—including sometimes worsening targets' affect or contravening their wishes in order to improve their well-being—that can be productively integrated into the framework of interpersonal emotion regulation (IER). I review the empathic IER spectrum in a number of contexts, including close relationships, professional caregiving, and group-based emotions. Integrating empathy and IER provides a synthetic and generative way to ask new questions about how social emotions produce prosocial actions.

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INTRODUCTION

A group of relatives confront an individual struggling with alcohol abuse, describing how the person's drinking has damaged their family. A therapist instructs a patient with obsessive-compulsive disorder to touch a toilet seat. An activist shares images of mistreated children on social media, along with the caption "If you're not outraged, you're not paying attention." All of these people purposefully worsen others' emotional state, sometimes without their consent. All of them also act in ways designed to increase others' well-being.

Cases like these challenge common assumptions about empathy and prosociality. The vast majority of research on these phenomena takes a hedonistic perspective—assuming that empathy motivates individuals to decrease others' suffering and add to their pleasure. In this article, I present a broader view of how people care for each other, drawing from the emerging field of interpersonal emotion regulation (IER). Integrating empathy and IER generates new perspectives on prosocial motives and actions, two of which I focus on here. First, different components of empathy produce varying IER goals, some aimed at regulating one's own emotions and others uniquely targeted toward those of others. Second, empathic individuals often seek to help others by worsening, rather than improving, their emotional states.

I will review evidence from three domains—close relationships, professional caregiving, and group-based emotion—that highlight empathy–IER connections, as well as the prevalence of non-canonical empathy in social behavior and affect. These cases highlight core features of empathy obscured by much of the psychological literature. In particular, empathic choices require individuals to understand, forecast, and regulate others' emotions as well as their own.

Examining these building blocks clarifies the deep connections between empathy and IER, and more generally it helps elucidate the complex, sometimes counterintuitive ways that social emotions produce prosocial actions.

Empathy:

a suite of distinct but interrelated processes through which observers respond to targets' emotions, including experience sharing, mentalizing, and empathic concern

Prosociality: actions designed to improve a target's well-being

Interpersonal emotion regulation (IER): the formation and pursuit of goals designed to change one's own or others' emotions through social interactions

HISTORY AND SCOPE OF THIS REVIEW

Since 2000, the *Annual Review of Psychology* has featured several pieces focusing on empathy (Bernhardt & Singer 2012, de Waal 2008), prosociality (Keltner et al. 2014, Penner et al. 2005, Tomasello & Vaish 2013), and emotion–cognition interactions (Barrett et al. 2007, Folkman & Moskowitz 2004, Phelps 2006). However, it has not yet featured coverage of IER. In this article, I review work on IER but also use this framework to recast empathy and prosociality. I focus preferentially, though not exclusively, on research published in the last 10 years.

A TAXONOMY OF EMPATHIC GOALS

Empathy describes ways in which observers respond to the emotions of social targets. It comprises multiple distinct but related components. Mentalizing refers to the explicit consideration of targets' experiences, which allows observers to form internal representations of what targets feel and why. Observers also experience varying affective responses to targets' emotions. Experience sharing entails vicariously taking on the targets' affect, and empathic concern entails experiencing motivation to improve someone else's well-being without necessarily taking on their states (Davis 1983, Zaki 2017).

Experience sharing and empathic concern are not mutually exclusive, but they do appear to be somewhat independent. Individual difference measures of concern and sharing are only weakly correlated, as are state-level reports of these empathic states in experimental contexts (Fultz et al. 1988, Jordan et al. 2016). Separability between these states takes on additional importance because concern tracks a number of prosocial and salutary outcomes that experience sharing does not. For instance, concern predicts volunteering, charitable donation, and generosity in laboratory tasks more tightly than sharing (Batson 2011, Davis et al. 1999, Jordan et al. 2016). Concern, but not sharing, tracks individuals' well-being (Leaviss & Uttley 2015, Morelli et al. 2015) as well as their ability to form and maintain successful close relationships (Crocker & Canevello 2012, Morelli et al. 2017). And whereas experience sharing puts caring professionals at risk for burnout, concern buffers them against these problems (Gleichgerricht & Decety 2013, Lamothe et al. 2014).

Differences between sharing and concern have been documented and discussed for decades, but a deep understanding of their roots has remained elusive. One productive way to take a new look at these phenomena is through the lens of emotion regulation. According to contemporary models (e.g., Gross 2015, Ochsner et al. 2012), regulation occurs when individuals appraise their emotional state, form a goal to change or maintain that state, and then pursue that goal through a number of strategies. For instance, an individual who realizes they are anxious prior to a job interview might calm themselves by practicing mindfulness or reminding themselves how well-prepared they are. Importantly, they might also outsource emotion regulation, for instance by calling a friend who can offer support or distract them with a funny story. This is known as IER (Dixon-Gordon et al. 2015, Niven 2017, Reeck et al. 2016, Williams et al. 2018). IER refers to ways in which individuals regulate their own and others' emotions through social interaction. In this example, the nervous interviewees employ intrinsic IER—regulating their own affect through social means—whereas their friends engage in extrinsic IER—forming and pursuing a goal to shift someone else's emotional trajectory (Zaki & Williams 2013).

IER is prevalent and impactful across a number of social contexts. It scaffolds the development of self-regulation in children (Morris et al. 2007), is a core component of social support between friends and romantic partners (Butler & Randall 2013), and factors heavily into professional contexts, including management and psychotherapy (Grecucci et al. 2015, Williams 2007). Disruptions in IER also characterize several disorders, including depression and borderline personality disorder (Dixon-Gordon et al. 2015, Hofmann 2014, Marroquín 2011).

Observer:

an individual focusing on another person's (or group's) emotional state

Target: an individual (or group) that is the focus of an observer's attention and action

Mentalizing:

an observer's explicit consideration of a target's internal states, producing an internal model of their thoughts, emotions, and goals

Experience sharing:

an observer's vicarious experience of a target's internal experience, including motor, somatic, visceral, or emotional states

Empathic concern:

other-oriented emotions elicited by and congruent with a target's well-being that motivate prosocial behaviors toward them

Empathic IER: goals to change another person's emotional state that follow from observers' empathic experiences toward targets

Both sharing and concern fit neatly within an emotional regulation framework. Observers who vicariously take on targets' negative affect through experience sharing often feel a resulting motivation to relieve their own distress. They sometimes pursue this goal by helping targets, but other times they salve themselves by avoiding or derogating targets or attempting to prevent them from expressing negative affect (Batson & Shaw 1991, Lerner & Simmons 1966). Even when occurring in social contexts, some of these cases represent intrapersonal emotional regulation. For instance, an individual who crosses the street to keep their distance from a homeless individual—and the guilt or pain encountering that individual would carry—is engaged in situation selection, a pre-emptive form of emotional regulation.

