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Seven Empathy Myths: Correcting Misconceptions About a Complex Construct

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ABSTRACT

The term *empathy* has become a buzzword in recent decades, and the concept has received both scholarly attention and has also been the focus of public interest, professional trainings, and policy initiatives. However, misconceptions about its nature persist. Our aim is to rectify these misunderstandings by highlighting claims about empathy that have been empirically refuted. We address seven myths about empathy: #1 People mean the same thing when they say "empathy," #2 Empathy increases burnout, #3 Empathy cannot be measured, #4 Empathy comes effortlessly, #5 Empathy cannot be learned, #6 More recent generations lack empathy, #7 Women are naturally more empathic. These myths, selected due to their considerable implications, often contain a grain of truth but are usually exaggerated or misapplied, typically by generalizing findings from one narrow empathy definition to all empathy constructs. The term "empathy" is an umbrella term encompassing lower-order constructs like compassion, personal distress, emotional congruence, perspective taking, and accurate interpersonal perception. We specify for which lower-order empathy constructs each myth holds, for which constructs it is debunked (based on empirical evidence), and for which lower-order constructs sufficient or consistent evidence exists to offer a conclusive verdict. We illuminate the complexities involved in discussing and studying empathy while debunking these prevalent misunderstandings. Our goal extends beyond merely refuting these myths; we strive to avert their potentially harmful impact on policies and society.

1 | Introduction

Empathy has evolved into a widespread cultural ideal, reflected in popular media, celebrity endorsements, and thousands of empathy-related publications. However, some notions about empathy do not align with current empirical evidence. We refer to these as myths: beliefs that persist in public discourse despite lacking scientific support. Such myths propagate confusion and undermine efforts to translate scientific insights into effective policy and education. Our goal is to set the record straight by detailing what we, as psychological scientists and health services researchers, understand about empathy, and highlighting areas where knowledge is limited.

Empathy is an umbrella term encompassing a variety of lower-order constructs such as compassion, personal distress,

perspective taking, accurate inference about others' states, and emotional congruence (Davis et al. 2025). Empathy myths often arise when empirical findings related to one specific lower-order construct are inaccurately generalized to the broader category of empathy. For each myth, we discuss its potential origins, summarize the evidence supporting or refuting it across different lower-order constructs (see Tables 1 and 2), and contemplate the potential consequences of its further spread.

We have chosen to address seven prevalent myths about empathy:

#1 People mean the same thing when they say "empathy,"

#2 Empathy increases burnout,

#3 Empathy cannot be measured,

#4 Empathy comes effortlessly,

#5 Empathy cannot be learned,

#6 More recent generations lack empathy,

#7 Women are naturally more empathic.

These myths were selected because they have been extensively studied and their continued misconceptions among the public can have significant practical implications. These empathy myths may carry a grain of truth, yet they are frequently exaggerated, misused, or inaccurately applied to all empathy constructs. By specifying the lower-order empathy constructs for which each myth holds true, those that have been empirically debunked, and those for which consistent evidence is currently lacking, we hope to introduce subtlety and nuance to conversations about empathy in the media, public debates, and among family and friends, and urge future researchers to continue systematically studying empathy constructs and their interrelations.

2 | The Urgent Need to Debunk Empathy Myths

Based on studies conducted by neuroscientists, philosophers, and psychologists, there is a growing recognition that empathy (variously defined) plays a pivotal role in encouraging prosocial behaviors essential for societal wellbeing. Empirical research indicates that individuals who effectively understand and respond to others' emotional experiences are more likely to volunteer (Barnett et al. 1983), donate to charities (Verhaert and

TABLE 1 | Working definitions of five lower-order empathy constructs.

Lower-order empathy construct	Definition	Alternative names
Empathic concern	Other-oriented feelings of sympathy and concern in response to the suffering of others	Concern Caring Compassion Sympathy
Personal distress	Self-oriented feelings of anxiety and unease in response to the suffering of others	Egoistic distress Empathic distress Self-focused distress
Emotional congruence	Feeling the same or similar emotional state that another person is feeling	Emotional resonance Emotion contagion Empathy Emotion matching Feeling-with State matching Fellow feeling
Perspective taking	Generating an internal idea of another's experience, producing inferences about what the other feels, thinks, wants, or prefers	Mentalizing Theory of mind Cognitive empathy Mental state attribution
Emotion recognition	A correct understanding of another's felt or posed expressions	Empathic accuracy Interpersonal accuracy Accurate inference

Note: For more exhaustive definitions of lower order empathy constructs please see Davis et al. (2025).

TABLE 2 | Summary of empirical support for empathy myths across five lower-order empathy constructs.

