C4

4 Disability's Incompetent-but-Warm Stereotype Guides Selective Empathy

DISTINCTIVE COGNITIVE, EMOTIONAL, AND NEURAL SIGNATURES

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C4.P1 MANY CIRCUMSTANCES CAN evoke empathy, or the emotional experience commonly defined as "standing in someone else's shoes." We'll cry along with the protagonist at the end of a sad movie, feel compelled to donate money upon viewing the wreckage of homes after an earthquake, or spend time with a friend going through a rough patch. Often, empathy seems simple: a natural, automatic response to seeing a person in pain or in need. However, empathy is by no means fixed or experienced equally in all situations. Rather, the degree of empathy felt for another person appears to be contingent on the group memberships of both parties.

C4.P2 For example, when university students read descriptions of a White or Black man charged with a crime, White participants expressed greater empathy for, and gave more lenient punishments to, the White defendant than to the Black defendant (Johnson et al., 2002). In another study, Black participants expressed a greater willingness to help and provide money to Blacks, versus Whites, shown in painful situations (Mathur, Harada, Lipke, & Chiao, 2010). Asian and White participants, in a similar study on pain, showed a comparable bias favoring racial ingroup members (Xu, Zuo, Wang, & Han, 2009), suggesting less empathy and concern toward outgroup members.

C4.P3 This selective empathy holds not only for racial groups but also more generally for people deemed similar or dissimilar from oneself. When Batson, Turk, Shaw, and

Klein (1995) manipulated the degree of similarity between a perceiver and a target person, based on two 20-item profile and interest inventories, participants expressed greater empathy and concern for the welfare of those presented as more similar to themselves. The ability to empathize with people may therefore be moderated not simply by racial or cultural groups but also more generally by the degree of perceived relatedness between the perceiver and the target.

C4.S1 ## Ambivalent Stereotypes Support Selective Empathy for Disabled Outgroups

C4.P4 If apparent similarity influences empathy expressed for others, members of disabled outgroups are at a clear disadvantage, given their anomalous, rare, and often little-understood characteristics. The present chapter reviews research on stereotypes of people with disabilities to explain whether and how other people might empathize with physically disabled individuals, given that their outgroup status is distinctive from, and in certain ways more complex than, that of social-class outgroups. After all, people with disabilities may occupy the same cultural, class, or racial group as the perceiver, and social norms further dictate that they should be treated as normal members of one's own social group. Yet, people with disabilities are nonetheless viewed as members of a distinct and strange outgroup, and they suffer from harmful stigma and social isolation (see other chapters in this volume). In this social predicament, nondisabled people may be reluctant or unable to report all their spontaneous emotional responses, but the neuroscience of empathy offers some possible indicators. This chapter reviews cognitive and neural signatures of disability stigma, focusing on systematic stereotypes and neural patterns potentially related to empathy.

C4.S2 ### STEREOTYPE CONTENT AS SYSTEMATIC COGNITIVE PATTERNS

C4.P5 The mark of deviance on physically disabled individuals by itself can stigmatize, by eliciting dispositional inferences that overwhelm the viewer's impressions (Jones et al., 1984). According to the stereotype content model (SCM), people typically view disabled individuals as warm (trustworthy, friendly), but generally incompetent (not capable or assertive; Fiske, Cuddy, Glick, & Xu, 2002). This ambivalent image is widespread: Surveys rate people with disabilities as having stereotypically high warmth but low competence, in 15 countries, including the United States, Australia, Germany, Greece, India, Israel, Italy, Kenya, Mexico, New Zealand, Northern Ireland, Norway, Sweden, Switzerland, and Uganda (Cuddy et al., 2009; Durante et

al., 2013, 2017; Norway and Germany appear in Bye et al. (2014) and Asbrock (2010), respectively; to see the maps locating disabled people among societies' groups, go to http://www.fiskelab.org/cross-cultural-wc-maps/).