In other cases, empathic states drive IER goals, a phenomenon I will refer to as empathic IER. Again, types of empathy vary in the sorts of goals they produce. Experience sharing is more likely to drive intrinsic IER. An individual who becomes upset hearing about a friend's trouble might change the subject, regulating their own affect by suppressing their interlocutor's expression. By contrast, concern is defined as a fundamentally prosocial emotional response (DeSteno 2015, Goetz et al. 2010), which produces “a motivational state with the ultimate goal of increasing another's welfare” (Batson 2011, p. 20). This goal to improve others' well-being often (though not always) produces an aligned extrinsic IER goal to change the way a target feels.

BEYOND EMPATHY AS HEDONISM

Concern generates goals to help others, but what exactly do those goals entail? One strength of an emotion regulation framework is that it clarifies the nature of prosocial motives by specifying the affective states an observer wants a target to experience. This is not typically true of the study of empathy and prosociality. A common assumption—both within and outside psychological research—is that improving someone's well-being is a hedonic pursuit, comprising goals to increase their positive affect or decrease their negative affect. A second is that benevolent observers should form cooperative extrinsic IER goals that match the targets' intrinsic goals. In other words, both parties should agree about what one of them should feel and work together to pursue that outcome. Prosocial goals and hedonic, cooperative empathic IER are treated as interchangeable in existing work.

These assumptions are deeply ingrained in the vast majority of research on empathy and prosociality. In canonical studies of these phenomena, observers' empathy is either measured or manipulated; observers then make choices between acting selfishly or prosocially. For instance, they might decide between doling out money, electric shocks, or unpleasant tasks to themselves or a target. This paradigm has been enormously useful in exploring the psychological dimensions of self/other dilemmas; for example, empathy-related individual differences and brain activity, adoption of targets' perspectives, ethnic or ideological similarity between observers and targets, visibility of targets' suffering, and the resonance of that suffering with observers' past experiences all track observers' likelihood of making prosocial, rather than selfish, choices (Batson 2011, Cikara & Van Bavel 2014, Slovic et al. 2017).

Although this paradigm illuminates antecedents of prosociality, it also focuses on a single, simplified account of what prosocial behavior entails. It is safe to presume that targets prefer fewer shocks but more money and experience more positive affect (and less negative affect) when they get what they want. As such, observers who act prosocially in response to the self/other dilemmas described above also act hedonically and cooperatively. By design, this confounds the empathic goal of improving well-being with the IER goal of bolstering positive affect. Likewise, the large majority of studies in this literature offers observers only one prosocial option, leaving no space to explore tensions between forms of prosociality.

		Observer's goal	
		Positive	Negative
Target's goal	Positive	Hedonic cooperative <ul style="list-style-type: none"> • Celebrating a colleague's promotion • Soothing an upset child 	Counter-hedonic paternalistic <ul style="list-style-type: none"> • Family addiction interventions • Inducing ingroup guilt
	Negative	Hedonic paternalistic <ul style="list-style-type: none"> • Inflating social feedback 	Counter-hedonic cooperative <ul style="list-style-type: none"> • Delivering exposure therapy

Figure 1

This matrix delineates different classes of empathic interpersonal emotion regulation, determined by two dimensions: an observer's goal for a target to feel positive versus negative affect and a target's goal for their own emotions.

Outside the lab, many helpful acts are hedonistic and cooperative, but many are not. This means that psychological research essentially ignores the larger spectrum of empathic motives and goals. An IER framework allows us to address this gap and to broaden conceptual models of empathic motives and choices. In particular, as delineated in **Figure 1**, we can acknowledge variance along two dimensions: (a) whether concern motivates hedonic or counter-hedonic extrinsic IER, and (b) whether observers' goals for their targets match or do not match the targets' own goals. Considering these factors—and especially noncanonical cases of empathic IER—can foster a more complete perspective on the range of prosocial motives and actions.

Hedonism Versus Pragmatism

Much research in emotion regulation is undergirded by the notion that people strive to feel good and avoid feeling bad (Larsen 2000). However, this assumption is often violated across people, groups, and situations. Depressed individuals and those with low self-esteem sometimes prefer to feel negative affect (Millgram et al. 2019, Wood et al. 2009), especially after suffering a failure (Heimpel et al. 2002). People commonly subject themselves to horror movies, somber music, habanero sauce, marathon training, and other unpleasant stimuli (Oosterwijk 2017, Rozin et al. 2013). Some cultures embrace negative affect more than others (Koopmann-Holm & Tsai 2014), and counter-hedonic motives also vary across the life span, for instance appearing more common in adolescence than older adulthood (Riediger et al. 2009).

These data suggest that people are not pure emotional hedonists. How, then, do we select what to feel? Many motives shape emotion goals; these include impression management, adaptive detection of threats, personal and cultural values, desire for achievement, and fit between an affective state and one's personality (Augustine et al. 2010, Higgins 2011, Ortnner et al. 2018, Tsai 2007, Zaalberg et al. 2004). These motives, in turn, can be aggregated under an overarching theme: People are emotional pragmatists who pursue feelings not because they are pleasant, but because they are useful in a given context.

A wellspring of evidence now supports this instrumental view of emotion regulation (Tamir 2016). People pursue anger prior to tasks that require them to aggress, fear prior to tasks that require them to avoid threats, and sadness prior to tasks that require them to garner others' sympathy. These counter-hedonic motives are driven by the individuals' beliefs that negative emotions will serve their goals, and inducing people to hold such beliefs increases their desire to feel negative affect (Tamir et al. 2015). Finally, evidence suggests that instrumental emotion goals are salutary:

Hedonic IER:
regulation guided by the desire to increase positive emotion or decrease negative emotion in self or others

People who flexibly desire negative or positive states when they are useful, as opposed to merely desiring positive affect, exhibit greater psychological well-being (Tamir & Ford 2012).