	Empathic concern	Personal distress	Emotional congruence	Perspective taking	Emotion recognition
Myth 1 People mean [this construct] when they say "empathy"	Often	Almost never	Rarely	Often	Sometimes
Myth 2 Empathy increases burnout	Associated with lower burnout	Associated with higher burnout	Depends on type of contagion (positive, negative)	Associated with lower burnout	Not enough data
Myth 3 Empathy cannot be measured	Measures available	Measures available	Measures available	Measures available	Measures available
Myth 4 Empathy is effortless	May be effortful	Not enough data	Appears to be effortless	Effortful	May be effortful
Myth 5 Empathy cannot be taught	Teachable	Teaching may influence	Teaching may influence	Teachable	Teachable
Myth 6 Empathy is declining over generations	Has been rising since 2008	No significant changes over time	Not enough data	Has been rising since 2008	Not enough data
Myth 7 Women are naturally more empathic	Socialization may play a role	Socialization may play a role	Small or no gender differences found	Socialization may play a role	Socialization may play a role

Van den Poel 2011), and provide assistance to both strangers and loved ones during difficult times (Feeney and Collins 2001; Fultz et al. 1986). The relationship between empathy and prosocial behavior has been demonstrated with both questionnaire (Ding and Lu 2016; Yin and Wang 2023) and more objective measures of empathy (Eisenberg et al. 2011; Imuta et al. 2016). However, if a goal is to foster a society characterized by greater "empathy," it becomes crucial to identify misconceptions about empathy. If strategies, interventions, or policies designed to cultivate empathy are developed based on an inaccurate or overly simplistic understanding of this complex construct, such efforts are likely to be ineffective, or even counterproductive. Moreover, certain lower-order empathy constructs may have negative consequences, including partiality (e.g., Batson et al. 1995), burnout (e.g., Delgado et al. 2021), and even victim-blaming (Martingano 2022). This makes it especially important to disentangle the different lower-order constructs subsumed under the umbrella of "empathy," so that interventions can target beneficial components while avoiding those with unintended harms.

To better understand the extent to which empathy myths are prevalent, we administered an online survey to 186 U.S. adults. Participants were asked to rate their agreement with several assertions about empathy (myths, to us) on a scale ranging from "strongly agree" to "strongly disagree." Most respondents endorsed nearly all the myths listed, frequently constituting a clear majority (see Table 3). Notably, the most strongly endorsed misconception was Myth #3: "Empathy is impossible to measure." Belief in the immeasurability of empathy is particularly problematic because effective measurement is foundational to science. Without valid and reliable assessment tools, research on empathy would be meaningless, leaving scholars unable to compare findings, track changes, or evaluate interventions designed to enhance empathy. Consequently, this myth can significantly undermine the credibility and applicability of all scientific empathy research.

To combat acceptance of empathy myths, we advocate direct refutation. Educational psychology research has demonstrated that explicitly challenging misconceptions in psychology is significantly more effective than simply presenting accurate information. For example, after a semester-long instructional intervention, students exposed to direct refutation improved their ability to correctly identify psychological myths as false by 53.7%, compared to only a 34.3% improvement among those taught in a traditional manner (Kowalski and Taylor 2009).

However, in the process of debunking misconceptions about empathy, one must remain mindful that scientific knowledge is always provisional. Many ideas now considered myths were once grounded in the best available evidence, and we recognize that scientific understanding on this multifaceted topic will evolve. Nevertheless, dispelling misconceptions can mitigate potential negative effects on empathy-related policymaking, clinical practice, education, and broader societal attitudes toward empathy and prosocial behavior.

2.1 | Myth #1: People Mean the Same Thing When They Say 'Empathy'

The belief that everyone shares a common understanding of empathy seems to be widespread. Even the authors of a highly cited empathy questionnaire stated, "We all have an understanding of what empathy means" (Reniers et al. 2011, 84). However, researchers often group different lower-order constructs under their own favored definition, or choose just one such aspect—all while using empathy as the label. For instance, one paper might focus on perspective taking, another on empathic concern, and still another on emotion contagion. Laypeople, too, often assume that their personal sense of empathy will be shared by others. In our survey, 37% of respondents endorsed the idea that everyone defines empathy the

TABLE 3 | Endorsement of empathy myths.