C4.P6 This warm-but-incompetent "pity quadrant" of the SCM results from a mixed stereotype depicting disrespected but likable groups. The image fits the finding that disabled people appear in the same cluster as older people, in many countries (United States, both Euro- and Asian-Australia, Greece, India, Jewish Israel, Italy, Kenya, Mexico, Norway, Sweden, Switzerland—French and German cantons). People with disabilities also overlap clusters that include people with mental illness (New Zealand—Euro) and mental disabilities (Germany, United States), as well as people who are not fully adult: young people (both Australian samples, Italy) and children (Kenyan students, Sweden, Swiss Germans). To be sure, landing in the pity cluster does not mean that observers think disabled people are childlike. But all these groups share the attribution of incompetence, and in the case of people with physical disabilities, who by definition have physical limitations, the stereotype unjustifiably extends to cognitive limitation and a patronizing attribution of "not fully adult."

C4.P7 The disability stereotype also sometimes shares a cluster with poor people (Greece, India, Japan, Mexico, New Zealand—Euro). Along with older people, mentally disabled people, and nonadults, disabled groups are disrespected as having unfortunate, lower status through no fault of their own—at least as a baseline assumption.

C4.P8 The no-fault baseline is not harmless. From the outset, disabled people are invisible, or at least not salient; only about one third of pretest samples list them as a relevant social group. Neglect is a form of passive harm that dismisses disabled people (Cuddy et al., 2007), in settings ranging from national to interpersonal contexts.

C4.S3 EMOTION AND BEHAVIOR

C4.P9 Stereotypes predict emotional prejudices, which in turn predict discriminatory behavior more accurately than stereotypes alone (Cuddy et al., 2007). In the first step, the paternalistic disability stereotypes enable the viewer to express pity and sympathy—variants on empathy—toward disabled individuals. However, unlike empathy, pity additionally requires that the pitied target stay subordinate (Fiske et al., 2002). The emotional prejudice of pity results in behavior that combines assumed superiority with potential caretaking, keeping disabled individuals in a position of subordination. Therefore, although the stereotypic helplessness of disabled individuals can elicit assistance, such perceptions also relegate them to a social status marked by powerlessness and inferiority, which motivates pity and patronizing behavior.

C4.P10 To be specific, the nature of the assistance given to disabled individuals reflects ambivalence toward this outgroup and possibly undermines true empathy. Generally, people react to disabled individuals with both active help and passive neglect (Fiske, Cuddy, & Glick, 2007). For example, people may actively support institutions for disabled people, which help and protect, but at the same time, people fail to personally associate with and instead socially isolate people with disabilities. The ambivalence reflected in these behaviors suggests that even though people pity disabled individuals and would willingly give resources to help them, they fail to truly relate to them and instead distance themselves from this stigmatized outgroup.

C4.P11 In fact, even though nondisabled people may claim to accept disabled individuals as normal members of society, those same people often show avoidant behavior toward the disabled outgroup. When interacting with disabled individuals, people sit farther away, implicitly show unease, display overcontrolled behavior, and attempt to disengage themselves from those interactions when possible (Kleck, Ono, & Hastorf, 1966; Langer et al., 1976). People, particularly those who have not had much interaction with disabled individuals, apparently feel uncomfortable interacting with them because they do not know how to relate to or understand people with disabilities. Therefore, regardless of any genuine feelings of kindness, lack of empathy can inhibit spontaneous social interactions between the two groups and ultimately isolate the disabled outgroup.

C4.P12 Furthermore, although altruism for an ingroup member may generally result from an understanding of that person's concerns, the assistance given to any pitied outgroup appears to lack the same type of understanding. For instance, a common experience that often disturbs disabled individuals comes from instances of unsolicited and gratuitous aid (Hebl & Kleck, 2000)—overhelping undermines the autonomy and apparent capability of the recipient, sometimes deliberately (Gilbert & Silvera, 1996). Although often a result of good intentions, people may try to help disabled individuals, but in a way that does not actually have their best interests in mind, and instead reinforces the incompetence stereotype and increases the disabled individuals' dependency. Therefore, without understanding the needs of pitied outgroups, paternalistic stereotypes could potentially undermine the nondisabled individual's good intentions and result in social harm.

C4.S4 Perceived Fault Moderates Empathy for People with Disabilities

C4.P13 The potentially unconstructive treatment of disabled individuals raises a key question: What exactly is the nature of empathy directed toward members of this social group, given that they straddle the boundary between ingroup and outgroup—cooperative

but lower status? Moreover, what distinctive aspects of disability might most influence expressed empathy? After all, not all physical disabilities are alike, and some disability characteristics may come off as more repugnant and worthy of avoidance than others. According to Jones et al. (1984), six dimensions of stigma, such as the origin or course of the abnormality, may significantly influence the way people empathize with disabled individuals. Some dimensions of stigma should affect empathy expressed for disabled targets.