People also approach empathy instrumentally, in at least two ways. First, individuals shift their experience of empathy in a motivated fashion: avoiding it when it is likely to be painful or negative, and approaching it when it is useful, for instance in helping form or maintain social bonds (Zaki 2014). Second, observers who experience empathy develop instrumental goals for others' emotions. A growing set of studies has found that observers engage in counter-hedonic extrinsic IER to benefit targets. When targets are about to play a game that requires either aggression or avoidance of threats, observers choose for them to listen to music or view images that will induce anger or fear, respectively (Netzer et al. 2015). Observers high in trait empathic concern are more likely to select negative emotions for targets in these settings, and inducing observers to experience concern for targets likewise increases their likelihood of engaging in counter-hedonic IER (López-Pérez et al. 2017, Niven et al. 2019). This work supports the argument that empathic IER does not always comprise a goal of improving another person's hedonic state.

Cooperation Versus Paternalism

A key achievement of human empathy, compared to that of other species, is our ability to not merely sense others' affect, but also to form detailed internal models of others' desires and beliefs. These inferences allow observers to negotiate and cooperate by pinpointing targets' goals even when they differ from the observers' own goals and by helping targets achieve their aims (de Waal 2006, Tomasello et al. 2005). Prototypical studies of prosociality follow this paradigm, in that observers who improve targets' well-being do so cooperatively—moving targets toward their own goals.

Cooperative goals can be counter-hedonic. In the studies described above, observers chose for targets to feel useful negative emotions. In similar paradigms, people choose to feel negative emotions themselves. Thus, an observer who makes a target to feel negatively is nonetheless engaged in cooperative IER—because the target would make the same choice for themselves.

Other forms of IER are noncooperative. Negotiation often depends on people's ability to advance their own agenda by altering others' feelings (Niven et al. 2019). A car salesperson benefits from excitement, an insurance salesperson benefits from fear, but whatever their target emotion, service professionals commonly use IER to shift customers into a buying mood (von Gilsa et al. 2014). During competition, observers often use IER to “psych out” their opponents, inducing emotions that will rattle or distract them (Gneezy & Imas 2014). Intergroup conflict, bullying, and online trolling are characterized by systematic efforts to emotionally destabilize others (Sest & March 2017).

The above instances of noncooperative IER range from neutral to malevolent, but observers also engage in noncooperative IER for benevolent reasons. Economists describe paternalistic altruism, in which observers act as though they know what is best for targets. For instance, people prefer to make in-kind charitable donations—restricted to food or health-related expenses—rather than giving recipients money to spend freely (Gangadharan et al. 2018). Developmental psychologists have documented similar preferences. For instance, five-year-olds fulfill other children's wishes by giving them chocolate but refuse to do so if they first learn that chocolate will make the targets sick (Martin et al. 2016).

Paternalism has received scant attention in affective science, but some work suggests that empathy can drive observers to act paternalistically. In one set of studies, observers evaluated subpar essays privately and then evaluated them a second time, knowing that the writer would see their feedback. Observers high in trait empathy—or induced to experience empathy for the

target—were more likely to inflate their evaluation, protecting targets' feelings but also depriving them of useful feedback (Lupoli et al. 2017).

In another study, observers were either induced to feel empathy for a distressed target or to remain neutral. The target requested help solving an anagram task, but some observers learned that giving the target too many hints would be detrimental to their future performance. Observers induced to feel neutral provided comparable amounts of hints regardless of whether they were described as detrimental or not. By contrast, observers who empathized and knew hints could harm the target in the long term offered less help, disregarding the targets' wishes (Sibicky et al. 1995).

Observers who inflate their feedback on essays avoid targets' negative affect. Observers who deny targets' requests for hints might instead induce negative affect. In other words, their choices range from hedonic to counter-hedonic. Yet across these contexts, observers who experience empathy for targets are driven toward paternalistic—rather than cooperative—IER strategies.

Summary

Atypical examples of a phenomenon can illuminate how that phenomenon operates more broadly. Counter-hedonic and paternalistic IER place greater—and different—demands on observers than hedonic, cooperative actions. As such, they can reveal parameters of empathy and IER that are not readily apparent in the bulk of the scientific literature.

In the following sections, I review noncanonical forms of IER across three contexts—close relationships, professional caregiving, and group emotion. I then use counter-hedonic and paternalistic cases as a wedge to consider features of empathy and IER more generally, especially focusing on their psychological building blocks and on determining how, when, and in which ways different forms of IER are adaptive for observers, targets, and their relationships to each other.

NONCANONICAL IER ACROSS CONTEXTS

Close Relationships

Individuals' emotional well-being depends on close relationships. This is perhaps most obvious in the context of child development. Parents and caregivers not only regulate children's emotions; their interactions scaffold the children's later abilities to regulate themselves (Eisenberg et al. 1998).

Parents shape children's emotional lives in many ways, including social referencing, modeling, household emotional climate, and reciprocal interactions (Morris et al. 2007). A key aspect of parenting is managing children's experience and expression of negative affect. Psychologists have documented a slew of such parental strategies, many of which can be conceptualized as falling under one of two IER categories. The first strategy is hedonic paternalistic, whereby the parents attempt to force or coerce the children into suppressing their negative affect, for instance by punishing, dismissing, or belittling their feelings or withholding attention or affection while the children express negative emotion (Morelen & Suveg 2012, Roth et al. 2009). A second strategy is hedonic cooperative, whereby the parents validate and discuss the children's feelings with them and work with them to pursue strategies, such as cognitive reframing, that can reduce the children's negative affect (Gottman et al. 1996). Both of these strategies entail parental attempts to reduce children's negative affect, but they produce widely varying downstream results. Cooperative IER bolsters children's own regulatory ability (Crowell et al. 2013, Morelen & Suveg 2012), whereas paternalistic IER tracks later dysregulation and externalizing behavior in children.

Viewed through the lens of empathic IER, these outcomes might reflect differences in the parents' empathic IER goals. When parents work cooperatively with children, they focus on the

ultimate goal of improving their affective state, consistent with empathic concern. When parents dismiss or punish children's negative displays, they might in fact be more interested in reducing their own discomfort, consistent with experience sharing. Parents who vicariously take on children's distress will take whatever measures most quickly reduce the children's expressions—thus regulating parents' own reactions to those expressions—even if those strategies do not serve the children in the longer term.

Two examples bear out this prediction. The first is parental responses to infant sleep disruptions. It will shock no one that nighttime infant crying increases negative affect and arousal in adults. However, parents vary in the way they interpret such crying, with some viewing it as a sign of severe distress that requires immediate intervention and others viewing it as less urgent. Parents who believe crying signals an emergency are more likely to quickly intervene, for instance by soothing their child as soon as they wake up. Ironically, such parental soothing tracks children's later difficulty soothing themselves and is a predictor of ongoing sleep disruption (Sadeh et al. 2016).