	Strongly disagree (%)	Somewhat disagree (%)	Neither agree nor disagree (%)	Somewhat agree (%)	Strongly agree (%)	Disagree (%)	Agree (%)	Mean	Standard deviation
Myth #1 People mean the same thing when they say "empathy"									
"Everyone defines empathy the same way"	15.0	30.5	17.1	26.7	10.7	45.50	37.40	2.88	1.26
"Empathy is easy to define"	4.3	17.4	21.4	41.7	15.5	21.7	57.2	3.48	1.08
Myth #2 Empathy increases the likelihood of burnout									
"Being empathic causes burnout"	13.4	24.1	21.9	32.1	8.6	37.5	40.7	2.99	1.20
"People who show empathy are more likely to be tired and burnt out"	12.8	23.0	21.9	29.4	12.8	35.8	42.2	3.06	1.24
Myth #3 Empathy cannot be measured									
"It is impossible to measure empathy"	4.3	23.0	23.0	33.7	16.0	27.3	49.7	3.34	1.12
"People can self-report how empathic they are" (–)	1.6	9.6	27.3	44.4	17.1	11.2	61.5	2.34	0.92
"You can tell how empathic someone is by observing their behaviors" (–)	1.1	7.0	20.9	50.3	20.9	8.1	71.2	2.16	0.88
Myth #4 Empathy is effortless									
"It doesn't take much effort to be empathic"	4.8	19.8	25.7	39.0	10.7	24.6	49.7	3.29	1.05
"Being empathic is a skill" (–)	6.4	18.7	25.7	35.3	13.9	25.1	49.2	2.68	1.12
Myth #5 Empathy cannot be taught									
"People can be taught to be more empathic" (–)	2.7	13.4	20.3	46.0	17.6	16.1	63.6	2.38	1.01
"Empathy can be improved with training" (–)	2.7	14.4	20.3	42.2	20.3	17.1	62.5	2.37	1.04
Myth #6 Younger generations are less empathic									
"Empathy has declined over time in society"	8.6	21.4	20.9	35.8	13.4	30.0	49.2	3.24	1.18

(Continues)

TABLE 3 | (Continued)

	Strongly disagree (%)	Somewhat disagree (%)	Neither agree nor disagree (%)	Somewhat agree (%)	Strongly agree (%)	Disagree (%)	Agree (%)	Mean	Standard deviation
"People today are more empathic than they were in previous generations" (–)	8.0	19.8	28.9	31.0	12.3	27.8	43.3	2.80	1.13
Myth #7 women are naturally more empathic									
"Women are more empathic than men"	7.5	9.1	31.6	35.8	16.0	16.6	51.8	3.44	1.09
"Men have less empathy than women"	7.5	20.3	19.8	41.2	11.2	27.8	52.4	3.28	1.13

Note: A survey of Americans was conducted via Amazon's Mechanical Turk in 2021 ($N = 187$). Respondents who did not pass an attention check were excluded. 131 respondents were male, 55 female and 1 unreported. Ages ranged from 20 to 71 with a mean age of 36.7. 161 respondents identified as White, 18 Black, 11 Asian. Responses were coded from 1 = strongly disagree to 5 = strongly agree. Items marked with (–) were reverse scored when calculating the mean, so that higher means indicate greater endorsement of the myth.

same way, with 57% agreeing that defining empathy is easy (see Table 3). However, just like researchers, people differ considerably in which lower-order constructs they believe "count" as empathy (Hall et al. 2021). The term "empathy" is used so broadly and vaguely that it seems to embody everything that is humane and just in interpersonal relations. This assumption of a universally shared empathy definition may explain why research articles often lack explicit definitions (Hall and Schwartz 2019; Sulzer et al. 2016).

The inconsistency and imprecision with which empathy is defined have long been criticized. As early as 1948, Reik observed, "The word empathy sometimes means one thing, sometimes another, until now it does not mean anything" (Reik 1948, 356–357). Decades later, Batson et al. (1987) commented, "Psychologists are noted for using terms loosely, but in our use of empathy we have outdone ourselves" (19). In 2014, Cuff et al. concluded that "there are perhaps as many definitions as there are authors in the field" (144). The vagueness and inconsistency of empathy's usage have led some researchers to suggest replacing the broad term "empathy" with more specific lower-order constructs pertinent to their research (Davis et al. 2025; Decety and Cowell 2014; Hall and Schwartz 2019).

The lower-order constructs (sometimes called facets) that comprise the broader empathy concept include compassion, personal distress, emotional congruence, perspective taking, and accurate interpersonal perception, among others (see Table 1 for working definitions of five lower-order empathy constructs). Debates among researchers revolve around how to differentiate empathy from sympathy and compassion, how to distinguish between "cognitive" and "affective" empathy, whether accurate interpersonal perception qualifies as empathy, whether feeling empathy requires distinguishing between self and other, and whether empathy inherently entails a prosocial orientation. Empathy is also sometimes considered by researchers to be a state, sometimes a trait, and sometimes an interpersonal process.

But what about the general public? Research shows that laypeople also vary significantly in their beliefs about what counts as "empathy," with some aspects, such as perspective taking and empathic concern overlapping with researchers' definitions. However, laypeople also consider some elements not commonly linked with empathy by researchers. For example, in the workplace context, competent and conscientious role fulfillment is often rated as "empathic" by workers (Hall et al. 2024).