C4.P14 In accord with attributional analyses of responsibility for negative outcomes (Weiner et al., 1988), the presence of fault (personal control) should have a clear impact on reported empathy; preliminary data support this (Wu, 2011). People expressed significantly less empathy toward people at fault, versus not at fault, for their own disabilities. These results indicated that regardless of the disabled individual's unfortunate fate, the presence of fault penalized some of the disabled compared with the not-at-fault individuals. Someone who jumps off a balcony for fun would get less sympathy than someone who was pushed. Likewise, less empathy emerges for injury from high-risk sports such as hang-gliding or off-trail skiing. In fact, the negative response to fault spread throughout all dependent measures, as participants gave significantly more negative ratings to all of the target's characteristics, including judgments of competence and warmth. These preliminary findings suggest that people make strong assumptions about the characteristics of disabled individuals deemed blameworthy, which can reduce empathy and motivation to help.

C4.P15 According to Jones et al. (1984), a stigmatized individual receives worse treatment when the person bears responsibility for his or her condition because the viewer can attribute some element of punishment to deviation. For instance, in one experiment, an obese confederate revealed to half of the participants that he had a gland disorder and to the other half revealed simply an excessive fondness for eating (Vann, 1976). The experiment called for the participant to convey a message to the confederate by administering an electric shock, whose strength and duration the participant controlled. The observers gave more painful shocks when the confederate seemed responsible for his obesity, rather than a victim of disease.

C4.P16 Further, the notion of fault is as important in the maintenance of a stigmatizing mark as in the cause of one. According to Jones et al. (1984), a viewer may regard the presence of a remediable blemish as an indicator that the bearer is stupid, careless, lazy, or part of a social group that accepts such an aberration. For instance, people may not be at fault if they are born with prominent facial moles or are victims of a crash that causes missing teeth, but it may as well be their fault if they do not take corrective measures. Consequently, the persistence of a presumably repairable defect may negatively shape a viewer's opinion of the afflicted person.

C4.P17 Given these two different types of fault perceptions, future work should break down the general notion of *fault* for one's own disability into a more specific *fault for causing* and *fault for sustaining* the disability. The literature offers no clear prediction about whether one type of fault would be more heavily penalized by the participants. On one hand, people who willingly and actively commit actions that lead to their own disabilities may be seen as rightfully punished, and people who simply sustain their preexisting disabilities may seem more pitiable and helpless. On the other hand, people who do not take steps to help themselves in their own disabled state may be seen as not deserving outside help, compared with people who might regret the actions that led to their disabilities. There is also no clear theoretical basis for predicting how the presence of one type of fault might affect the other.

C4.P18 Overall, cognitive stereotypes of people as warm but incompetent allow paternalistic empathy and pity, which then support both social neglect and active helping that may be patronizing, even if well intentioned. Empathy and helping, however, rest on the no-fault baseline. When the person seems at fault for either the cause or the sustaining of the disability, this undermines empathy and help.

C4.S5 Neural Correlates of Empathy for the Disabled Outgroup

C4.P19 Behavioral studies of empathy may suffer from socially desirable self-report bias. Or people may not in fact be fully aware of their own responses. Therefore, fully understanding the experience of empathy demands an investigation of its neural correlates. According to the current consensus in the empathy literature, empathy consists of two subcomponents: (1) emotional empathy, or an affective response to the perceived or imagined feelings of another person; and (2) cognitive empathy, or the capacity to understand the other person's mental perspective (Decety & Jackson, 2004). The emotional component implies an automatic, physiological reaction to another person's situation, and it relies on limbic structures in the brain that develop earlier in ontogeny. On the other hand, cognitive empathy entails a degree of social insight to comprehend the thoughts of others, and it relies on the later developing lateral temporal lobe and prefrontal structures (Singer, 2006).

C4.P20 Cognitive empathy is closely related to the concept of theory of mind (ToM), or the awareness that others have mental states that may differ from one's own and can account for their behavior (Hooker, Verosky, Germine, Knight, & D'Esposito, 2008). However, note that even though cognitive empathy and ToM perspective-taking are often used interchangeably, cognitive empathy depends on the perception of another person in an emotional or difficult situation, which is not required for general ToM perspective-taking, so they are separable processes.