A similar effect characterizes parents of children with chronic pain. Some parents in this position catastrophize their child's discomfort, agreeing with statements such as "When my child is in pain, it's terrible and I think it's going to overwhelm me." This self-report measure of catastrophizing closely mirrors items associated with empathic distress (e.g., "I sometimes feel helpless when I am in the middle of a very emotional situation."). Parents who catastrophize also engage in strategies to avoid pain: for instance, frequently keeping children out of school or other activities. Like the excessive soothing of infants, this choice predicts negative outcomes for children in the long run, including increased depression and anxiety and reduced school functioning (Chow et al. 2016).

These examples both comprise hedonic paternalistic, extrinsic IER strategies that—in avoiding distress—eventually leave targets worse off. As described above, this is consistent with work on personal distress, which motivates immediate avoidant action that does not always benefit the target. Little work has directly tied these phenomena to each other, but this will be an important direction for future research.

Throughout adulthood, family, friends, and romantic partners remain crucial sources of IER. When individuals experience strong affect, they gravitate toward others to express themselves and receive support (Rimé 2009). Individuals who share their emotions benefit as a result, for instance by quickly forming supportive relationships in new environments (Williams et al. 2018). People also appear savvy in their sharing. For instance, they seek different friends depending on their affective goals (e.g., to be cheered up when sad versus calmed down when angry) (Cheung et al. 2015) and disproportionately disclose negative events to empathic members of their community (Morelli et al. 2017).

Supportive social partners, in turn, reduce targets' negative affect during stressful times and intensify their happiness following positive events (Gable & Reis 2010, Uchino et al. 1996). Some affective consequences of social contact are incidental; for instance, the mere presence of close others attenuates individuals' responses to stress and pain (Beckes & Coan 2011). In other cases, friends and romantic partners purposefully shape each other's emotions through extrinsic IER. The bulk of their efforts are hedonic. For instance, when asked the extent to which they use different IER strategies with friends, colleagues, and partners, individuals endorse hedonic strategies twice to three times as strongly as counter-hedonic ones (Niven et al. 2012). In organizational contexts, managers consistently endeavor to reduce their supervisees' stress to boost morale (Little et al. 2012).

Though less thoroughly documented, friends, colleagues, and relationship partners also engage in counter-hedonic IER. One example surrounds interpersonal alerting, which happens when an

observer directs a target's attention to a problematic situation they might otherwise ignore. For example, during discussions of the future, romantic partners alert each other to the seriousness of potential problems, upregulating their partner's worry (Parkinson et al. 2016). Individuals fine-tune their hedonic and counter-hedonic IER based on their partner's current emotional state. For instance, an individual's distress tracks the likelihood that their partner will try to calm them. By contrast, individuals' initial sense of calm and their reappraisal of a problem predict their partners' likelihood of trying to increase their worry through alerting.

Some forms of IER in close relationships are noncooperative. Consider the support of individuals struggling with substance abuse. When drug and alcohol users resist treatment or fail to seek it, concerned significant others, such as family members and friends, sometimes take the lead in guiding them toward it. Some of the strategies they employ are unilateral, proceeding at first without the participation of the individual with substance abuse issues. These culminate in an intervention, a surprise meeting in which concerned significant others confront the individual about the scope and consequences of their behaviors (Loneck et al. 1996). Such interventions are both counter-hedonic and paternalistic but nonetheless increase individuals' likelihood of beginning and continuing treatment (Kirby et al. 2015).

Professional Caregiving

Caring professions—such as medicine, social work, and psychotherapy—depend heavily on IER and empathy. Individuals in these lines of work encounter vast amounts of suffering and manage others' emotions during volatile moments. It is thus unsurprising that empathy tracks caregivers' effectiveness. Patients of empathic physicians report greater satisfaction with their care, are more likely to adhere to medical recommendations, and even recover more quickly than those whose physicians are less empathic (Hojat 2016). Similarly, psychotherapy clients experience greater therapeutic alliance when the clinicians empathically mirror their affect, posture, and levels of arousal during therapy (Koole & Tschacher 2016).

The fact that empathy is valuable to the caring professions does not mean its role is simple. When combined with intense, chronic exposure to others' suffering, it can become an occupational hazard. Professional empathy tracks patient well-being, but empathic caregivers—and especially those high in experience sharing—develop burnout and compassion fatigue at unusually high rates (Gleichgerricht & Decety 2013).

A surfeit of empathy can also interfere with caregivers' decision making (Hojat 2016). A physician who experiences intense empathy for patients might attempt heroic medical interventions, even when these treatments are more likely to prolong suffering than to succeed. Moreover, when delivering bad news, caregivers often avoid language that will cause patients distress. This can be characterized as a form of hedonic paternalistic IER, but it also leaves patients unclear about their diagnosis in the moment and may leave them feeling alienated afterwards (Fallowfield & Jenkins 2004). Several programs now train physicians in the delivery of bad news (Back et al. 2007). Some of their instructions focus on classic tenets of empathic communication, but others focus on helping caregivers overcome their desire to shield patients from suffering in favor of communicating clearly.

These issues highlight a tension at the core of professional empathy. Caregivers' mission is to improve others' well-being, but that goal is not always consistent with hedonic or cooperative IER. One key example of this tension arises in exposure-based interventions, which involve helping patients approach stimuli or memories they find aversive. Exposure is among the most efficacious therapies for phobia, posttraumatic stress disorder, and related disorders (Foa et al. 2008), but it

also requires generating intense negative affect in patients. By experiencing aversive emotions and sensations they habitually shun, patients can form new beliefs about these stimuli and ultimately learn they do not need to fear or avoid them. This, in turn, leads to dramatic reductions in the symptoms central to their disorder (Craske et al. 2014).

Despite the utility of exposure, evidence indicates that it is underutilized among clinicians. Clinicians who do use it are prone to cautious delivery of exposure—for instance, refraining from using highly anxiety-provoking stimuli, terminating exposure tasks early, or interweaving anxiety-reduction exercises into those tasks (Deacon et al. 2013). There is little evidence that cautious delivery improves the efficacy of exposure, and some evidence that it renders therapy less effective (Peris et al. 2017). Why, then, would clinicians favor it? One possibility is that they overweight the negative impact of negative affect. Consistent with this prediction, clinicians commonly report reservations about exposure, largely rooted in the belief that patients will be unable to tolerate the distress it produces. These reservations, in turn, track both avoidance and cautious delivery of therapy (Farrell et al. 2013).