In summary, the term "empathy" is a kaleidoscopic, vague term, referring to a broad spectrum of intra- and interpersonal phenomena, from traits, states, and discrete behaviors to brain activity, measured skills, values, and emotional experiences. Each of these aspects of empathy can lead to different outcomes, interpretations, and applications. Thus, when evaluating a claim about empathy, its validity depends on the lens through which empathy is being viewed.

2.2 | Myth #2: Empathy Increases Burnout

Headlines such as "Are You an Empath? 5 Ways to Avoid Emotional Burnout" (Carpenter 2019), "Why Empaths Experience Burnout Like No Other" (Lucia 2019), and "How to Stop Your Empathy from Causing Burnout" (Todd 2021) populate numerous blogs, self-help guides, and news articles. These pieces frequently portray highly empathic individuals as being at a greater risk of burnout. While some articles delve into the nuances within the main text, many do not. Based solely on these headlines, it is hardly surprising that over 40% of Americans we surveyed endorse the myth that "empathy causes burnout" (see Table 3).

Contrary to this prevalent belief, the scientific consensus—following over a decade of research on physicians, nurses,

other human services professionals, and high school teachers—suggests that some types of empathy may serve as protective factors against burnout (Wilkinson et al. 2017; Williams et al. 2017). Burnout was named an occupational syndrome in 2019 (World Health Organization 2019) and goes well beyond simply feeling drained. It involves symptoms such as emotional exhaustion, cynicism, and a reduced sense of personal accomplishment (Maslach and Leiter 2016). Individuals who exhibit high levels of empathic concern and perspective taking have fewer burnout symptoms (Martingano et al. 2025). This holds true across various ages, genders, professions, and nationalities. In comparison to the plethora of research on these types of empathy, the relationship between burnout and other lower-order empathy constructs remains under-researched. For instance, a meta-analysis on burnout and empathy found 71 studies, none of which used a measure of emotion recognition (Martingano et al. 2025).

The myth that empathy causes burnout may persist due to the inconsistent definitions of empathy. The aforementioned meta-analysis examined how burnout related to various components of empathy, including empathic concern, perspective taking, and emotional congruence. While people who are high in empathic concern and perspective taking are less likely to burn out, people who easily catch the emotions of others (emotional congruence) are more likely to burn out. This specific aspect of empathy might contribute to the perpetuation of the empathy-burnout myth. However, the relationship may be even more complex, as the impact of being prone to emotional contagion likely depends on the specific emotion being shared. For instance, a study on physicians and nurses found that those feeling others' positive emotions (e.g., joy) were less likely to display symptoms of burnout, while those feeling others' negative emotions (e.g., anger) were more prone to burnout. Moreover, individuals who tend to experience personal distress when witnessing others' suffering are more likely to experience burnout (Andreychik 2019; Delgado et al. 2021; Gross 1994; Song 2018; Thomas 2013).

Endorsing this myth could be detrimental in several ways. A natural reaction to the belief that empathy leads to burnout could be to limit expressions of all types of empathy. This would have clear adverse consequences for those who would benefit from empathic support. However, the "empathizers" themselves may also experience negative consequences. While self-help guides often endorse self-centered practices such as focusing on oneself, creating personal space, and allocating "me time," these measures may not be as beneficial as they initially appear. While it would certainly be maladaptive to prioritize others to the point of neglecting one's own basic needs, excessive self-focus could be detrimental to mental health (Leary 2004; Mor and Winquist 2002). Diverting attention toward others can diminish anxiety and physiological stress responses (Abelson et al. 2014; Derakshan and Eysenck 2001) and providing help to others has been consistently related to greater wellbeing and flourishing (Hui et al. 2020), and reduced burnout (Ramos et al. 2016).

In summary, while systemic and organizational conditions are the primary causes of burnout (Maslach and Leiter 2016), individual-level factors can be protective. Specifically, perspective taking and empathic concern can lessen the risk of burnout, especially if these types of empathy are paired with actionable support for others. In essence, those at risk of burnout might be better advised to increase, rather than decrease, many of their empathic responses.