C4.P21 To experience true empathy, a visceral, emotional reaction by itself is insufficient. Rather, the full experience of empathy relies heavily on cognitive processes, in which the observer must in some way adopt the perspective of the target through shared neural representations (Singer & Lamm, 2009). By using our own sensorimotor and affective programs, we can simulate the target's corresponding sensorimotor and affective states. Such simulation of perception, which relies on common neural structures, allows us to experience, rather than simply witness or infer, another person's state of mind as though it were our own (Decety & Grèzes, 2006). This neural overlap of personal and imagined feelings potentially plays a crucial role in the experience of empathy.

C4.P22 Several studies have attempted to shed light on the neural correlates of cognitive empathy. In one study, participants responded to a series of scenarios that involved emotional perspective-taking or purely cognitive perspective-taking, which was more similar to the concept of ToM. The results indicated that the ToM condition engaged more lateral and anterior regions of the ventral frontal lobes, although the emotional condition engaged more medial orbital frontal regions relative to the other conditions. The medial prefrontal cortex (mPFC)—a key region implicated in mentalizing about emotions (Hooker et al., 2008; Hynes, Baird, & Grafton, 2006; Krämer et al., 2010) and other people's dispositions (Amodio & Frith, 2006)—notably showed common activation patterns for both conditions. The activation for both emotional stimuli and cognitive perspective-taking therefore signifies the region's potential role in the cognitive aspect of empathy.

C4.P23 In a similar study, participants thought about agents' intentions in cartoon stories (Völlm et al., 2006), which included emotional and purely cognitive appraisals. The results revealed increased lateral orbitofrontal cortex activity in response to ToM stimuli, and increased activation in the anterior and posterior cingulate and amygdala in response to emotional stimuli. Although these brain regions differ somewhat from those found by Hynes et al. (2006), this study also implicated the mPFC as being associated with both types of appraisals, again suggesting the brain region's role in cognitive empathy.

C4.S6 Neural Differences in Ingroup and Outgroup Empathy

C4.P24 Three brain regions seem promising for investigations of neural responses to people with disabilities: medial prefrontal cortex, precuneus, and insula.

C4.S7 MEDIAL PREFRONTAL CORTEX AND COGNITIVE EMPATHY

C4.P25 The behavioral disparities in empathy, most often biased against outgroups, correlate with a reduction in, or general lack of, the cognitive component of empathy. In a study described earlier (Mathur et al., 2010), participants viewed pictures of Blacks and Whites in painful or neutral situations. During scanning, participants indicated the extent to which they felt empathy for the person in the image. The results indicated that regardless of the target's race, empathy across participants corresponded with affective neural responses in the anterior cingulate cortex and bilateral insula. However, participants showed significantly greater activity in the mPFC for ingroup members than for outgroup members. Moreover, self-reports correlated with the functional magnetic resonance imaging (fMRI) data; participants who reported experiencing greater empathy for ingroup members also showed greater mPFC activity for ingroup members. These results suggest that empathy for people in general is associated with emotional empathic processing, although selective empathy and altruism toward members of one's own social group correlate with cognitive empathic processing (Mathur et al., 2010).

C4.P26 In another study contrasting ingroup and outgroup responses, participants interpreted ("mentalized" about) the opinions of two targets with opposing sociopolitical views (Mitchell, Macrae, & Banaji, 2006). This manipulation aimed to create one target who would share similar sociopolitical opinions with the participant, and one who would have dissimilar opinions. During the scan, participants mentalized about the opinions and preferences of the two targets and also indicated their own responses to those opinion questions. Participants showed greater ventral medial prefrontal cortex (vmPFC) activity for targets with views similar to their own. The activity in the vmPFC, which correlates with self-referential tasks (S. C. Johnson et al., 2002) or reflecting on one's current affective state (Gusnard et al., 2001), suggests that simulation through shared neural structures occurs more reliably for similar, ingroup targets compared with dissimilar, outgroup targets.