This same study found that clinicians' trait empathy also predicts their tendency toward cautious delivery. At least some research demonstrates that therapists vicariously take on patients' negative affect and physiological arousal during exposure (Schumacher et al. 2014). Together, this work opens the possibility that experience sharing might induce therapists to engage in hedonic paternalistic IER, depriving their patients of treatment options that feel too aversive to deliver. Interestingly, clinical supervisors are now encouraging new clinicians to avoid cautious delivery through cognitive framing and meta-exposure, that is, by exposing them to patients' distress and teaching them that negative affect, though unpleasant, is crucial to optimal treatment (Farrell et al. 2013).

Caregivers walk a fine line: They must steward others' well-being, but this sometimes requires becoming a source of negative affect for patients, which could potentially induce guilt, moral distress, and avoidance. This could in turn prompt caregivers to use sugarcoated communication or cautious delivery, which does patients a disservice by trying to protect their feelings. Avoiding this outcome might require them to actively modulate their own empathy in an instrumental way (Zaki 2014). Given its importance to promote health and well-being, this is an idea that should receive more attention in future work.

Group-Based Emotions

The vast majority of affective science focuses on how emotions unfold within individuals. Research on IER and empathy extends this paradigm, but nonetheless it focuses mainly on how one observer perceives and manages the feelings of one target. However, people's emotions and emotional goals also operate in larger collective contexts. Pride in one's flag, sadness at the anniversary of a national tragedy, and outrage at the actions of an outgroup are all forms of group-based emotion—affective responses to the collective experiences of one's group, even those that do not personally affect the individual (Smith & Mackie 2015).

Such emotion depends on one's identification with their group, be it a team, town, company, or country. People who experience high levels of identification are most invested in their group's well-being and most reactive to events that affect it. For instance, individuals who report psychological overlap between themselves and their group are more willing to protect the collective, even violently (Swann et al. 2009). Group identification also affects empathy. Whether measured through self-report, behavior, facial expressions, or brain activity, individuals exhibit greater levels of experience sharing, mentalizing, and empathic concern toward members of their own group

compared to outgroup members (Cikara & Van Bavel 2014), especially if they are highly identified with their ingroup (Hackel et al. 2017).

Individuals commonly regulate group-based emotion both in themselves and in their peers (for review, see Goldenberg et al. 2016). Collective rituals and holidays—from church services to 4th of July fireworks—are designed to produce shared emotional states across group members, enforcing group identification in the process. As with the individual level, much group-based emotion regulation is hedonic. People choose their media landscape to cultivate pride and hope for their group, and they deny evidence of their group's misdeed to avoid collective shame (Cohen-Chen et al. 2014, Wohl et al. 2006). In other cases, individuals have reasons to pursue counter-hedonic emotions for their groups. For instance, collective mourning produces sadness, but it might also increase group members' sense of connection to each other.

There are two classes of circumstances in which negative group emotion is particularly useful. The first is intergroup conflict. Fear and anger underlie xenophobia and aggression, but during conflict they also drive group members to band together, remain vigilant to threats, and protect each other (Bar-Tal 2001). Consistent with a functionalist account of emotion regulation, during conflict individuals want to feel anger, and they are less keen to experience goal-inconsistent emotions such as empathy for outgroup members. These affective desires predict the actual experience of anger and empathy (Porat et al. 2016).

Little psychological research directly examines people's counter-hedonic regulation in the face of conflict, but history offers countless examples. During war and cultural conflicts, propaganda and media are used to ramp up anger and fear of outsiders. Collective negative affect paves the way for dehumanization and hatred—psychological states that, in turn, make violence more palatable for soldiers and civilians alike (Grossman 2014, Kimani 2007).

Collective action is a second context that favors negative group-based emotion. When groups are characterized by structural inequality, power asymmetries, or oppression, positive emotions favor complacency. Individuals from low-power groups who experience harmony with people in power are less likely to agitate for change and more likely to trust high-power individuals to act fairly, even when that trust is misplaced (Dixon et al. 2010). By contrast, outrage motivates people to challenge the status quo and energizes movements for equality and justice (Spring et al. 2018). The guilt experienced by high-power individuals also tracks their openness to such movements and their reluctance to endorse behaviors that harm low-power groups (Shepherd et al. 2013).

A functionalist account suggests that when collective action is urgent, individuals should seek out negative group-based anger and guilt for themselves and fellow group-members. At least some findings support this prediction. Protestors highlight injustice and suffering, endeavoring to incite anger and guilt within their groups (Van Zomeren et al. 2012). In many cases, protestors engage in IER that is not only counter-hedonic but also paternalistic by disrupting people's comfort with reminders of ingroup transgressions.

Likewise, when individuals are reminded of ingroup transgressions, they upregulate their experience of group-based guilt, especially when they believe guilt will be useful or when others do not experience sufficient guilt (Goldenberg et al. 2014, Sharvit & Valetzky 2019). In this latter case, individuals compensate for fellow group members. Emotional compensation involves purposefully changing one's own emotion, but it can nonetheless serve as a form of indirect IER in two ways. First, individuals who upregulate their affect in response to low collective emotion do their part to nudge the group's average emotion upward. Second, people conform to the emotions of others, especially when they share group membership (Izuma & Adolphs 2013). Individuals who highlight their own guilt, for instance, might offer themselves as targets for conformity, exerting normative pressure on others to upregulate their own negative affect.

Summary

Across diverse contexts, including family life, romantic relationships, professional caregiving, intergroup conflict, and collective action, people form goals regarding others' emotional responses. Many of these goals are hedonic and cooperative, but many are not. Individuals also pursue negative emotions for their loved ones, friends, patients, and group mates—not because they prize those others' pain, but because they believe fear, anger, distress, or guilt will help those targets in the long run. The foregoing review demonstrates that empathic goals aimed at improving targets' affective state are sometimes in tension with empathic goals aimed at benefiting those targets, and this tension is not obvious in the vast majority of research on empathy, prosociality, or IER.

The tensions between empathic goals also foreground psychological building blocks required for empathic IER. By building blocks I mean psychological processes that support IER but are not specific to it. Here I focus on two such building blocks, affective forecasting and self-control. These processes intersect with empathic IER most obviously in counter-hedonic and paternalistic contexts but are not limited to them. This is one reason that noncanonical examples provide a window into the psychological structure of empathic goals more broadly.