2.3 | Myth #3: Empathy Cannot Be Measured

The psychological literature is replete with empathy measures, and researchers often express confidence in empathy's measurability. Despite this, there are still frequent disagreements about whether a specific assessment measures what other scholars consider empathy to be (e.g., Cuff et al. 2014). However, a commonly held view among the lay public suggests that empathy, by its nature, is so elusive that attempts to quantify it are doomed to fail. Indeed, almost 50% of our survey respondents agreed that "It is impossible to measure empathy" (see Table 3). The essence of this view is that empathy is a phenomenon that—like love—has an ineffability that is lost when subjected to formal analysis. As one public commentator put it, "[To measure empathy] we have to strip it of softness, feelings, and any sense that it's a touchy-feely-can't-exactly-measure-it-on-an-employee-evaluation sort of thing. But to do that means it's no longer empathy" (Reich 2016). Although Reich's criticism was directed at workplace empathy rankings, similar concerns frequently arise in discussions about "empathy training," particularly within medical curricula. Here, debates focus on the challenge of evaluating training effectiveness without reducing empathy to a "tick-box" exercise (Gardner 2015; Laughey et al. 2021; Stepien and Baernstein 2006; Veen et al. 2020). Comparable debates emerge in education, where concerns about measurement threaten the sustainability of social and emotional learning programs (Duckworth and Yeager 2015). A narrower version of this skepticism exists among empathy researchers themselves who argue that due to humans' unreliability as assessors of their own traits and behavior, self-report measures are not suitable for assessing the outcomes of empathy training (Roth and Altmann 2021). This critique holds merit. If the objective is to train physicians or other professionals to behave more attentively, supportively, and caringly toward patients, merely asking doctors to rate their own "caring" is not a persuasive measurement (Blanch-Hartigan 2011). Therefore, this myth leads to an important insight: the choice of empathy assessment must align with its intended purpose. One size does not fit all.

Fortunately, researchers have developed various reliable and valid measurement techniques for evaluating different constructs falling under the umbrella of empathy. For those wishing to assess temporary feelings of empathic concern and personal distress, a set of valid and reliable questionnaire items are available (Batson 2011). These items prompt respondents to describe their current feelings of sympathy and compassion (empathic concern), or unease and distress (personal distress).

For those interested in trait levels of empathy-related constructs, numerous assessment options exist. Some primarily focus on the emotional experience of the empathizer, such as the extent to which one experiences the same emotions as others (e.g.,

Jordan et al. 2016); some concentrate on the ability of individuals to identify others' internal states (e.g., Baron-Cohen and Wheelwright 2004). Others offer a measure of "global" empathy, encompassing both cognitive and emotional responses to others (e.g., Spreng et al. 2009). Still other tools take a multidimensional approach and provide separate evaluations of multiple lower-order empathy constructs (e.g., Davis 1983; Jolliffe and Farrington 2006; Reniers et al. 2011). These measures also come with substantial reliability and validity evidence.

Another form of assessment involves knowledgeable observers rating others' behavior. For instance, children's empathy might be rated by teachers or parents (e.g., Dadds et al. 2008), and physician empathy might be evaluated by patients based on factors such as demonstrated care and compassion (Mercer et al. 2004). This type of measure may be a better choice than straightforward self-reports for gauging the outcomes of empathy training programs.

Lastly, for those interested in the accuracy with which people can make judgments about the internal states or expressed emotions of others, there are several assessment methods available. Unlike self-report measures, these performance measures are tied to objective outcomes. A common empathic accuracy measure compares how accurate an observer is at guessing another individual's self-rated emotional experience during social interaction or story telling (Ickes et al. 1990). Agreement between the observer's and experiencer's ratings serves as an indicator of perceiver accuracy. Other, more recent, psychometric tests of emotion recognition, such as the Geneva Emotional Recognition Test (GERT; Schlegel et al. 2014) are also widely used.

In summary, empathy can be measured using numerous valid measures. The most crucial consideration for those seeking to measure empathy is to address the fundamental questions: what exactly am I trying to measure, what am I trying to predict, and which technique will best provide this information?

2.4 | Myth #4: Empathy Is Effortless

The common perception of empathy often presents it as effortless: as an unsolicited rush of compassion flowing automatically from innately kind people. In fact, nearly 50% of our survey respondents endorsed the statement that "it doesn't take much effort to be empathic" (see Table 3). While it is true that some kinds of empathy are felt more acutely by some individuals, it is generally assumed to be an automatic response common to most people. However, the widespread capability to feel empathy often masks the effort required to do so.

The misconception of empathy as effortless probably arises due to its commonality, instinctiveness, and early development in human life. Research on infants has shown that newborns cry in response to the cries of their peers (Geangu et al. 2010; Martin and Clark 1982; Sagi and Hoffman 1976), and by the age of 12 months, children comfort family members showing emotional distress (Paulus et al. 2024; Zahn-Waxler et al. 1992). However, even though many types of empathy are instinctual, early-developing, and nearly universal, this does not automatically mean they are effortless.

Increasingly, evidence and scholarly consensus suggest that mental effort is a prerequisite for many types of empathy. Psychologists, in their labs, have subjected individuals to empathy tasks to determine the conditions under which empathy may be inhibited. These experiments illustrate that even seemingly simple tasks, such as recognizing another person's emotions, require effort (Lin et al. 2010). Moreover, complex empathy tasks necessitate substantial cognitive resources. For instance, people struggle more to imagine themselves in another person's perspective when distracted by a concurrent processing task (Davis et al. 1996), they express less empathic concern under high cognitive loads (Morelli and Lieberman 2013), and they report less empathy for pain when sleep-deprived (Duan et al. 2021).