C4.P27 Studies investigating other SCM groups also support decreased cognitive empathy for outgroups. An fMRI study (Harris & Fiske, 2006) suggested that people in extreme outgroups (stereotypically both low warmth and low competence), such as drug addicts and homeless people, may actually elicit little to no cognitive empathy. In this study, participants saw images of people in all social groups categorized by the SCM and made affective assessments of each picture. The researchers found that, compared with other social groups, targets in extreme outgroups failed to activate the mPFC. This lack of activation in the mPFC implies that people failed to simulate the mindsets of these social outcasts, whom people typically regard as

having few shared interests or commonalities. These results corresponded to self-reported lack of empathy for these extreme outgroups.

C4.P28 Together, these findings suggest that any deficit in empathy for disabled individuals may also be reflected in similar regions of the mPFC. Although the results in the Harris and Fiske (2006) study did not suggest any decreased mPFC activation for the SCM cell containing the disabled outgroup, the study was not designed to isolate the reactions to disabled people from the reactions to the other outgroup (i.e., elderly people) in the same SCM cell. Further, this chapter mostly concerns how empathy (and therefore mPFC activation) may respond to particular dimensions of disability.

C4.P29 For the present, targets who are at fault for either causing or sustaining their disabilities seem likely to elicit decreased activity in the mPFC compared with targets who are not fault. This notion fits the previous findings that disabled individuals who are perceived to be at fault for their disabilities garner more negative judgments and less empathy from the viewer (Hebl & Kleck, 2000). By viewing these individuals more contemptuously, nondisabled people would presumably be less inclined to relate to them or to care about their individual perspectives, much as people might care less about the perspectives of racial or extreme outgroup members. Given that the mPFC is a large area of cortex with many different functions, studies should use voxels previously identified in empathy research (see Seitz, Nickel, & Azari, 2006, for a relevant meta-analysis).

C4.S8 PRECUNEUS AND EMOTIONAL EMPATHY

C4.P30 Previous research has implicated the precuneus in tasks involving perspective-taking to imagine another person's emotional reactions (Ruby & Decety, 2004) and in tasks requiring people to imagine another person's pain (Jackson et al., 2006). The precuneus has also been associated with attributing emotions to the self and other people (Ochsner et al., 2004) and with adopting a first-person perspective compared with a third-person spatial perspective (Vogeley et al., 2004). Moreover, the precuneus activates during judgments requiring empathy (Farrow et al., 2001). Even though they did not discuss this finding, Krendl, Moran, and Ambady (2012) found significant activation in the precuneus for uncontrollable versus controllable stigma. Further investigations should shed more light on the role of the precuneus in empathy or perspective-taking for disabled individuals. The various activation patterns suggest that individuals who do not purposefully sustain their disabilities elicit greater perspective-taking from the viewer compared with individuals who are at fault for their disabilities.

C4.S9 INSULA AND EMOTIONAL EMPATHY

C4.P31 The insula has been implicated in visceral emotions: disgust (Harris & Fiske, 2006; Phillips et al., 1997; Wright, He, Shapira, Goodman, & Liu, 2004) as well as empathy (Jabbi et al., 2007; Singer et al., 2004; Singer, Critchley, & Pritchard, 2009). Perhaps disabled individuals who are at fault, and who garner more negative evaluations and feelings of contempt, would elicit greater activation in the insula due to feelings of disgust. However, insula activation could reflect increased feelings of empathy, given that the region has been implicated in empathizing with the pain of others (Ochsner et al., 2008). The study by Krendl, Moran, and Ambady (2012) indeed found activation in the insula for the uncontrollable more than controllable stigma. Future studies should assess insula activation for people perceived as not responsible for their conditions.

C4.S10 Conclusions

C4.P32 Stereotype content for people with disabilities is clear: warm but incompetent, often evoking pity and empathy but also avoidance, neglect, and paternalistic behavior. Neural signatures are more preliminary, implicating the mPFC, precuneus, and insula. Using this exploratory review as a starting point, future studies can look further into how people affectively, cognitively, and neurally respond to people with disabilities. By learning more about how emotion and perspective-taking interact in neural and evaluative responses to people with disabilities, we can learn more about the nature of their stigma. Given that much of the stigma and neglect directed toward disabled individuals is implicit and unspoken, such findings could help elucidate the experiences, relationships, and social standing of disabled individuals.

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C4.P33 This chapter draws on the introduction to the first author's 2012 senior thesis, under the supervision of the second author: "Blaming the Victim: An fMRI Study on How Perceptions of Fault Influence Empathy for People with Disabilities."

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