BUILDING BLOCKS OF EMPATHIC IER

Prosociality can be a reflexive, automatic expression of emotion (Levine et al. 2018). However, empathic concern also produces more sophisticated prosocial goals, which require cognitive and regulatory effort. Noncanonical IER—such as fostering counter-hedonic emotions in others or contravening their goals—provides clear examples of this effort.

To illustrate this, imagine that a friend of yours begins dating a new partner you find arrogant and emotionally abusive. Your friend gushes about their new infatuation to you over coffee and, with a wide smile, asks what you think. You realize that offering your honest assessment will hurt your friend, but because you feel the relationship will eventually cause even more pain, you tell them what you truly think. Here you pursue counter-hedonic, paternalistic IER. You engage in a behavior designed to sap your friend's enthusiasm—replacing it with anger, sadness, or both—and do so without their consent. What type of calculations go into a choice like this one?

Forecasting

Emotion regulation requires emotional forecasting: identifying how future events will affect emotional experiences and vice versa. Individuals often pursue emotions for their own sake, and in such cases they need only forecast one step ahead in an affective trajectory. A parent who wants their child to be happy tickles them; a bully who wants their victim to be sad teases them. As soon as each target experiences the relevant emotion, the observer's mission is accomplished.

Other forms of regulation require multistep forecasting. When people work nights or study for difficult exams, they accept temporary discomfort in the service of positive long-term outcomes. Delay of gratification depends on similar calculations (Bulley et al. 2016). Instrumental emotion regulation (see the section titled Hedonism Versus Pragmatism) is more direct: People specifically target negative affective states, not because they are desirable on their own, but because they will help produce positive outcomes later.

When you tell your friend a hard truth about their partner, you engage in multistep interpersonal forecasting. By detailing their partner's shortcomings, you purposefully increase your friend's negative affect. Your short-term goal might be shared by a bully, but your IER differs from theirs in its long-term goal. You make your friend upset in the hopes that their negative affect might drive them to make a decision, such as breaking off the relationship, that will maximize their long-term well-being.

Emotions pervasively affect decision making (Forgas 1995, Lerner et al. 2015). When individuals experience anger, they tend to desire a change in their situation and to become relatively risk seeking when considering future actions (Frijda et al. 1989, Lerner et al. 2015). By contrast, fear renders people relatively risk averse and pessimistic about the consequences of future actions (Lerner & Keltner 2000). Emerging evidence suggests that observers hold consistent lay theories about how emotions guide future behavior (Ong et al. 2016). It thus stands to reason that when regulating others' affect, observers take into account the value not only of the emotions themselves but also of the decisions toward which they will drive targets and the utility of those choices.

By stoking your friend's anger, you make it more likely that they will take an action to change their situation. A parent who encourages their young child to fear busy intersections makes it less likely that they will impulsively run into the street. In both cases, observers forecast the positive outcomes of a decision driven by negative affect and decide that the utility of that decision is greater than the cost of short-term negative affect.

This role of forecasting in empathic IER remains poorly understood, but it is consistent with other aspects of empathic concern. Across both evolution and development, early arising empathic capacities such as experience sharing are later layered with the ability to draw specific attributions about what others feel, want, and need, even when the targets' experience diverges from the observers' own (de Waal & Preston 2017, Epley et al. 2004). Such self/other distinction relies on a general capacity for self-projection—extracting one's self from the here and now—that also characterizes autobiographical memory, counterfactual reasoning, and prospection about the future (Buckner & Carroll 2007). Social perspective taking further draws on brain systems similar to those involved in prospection (Spreng et al. 2009).

Empathic IER often requires both self-other distinction and forecasting, which might render it especially challenging. Decision making is affected by both social and temporal distance, such that observers view their future selves and their targets as similar to each other but different from the observers' present selves (see also Parfit 1984). For instance, people value rewards for themselves in the present more than rewards available to their future selves or to other people, a bias partially rooted in the difficulties of vividly prospecting and perspective taking (Hershfild & Kramer 2019, Pronin et al. 2008). Likewise, people exhibit systematic biases when forecasting their own future emotions and others' feelings, and these biases compound when they are asked to imagine what others will feel in the future (Ong et al. 2018).

The foregoing discussion suggests that forecasting plays a pivotal role in empathic IER and also places demands on the observers who use it. Future work should further explore this relationship as well as probe whether the capacity for forecasting (*a*) overlaps with social perspective-taking ability and (*b*) tracks individuals' use of counter-hedonic and paternalistic IER.

Self-Regulation

When you tell your friend what you think of their new relationship, you generate negative affect in them, but the consequences of your choice reverberate to you as well. A smooth conversation becomes uncomfortable and charged. Your friend hears about their partner's shortcomings but perhaps notices some of yours as well. In order to generate useful negative emotions in them, you accept an unpleasant experience yourself.

Extrinsic IER centers around goals for others' feelings, but executing IER goals often requires individuals to regulate themselves as well. At the broadest level, any prosocial behavior requires weighing one's own utility against that of others (Keltner et al. 2014). Even after that trade-off is made, however, empathic IER goals can require additional forms of self-regulation.

As we saw above, most psychological paradigms used to study prosociality obscure tensions between types of prosocial behavior. Likewise, standard assessments of emotion regulation—though vital for delineating the processes through which people alter their affective experiences (Gross 2015)—can obscure the prevalence of socially directed self-regulation. In prototypical studies of emotion regulation, individuals react to stimuli such as evocative images, films, or memories while being alone in a controlled laboratory setting. They change the trajectory of their emotional responses using strategies—such as reappraisal or suppression—experimenters instruct them to use.

In the field, by contrast, people frequently regulate their own emotions for social purposes, such as avoiding conflict, managing their impression, and helping others feel better (English et al. 2017). For instance, an individual might purposefully downregulate or hide their positive reaction to winning a prize if the runner-up is standing next to them, or they might upregulate their expression of emotion to be better understood by others (Eldesouky & English 2019; W.C. Williams, E. Nook & J. Zaki, unpublished manuscript).

Counter-hedonic IER likely places additional regulatory demands on individuals. When an observer worsens someone else's affect, empathy can generate psychological conflict and negative affect and cause individuals to question the morality of their actions (Crockett et al. 2014). Consistent with this, individuals who must harm others in their line of work—such as physicians who deliver painful treatments or managers who lay off employees—exhibit self-reported and physiological increases in stress, disrupted sleep, and worsened physical health (Grunberg et al. 2006, Hulsman et al. 2010).