In everyday social interactions, people choose how much effortful empathy they want to engage in. When given the choice in experimental settings, participants often opt out of empathic engagement. Cameron et al. (2019) demonstrated this in an experiment where participants had to choose between two decks of cards featuring pictures of people. In one deck, they were asked to label and resonate with the depicted person's feelings. In the other deck, they simply described the person's physical characteristics. Given the choice, participants chose to describe physical characteristics over empathic engagement 65% of the time. A series of follow-up studies found that participants could be incentivized to empathize, despite the effort involved, if the benefits were worth it (e.g., they were paid more) (Ferguson et al. 2020). Outside of the lab, people appear motivated to invest effort when they believe empathy is malleable and can be improved with practice (Schumann et al. 2014). These findings suggest that on some level people understand that empathy is not effortless, and they weigh costs and benefits to deploy empathy strategically.

However, not all lower-order empathy constructs necessitate conscious mental effort. For example, emotional congruence, the involuntary mirroring of another person's emotions, appears to be an automatic process akin to infectious yawning. This automatic response happens even outside of conscious awareness, with involuntary facial muscle contractions occurring in response to subliminal presentation of emotional facial expressions (Dimberg et al. 2000). Neurological evidence, showing activation in mirror neuron networks associated with emotional congruence even during a distracting task, reinforces this (Rameson et al. 2012; Morelli and Lieberman 2013). Nevertheless, emotional contagion represents only one facet of empathy and may be the exception. For instance, studies indicate that the pre-frontal cortex, a different part of the brain, activates when people engage in other types of empathy, such as perspective taking (Rameson et al. 2012). Importantly, these pre-frontal neurons do not activate when someone is distracted, demonstrating that it requires conscious effort to take someone else's perspective (Morelli and Lieberman 2013).

In summary, although some aspects of empathy, like emotional congruence and perhaps personal distress, might not require much mental effort, many other facets do. Perspective taking,

emotion recognition, and empathic concern are all lower-order empathy constructs that seem to require effort. As research continues to explore this complex topic, one should be cautious about assuming empathy is effortless. Such assumptions might lead individuals to judge themselves as not empathic or even flawed if they find empathy challenging. But the reality is, finding empathy effortful might be a common human experience.

2.5 | Myth #5: Empathy Cannot Be Taught

In our survey 17.1% of people disagreed that "Empathy can be improved with training" with and additional 20.3% being unsure. Given that many believe empathy to be an unconscious and internal prosocial response to the feelings of others (Decety et al. 2016), it may be natural to view it as impossible or difficult to teach. However, there is a long-standing, robust, and multidisciplinary science behind developing and improving different aspects of empathy. Overwhelmingly, the research evidence suggests that empathy can be nurtured through both experience and dedicated training.

Many training programs provide support for the effectiveness of increasing empathy in randomized controlled trials (Blanch-Hartigan et al. 2012; Teding van Berkhout and Malouff 2016). On average, these interventions caused a medium sized increase in empathy ($g = 0.63$) (Teding van Berkhout and Malouff 2016). Importantly, the trainings tested in these meta-analyses focused primarily on improving the cognitive aspects of empathy, such as perspective taking and emotion recognition. Generally, these trainings were most effective when they incorporated a mix of training approaches, especially practice and feedback (Blanch-Hartigan and Ruben 2013). Effectiveness of training may vary by who is receiving the training, with training shown to be particularly effective for healthcare professionals and college students (Teding van Berkhout and Malouff 2016). Both meta-analyses also found that the length of training did not predict effectiveness. This suggests that training does not have to be extensive or long-lasting to impact empathy.

However, a review of empathy training studies in the health sciences suggests that training programs which are either too short or too long may not be effective, although more work is needed to determine optimal training length (Bas-Sarmiento et al. 2020). Effectiveness of empathy training may also increase when training includes a consciousness-raising component where participants are made aware of the importance of empathy and its outcomes (Blanch-Hartigan 2012). For example, medical students appear to differ in the degree to which they value physician empathy (van Ryn et al. 2014), yet knowing the benefits of empathy can motivate students to adopt attitudes and skills that improve patient care.

Increasing people's empathy skills is assumed to have various prosocial benefits, but many of these benefits will only be realized if empathy is communicated appropriately. Skill-based and behavior-focused approaches can be particularly effective when trying to improve the perception of empathy in interpersonal interactions. Research indicates that in medical settings clinicians can communicate empathy by sitting down, detecting patients' nonverbal emotional cues, and giving verbal statements of acknowledgment, validation, and support. Such communication improves patient perceptions of physician empathy (Patel et al. 2019). Communication skills training has also been shown to enhance clinical trainees' recognition of emotion and their outward expressions of empathy (Alexander et al. 2006; Back et al. 2007). Importantly, this research addresses how empathy is expressed by the clinician and perceived by the patients. Interventions that seek to increase a clinician's internal feelings of empathy or other lower-order empathy constructs might need a different approach.

Other experiences and training approaches not directly focused on improving empathy are nevertheless associated with higher empathy. Formative experiences such as travel, participating in dance or music, reading literature, learning American Sign Language, and being leaders of student groups are associated with greater ability to perceive others' mental states accurately (Castano et al. 2020; Dael et al. 2022; Hall et al. 2009). Studies also suggest that pet ownership in childhood (Cloutier and Peetz 2016; Daly and Morton 2006) is related to higher affective empathy.

The research on whether training can change the experience of emotional congruence or personal distress is less robust. There is often an effort in medical education and clinical training to reduce personal distress in the clinical interaction to prevent burnout. For example, meditation training may lessen the personal distress experienced while viewing others' negative emotions (Leung et al. 2018).

The future of effective empathy training lies in applying and extending our scientific understanding of optimal approaches. There are many well-validated and effective empathy training strategies. However, the empathy enhancing techniques that tend to make headlines are often hyped in advance of empirical evidence, such as "Virtual Reality is the ultimate empathy machine" (Milk 2015). Many researchers are working hard to validate new empathy enhancing strategies and understand the boundaries of their effectiveness (e.g., Martingano et al. 2021). This is important work to ensure public trust and to debunk exaggerated and oversimplified claims of efficacy. But despite these premature headlines, the consensus across different research disciplines and populations is that many aspects of empathy can be taught.

2.6 | Myth #6: Empathy Is Declining Over Generations

Concerns regarding a perceived lack of empathy in younger generations are prevalent in our society, with many voices, including public figures and popular media outlets, expressing alarm. Headlines such as "The End of Empathy" in *NPR* (Rosin 2019) and "Generation Self: What Do Young People Really Care About?" in *The Guardian* (Ball and Clark 2013) encapsulate this sentiment. Our own survey indicates that 49.2% of respondents agree with the statement "Empathy has declined over time in society."

The origin of this myth may be traced back to empirical studies suggesting a decline in dispositional empathy and concern for others among American youth from 1979 to 2009 (S. H. Konrath et al. 2011; Twenge et al. 2012). Complementary evidence also indicates an increase in narcissism and individualism during a similar period (Twenge and Foster 2008; Twenge et al. 2012). Both research teams were careful to acknowledge the limitations of their studies and avoided making sweeping statements about the significance of the decline or its potential causes. However, popular accounts often lacked such caution.

However, the latest research, including a cross-temporal meta-analysis conducted by S. Konrath et al. (2025), challenges this perspective. Konrath and colleagues found a rebound in perspective taking and empathic concern after 2009. Two additional studies using nationally representative data by the same research team further supported this shift suggesting that the decline in these aspects of empathy may have reversed after the Great Recession of 2008–2009.

Interestingly, adversity during this period appeared to stimulate an increase in empathic concern, as experiences of personal economic decline correlated with higher empathic concern scores (Alonso-Ferres et al. 2020). This aligns with research showing that narcissism declined after 2008 among both U.S. undergraduates (Twenge et al. 2021) and Canadian undergraduates (Hamamura et al. 2020).

To date, there is less research on generational shifts in other lower-order empathy constructs such as emotional congruence and emotion recognition (although ongoing research indicates they may show different, linear declines over time (e.g., Aly et al. 2024)). Some research suggests that personal distress appears to show no change across generations (S. Konrath et al. 2025).

In summary, generational fluctuations differ substantially based on the empathy type in question, but it is a myth that newer generations are less empathic overall. The persistence of this myth can lead to stereotyping and misunderstandings of younger generations, and so dispelling it is important to promote more productive intergenerational relationships.

2.7 | Myth #7 Women Are Naturally More Empathic

Attitudes toward women have changed dramatically in the past few decades, sometimes becoming more stereotypical. A study examining gender stereotypes over time revealed that in 1946, men and women were perceived as equally communal (e.g., compassionate, affectionate). However, by 2018, a significant majority of Americans (97%) believed that women were more communal than men (Eagly et al. 2019). This belief is echoed in cultural narratives, such as the Dalai Lama's statement that "females have more sensitivity about others' wellbeing" (Seppala 2013). Our survey, specifically on empathy, found that the majority of respondents agreed that women are more empathic (51.8%) and that men are less empathic (52.4%).

Some scholars have argued that gender differences in empathy reflect evolved or biologically based traits, claiming, for instance, that "the female brain is predominantly hard-wired for empathy" (Baron-Cohen 2010). Similarly, proponents of the Primary Caretaker Hypothesis suggest that greater empathic capacity in women evolved due to ancestral roles in childrearing (Christov-Moore et al. 2014). However, to the extent that gender differences in empathy exist, they are likely better explained by differential socialization of boys and girls and ongoing societal pressures to conform to stereotypical gender roles.