Individuals who do harm often downregulate their empathic responding through moral disengagement: for instance, by ignoring, dehumanizing, or derogating victims (Bandura 2016). Disengagement is typically associated with pernicious behavior such as violence or oppression. However, observers might also disengage as a form of self-regulation allowing them to engage in counter-hedonic IER to help targets. In a series of surveys, about half of the professionals who cause suffering as part of their work (e.g., physicians who deliver painful therapies to patients) reported purposefully disengaging emotionally (Margolis & Molinsky 2008). Likewise, medical students' empathy decrease over their training (Neumann et al. 2011), and physicians exhibit blunted physiological and neural responses to others' pain (Decety et al. 2010).

Empathic downregulation in medicine is thought to be a self-protective mechanism helping professionals reduce their propensity for burnout, though perhaps at the cost of their patients' well-being (Vaes & Muratore 2013). The foregoing argument, however, raises an intriguing alternative prediction: During counter-hedonic IER, observers might purposefully downregulate empathy in order to benevolently worsen targets' affect. This would represent a complex trade-off between different forms of empathy, in which empathic concern for a target's future well-being requires disengaging from experience sharing with that same target in the moment.

Although little work has explored this possibility, it is consistent with many of the findings described above. In order to not immediately sooth a crying infant, a parent might need to decrease their experience sharing with the child by reappraising their crying as normal rather than a sign of urgent distress. In order to deliver exposure therapy without engaging in undue caution, a therapist might have to reappraise a patient's distress as useful to their therapeutic outcomes. In order to produce social change, an activist might have to steel themselves for uncomfortable conversations with colleagues and friends. Although these conclusions may seem obvious given the framework presented here, the scientific study of self-regulation and IER remains in its infancy. Thus, future work should explore the relation between these constructs.

IER SUCCESS: METRICS AND ANTECEDENTS

How do we determine whether, when, and how emotion regulation has succeeded? At the simplest level, we can ask whether someone is able to change their affect in the way they intend. When an individual tries to decrease their sadness, anger, or fear and reports feeling less negatively afterwards, that provides evidence they successfully pursued their affective goal (Gross & John 2003). Changes in other measures of affect—such as facial movements, physiological arousal, and patterns of brain activity—likewise index regulation success, and convergence across these channels provides even stronger evidence (Ochsner et al. 2012).

Functionalism accounts offer us a second metric of success: Did an individual's emotional regulation help them accomplish a relevant goal? Someone who ramps up their anger and later dominates a hostile negotiation, or who practices reappraisal and then cooperates with an outgroup member, has succeeded in generating useful emotions (Halperin et al. 2013). A third metric goes beyond any one goal and instead examines the role of emotional regulation in promoting broader adaptive outcomes. For instance, individuals who habitually regulate their emotion enjoy greater social integration and lower levels of depression in young adulthood (Ford et al. 2018, Tamir et al. 2007) and greater marital satisfaction (Bloch et al. 2014).

Extrinsic IER, whereby one person tries to change another's emotional experience, complicates these metrics. To parse its effectiveness, consider the three variables captured in **Figure 2**: an observer's goals for a target's emotions [$G(t)_o$], a target's goal for their own emotions [$G(t)_t$], and an adaptive or maladaptive outcome for the target [$O(t)$].

When all three of these variables overlap, IER reduces to standard prosociality as seen in the bulk of existing research. The observer and target concur about what the target should feel, and by some external metric, they are both right. As the observer executes their goal, they cooperate with the target, increase positive or decrease negative affect, and help the target.

Other combinations of these variables demand more nuanced perspectives on IER's success. In the segment of **Figure 2** shaded red, two people share a goal about what one of them should feel, but that goal diverges from some external metric of adaptiveness. Here IER is cooperative but might not serve either party in the long run. A child with chronic pain might want to avoid discomfort, and their parents might share that goal. They can pursue it through situation selection,

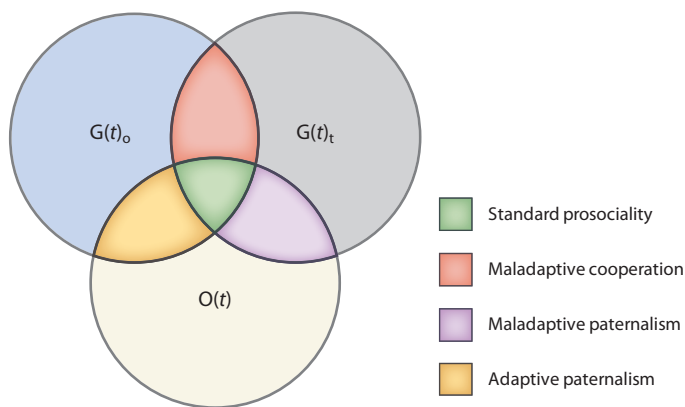


Figure 2

This Venn diagram depicts different combinations of interpersonal emotional regulation goals and outcomes. $G(t)_o$ indicates an observer's goal for what a target should feel; $G(t)_t$ indicates a target's goal for what they should feel; and $O(t)$ indicates an adaptive or maladaptive outcome.

for instance by keeping their child out of school or other activities, but as seen above, this effort can further limit the child's functioning. In difficult times, both individuals in a couple might try to keep the peace by suppressing their anger or sadness. This strategy might be cooperative, but when it becomes a habit, it can lead to reduced marital satisfaction (Velotti et al. 2016). Cases like these highlight forecasting as a component of empathic IER: Observers might empathize with targets in the short term and endeavor to improve their immediate well-being but ironically do them harm instead.

In the section of **Figure 2** shaded purple, an observer forms an affective goal for a target, but that goal diverges both from what the target wants and from an adaptive goal. Cases like these, which we can refer to as maladaptive paternalism, represent two conflicts. First, when targets' and observers' goals diverge, even well-intentioned actions can produce negative social consequences. As described above, observers sometimes engage in prosocial lies, for instance by inflating their ratings of a poorly written essay to avoid making its writer feel bad. Though this hedonic paternalism is motivated by empathy (Lupoli et al. 2017), prosocial lies are not received well by targets, who feel greater negative affect, judge observers as immoral, and are more likely to punish them after learning they have lied (Lupoli et al. 2018).