For example, although self-report measures typically find significant gender differences in perspective taking, empathic concern, and personal distress (Baez et al. 2017; Eisenberg and Lennon 1983), these gender differences are largely explained by gender-role orientations (Karniol et al. 1998; Löffler and Greitemeyer 2021; Vonk et al. 2016). Moreover, measures that indirectly assess empathy, such as automatic physiological reactions or facial/gestural expressions, either show minimal gender differences (Thompson and Voyer 2014) or no differences at all (Eisenberg and Lennon 1983).

On the other hand, research finds that women do consistently perform better than men on emotion recognition tests such as the Reading the Mind in the Eyes Test (Greenberg et al. 2023) and traditional measures of empathic accuracy (Hall et al. 2025). Women score on average a quarter of a standard deviation higher than men on these tests, and this finding is consistent across geographical location and various test characteristics (Hall et al. 2025). Importantly, gender differences in emotion recognition are not necessarily explained by gender-role orientation (Löffler and Greitemeyer 2021). Such findings are sometimes taken as support for biological explanations, yet the tests themselves rely on verbal and cognitive skills that may be shaped by socialization. For example, parents often talk about feelings more with their daughters than with their sons (Aznar and Tenenbaum 2015; Mascaro et al. 2017), and this opportunity to practice labeling emotions is likely to boost girls' performance on emotion recognition tasks. Moreover, the consistency of gender differences across cultures does not necessarily imply biology; global gender norms may themselves be widely shared and similarly reinforced.

Indeed, awareness of these stereotypes plays a role in influencing emotion recognition outcomes (Kahalon et al. 2020). For example, when interpersonal sensitivity tests are described as ones in which women tend to excel, men exhibit lower performance (Koenig and Eagly 2005). However, when participants are informed that the same test measures complex information processing, gender differences vanish. Additionally, motivation may play a role: offering financial rewards for good performance can enhance empathic accuracy performance for both men and women (Klein and Hodges 2001).

Taken together, gender differences in different empathy measures may be a result of socialization pressures, stereotypes, and motivation, rather than inherent ability. Studies employing more sophisticated or less obvious measures and methods indicate that empathy is more of a universal trait than a battle of the sexes.

Continued endorsement of the myth of women's empathy superiority can lead to unrealistic and unfair expectations of

women, both in the workplace and at home. This can have serious consequences when individuals fail to meet these expectations. For example, female professors who defy gender stereotypes by being strict graders may face backlash from students (Fisher et al. 2019). Moreover, this stereotype unfairly excludes and penalizes men for adopting more caring identities and roles, and it may even contribute to the acceptance or justification of low empathy behaviors exhibited by men. Ultimately, like any stereotype, this belief restricts individuals to prescribed roles and positions, which can have negative implications for their own and others' wellbeing.

3 | Conclusion

Empathy is inherently abstract and multifaceted, making confusion about its nature, implications, and effects unsurprising. This ambiguity creates fertile ground for empathy myths to emerge, persist, and spread. Efforts have been made over recent decades to mitigate confusion. Batson advocated for establishing a consensus definition of empathy (Batson 2009), but his concluding plea to researchers was more widely adopted: to clearly state the definition they are using. We reiterate this plea, asking researchers to refer to specific lower-order empathy constructs and use the umbrella term "empathy" more sparingly. Despite good intentions, many researchers continue to refer to lower-order empathy-related constructs simply as "empathy," inadvertently fostering oversimplifications. Such simplifications become magnified when research findings reach broader audiences through popular media, often resulting in misrepresentations of the scientific consensus.

The challenges of conceptual clarity and precise communication are certainly not unique to empathy research; other complex constructs across both social and natural sciences face similar struggles. Nevertheless, empathy scholars have a particularly valuable opportunity—and indeed, responsibility—to lead the way in improving how our field communicates about these nuanced constructs. In this article, we have directly addressed prevalent misconceptions surrounding empathy in an effort to clarify and improve public and scholarly understanding. We hope that these nuances are not lost in the translation of findings to the general public.

As new communication modalities and generative artificial intelligence continue to grow and challenge our notions of human interactions, greater precision in terminology will help to tackle up-and-coming potential "myths." For example, as we begin to debate whether only humans can be empathic (Perry 2023) or whether a Chatbot can be more empathic than your doctor (Ayers et al. 2023; Ruben et al. 2025), new myths may germinate. Halting their spread might be achived through specifying the relevant lower-order constructs for which a finding is true, and avoid overarching 'empathy' claims.

Considering the growing popularity of the term "empathy," it's unlikely that researchers and the public will completely abandon its use, even if more precise terms are available. Myth-busting, therefore, becomes ever more necessary.

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

All data and code required to replicate analyses are available via https://osf.io/fknmy/?view_only=ab32af537e774fa283b9204c30126320.

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