Research on social support demonstrates that recipients feel most helped when support providers are responsive to their needs—that is, they help targets advance their own psychological goals (Canevello & Crocker 2010, Maisel & Gable 2009). But even when observers work intently at understanding their targets' minds, they can nonetheless come up short (Eyal et al. 2018). In the case of prosocial lies, an observer might assume a target wants to avoid negative feedback when in fact the target wants to be challenged. Being misunderstood, in turn, can lead targets to feel undermined and alienated from the observers (Morelli et al. 2014).

Maladaptive paternalism also limits the targets' concrete opportunities. When readers inflate their assessment of an essay to spare the writers' feelings, they deprive them of the chance to improve. Evidence suggests that patterns like this are common. For instance, instructors with a fixed theory of intelligence are more likely to comfort students who have failed at a math task by assigning them less work or not calling on them as much in class, but such comforting demotivates students (Rattan et al. 2012). Likewise, when individuals provide each other with visible support, making their help obvious, support recipients can feel less capable of handling the problems themselves (Bolger & Amarel 2007).

These negative effects are compounded by the fact that observers use paternalism more frequently when encountering groups traditionally low in status or power. In one study, individuals were more likely to donate to members of a negatively stereotyped group only if they could restrict the way these donations were used (Jones 2017). Other forms of intergroup paternalism are subtler. Benevolent sexism (BS) comprises warm but belittling attitudes toward women. One dimension of BS is the idea that women's well-being must be protected by men (Glick & Fiske 1996). Though evincing a shallow positivity, such paternalistic attitudes generate negative affect and reduced self-efficacy among women, and they can damage their performance in professional settings (Dardenne et al. 2007).

Maladaptive paternalism also characterizes interracial interaction. White individuals manage their behavior around black individuals to avoid appearing prejudiced. This includes accentuating their own warmth, but also downplaying their own competence and withholding critical feedback in educational contexts (Croft & Schmader 2012, Dupree & Fiske 2019). Such paternalistic behavior produces negative affect in white individuals and is met with suspicion by minority individuals. Further, in educational contexts it can limit minority individuals' learning opportunities.

Maladaptive paternalism often comprises hedonic IER. An observer acts in ways designed to minimize others' discomfort, often out of positive intention; however, their actions might

represent failures of the building blocks of empathic IER described above. First, as with maladaptive cooperation, the observer fails to forecast clearly enough into the future. As such, they make a short-sighted choice to protect a target's affective state in the present at the cost of the adaptive long-term outcome. Second, maladaptive paternalism can represent a failure of self-regulation. Although ostensibly oriented toward the targets' well-being, observers who elide critical feedback, a parent who immediately soothes an infant's every cry, or a physician who uses vague language when delivering bad news might actually be maintaining their own comfort. A similar logic applies to intergroup paternalism. Men who engage in BS uphold their own status by patronizing women. Majority individuals can experience anxiety during interracial interactions (Trawalter et al. 2012); thus, their ingratiation of minorities might represent an attempt at self-soothing, rather than a truly other-oriented effort. The fact that paternalistic actions are received negatively by targets—across educational, gender, and racial contexts—suggests as much.

A third type of IER (shaded yellow in **Figure 2**) is adaptive paternalism. Here, a target and an observer have different goals for what the target should feel, but only the observer's goal is aligned with an adaptive outcome for the target. In other words, the observer has greater insight into what is best for the target than the target themselves.

Whereas maladaptive paternalism can result from observers' failures in perspective taking, forecasting, or self-regulation, adaptive paternalism is predicated on the targets' making similar mistakes. Individuals often misread how future events and experiences will make them feel, and as a result they make suboptimal choices. One way around forecasting errors is to lean on others' experience. In one set of studies, people formed more accurate judgments about how they would react to emotionally relevant events after learning how others actually reacted to those events (Gilbert et al. 2009). Interestingly, subjects in these studies failed to realize that others' experiences were better barometers than their own forecasts. When targets make such errors, paternalism becomes adaptive. The toddler who swears that cotton candy is the ideal dinner and the tipsy friend who thinks another drink is in order can both be saved a stomach ache through paternalism. A person at risk for cancer who resists preventative medicine can benefit more deeply (Hoerger et al. 2016).

Paternalism can also be adaptive when targets know what their goal should be but have difficulty pursuing it due to failures of self-regulation. Addictive behaviors of all sorts, from alcoholism to compulsive Internet use, are often characterized by such a profile (Köpetz et al. 2013). Interventions by concerned significant others—although paternalistic and counter-hedonic—can lead targets toward treatment. Afterward, many of these individuals are likely to favor the goals their families and friends chose for them rather than the shorter-term desires that previously drove their behavior.

CONCLUSION

People commonly alter each other's emotional lives, often with the aim of improving the well-being of friends, family, colleagues, and group mates. These efforts represent an intersection between empathy and IER, two psychological phenomena that have attracted enormous interest but have yet to be well integrated. This review provides an account of what such integration could look like. An IER framework complements existing research on empathy while offering a broader vision of empathic goals and behaviors. In particular, it highlights a multidimensional space of empathic choices, not all of which are designed to make the targets feel positively or to accord with the targets' goals.

Noncanonical cases of IER are poorly represented in the research literature. Nonetheless, probing them further can help psychologists pinpoint key ingredients, such as forecasting and self-regulation, that likely scaffold many types of empathic choices. As such, a broader model of

empathy and IER can not only connect these phenomena within psychology but also deepen our understanding of the varied, sometimes surprising ways people help each other.

SUMMARY POINTS

1. People commonly attempt to influence others' emotions and improve others' well-being.
2. Decades of research on empathy and prosociality have examined such actions, but this work focuses almost exclusively on prosocial choices that comprise bolstering others' positive affect.
3. The burgeoning study of interpersonal emotion regulation offers a broader perspective on empathic motives and choices, including cases in which prosocial choices involve worsening others' affect or overriding their preferences and cases in which apparent prosociality is actually driven by the desire to regulate one's own emotion.
4. These cases provide new insights into the cognitive and affective building blocks of empathic choice.
5. Bridging the study of emotion regulation and empathy—two phenomena that have received much attention but little integration—can deepen and broaden the psychological understanding of how social emotions produce social actions.

FUTURE ISSUES

1. What is the prevalence of hedonic, counter-hedonic, cooperative, and paternalistic uses of interpersonal emotion regulation (IER) in the field?
2. What is the relationship between different empathic components, such as experience sharing and concern, and the use of different IER strategies?
3. How does individuals' propensity for forecasting and self-regulation—or experimental inductions of those processes—affect their tendency to engage in different IER strategies?
4. What features of individuals and their situations predict their reaction to being the target of paternalistic or counter-hedonic IER?

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