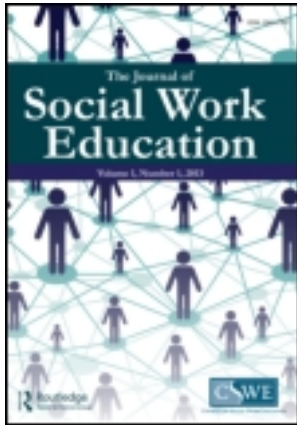


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TEACHING EMPATHY: A FRAMEWORK ROOTED IN SOCIAL COGNITIVE NEUROSCIENCE AND SOCIAL JUSTICE

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TEACHING EMPATHY: A FRAMEWORK ROOTED IN SOCIAL COGNITIVE NEUROSCIENCE AND SOCIAL JUSTICE

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We propose that a targeted and structured explication of empathy is a useful, if not essential, foundation for social work theory and practice. We outline a social work framework for empathy, one that is rooted in an interdisciplinary context, emphasizes recent findings in the field of social cognitive neuroscience, and yet is embedded in a social work context. The framework lends itself to identifiable education components that social work educators can implement across the curriculum. We can help students understand the basic process of neural pathway development that determines their affective empathic responses and develop and maintain cognitive empathic abilities. In addition, students can learn to use their knowledge, values, and skills, informed by empathy, to take empathic action consciously.

SHORTLY AFTER WORLD WAR II, social scientists attempting to understand the atrocities of the Holocaust began searching for explanations about the catastrophic failures of humanity that had occurred during the conflict. One of their most basic discoveries was the importance and centrality of empathy in sustaining the social contract (Laub & Auerhahn, 1989). Lack of empathy underlies the worst things human beings can do to one another; high empathy underlies the best. Social work can almost be seen as an organized manifestation

of empathy—to such an extent that social work educators and practitioners sometimes take it for granted. We propose that a targeted and structured explication of empathy is an extremely useful, if not essential, foundation for all social work theory and practice. Moreover, recent advances in the analysis of subjective human experience and corresponding activity in the brain have helped define the components of empathy both as a subjectively experienced phenomenon and as an observable activation of identifiable “neural

networks.” We posit that both the analytical and physiological identification of empathy will be of great benefit to social work educators and practitioners.

Evidence suggests that practitioner-to-client empathy is critical for effective social work practice (e.g., Berg, Raminani, Greer, Harwood, & Safren, 2008; Forrester, Kershaw, Moss, & Hughes, 2008; Green & Christensen, 2006; Mishara et al., 2007; Sale, Bellamy, Springer, & Wang, 2008). We also know that empathy is essential to adequate moral development (Jolliffe & Farrington, 2006) and healthy parent-child and partner relationships (Busby & Garnder, 2008; Curtner-Smith et al., 2006). Given these imperatives, we might expect to find a consensus in the social work literature on how to conceptualize, define, and measure empathy. We might also expect to find a consistent standard for how to teach and cultivate empathy in our students. However, no such consensus or consistency currently exists.

In fact, the treatment of empathy in social work literature and education has been described as haphazard and narrow (Freedberg, 2007; Raines, 1990). In this article we briefly outline a social work framework for empathy, one that is rooted in an interdisciplinary context, emphasizes recent findings in the field of social cognitive neuroscience, and yet is embedded in a social work context. The framework lends itself easily to identifiable education components that social work educators can implement across the curriculum.

Social Work’s Historical Treatment of Empathy

For more than 45 years schools of social work have included empathic responsiveness as

part of their skills training (Kaplowitz, 1967). Today this effort is most often reflected in the use of dyads and triads to practice empathy-related skills such as paraphrasing, appropriate self-disclosure, and articulation of feelings. Although virtually every social work educator would probably agree that empathy is an essential ingredient of successful social work practice, empathy has not always been well-articulated as a communicable and teachable concept. In addition to skill building, the profession needs a stronger heuristic tradition to convey empathy, both as a construct and as an experience, in social work education. Consider the simple, one-sentence definition of empathy in the *Social Work Dictionary*: “the act of perceiving, understanding, experiencing, and responding to the emotional state and ideas of another person” (Barker, 2008, p. 141). This definition leaves many unanswered questions: Is empathy innate or learned? What factors may augment or inhibit empathy? Why do some people have an empathy deficit or no empathy at all? We expected to find the answers to these questions in the 20th edition of the *Encyclopedia of Social Work* (National Association of Social Workers, 2008)—instead we found no entry at all for empathy.

The 2008 Council on Social Work Education (CSWE) Educational and Policy Accreditation Standards (EPAS) document does an excellent job of defining professional competencies and identifying a set of interrelated practice behaviors comprising knowledge, values, and skills. However, it falls somewhat short in communicating the importance of empathy. In fact, empathy is mentioned only once in the document, on page 7, under the section “Educational Policy 2.1.10(a)—Engagement”: “Social work-

ers must use empathy and other interpersonal skills.”

Curious as to the extent of recent coverage on empathy in our research and pedagogy, we completed a keyword search in the database Social Service Abstracts for peer-reviewed articles between 2000 and 2009. Table 1 displays the results. The results indicate that even though empathy is a critical component of social work practice it does not yet garner the same extensive attention that other critical components such as diversity and ethics receive.

We also completed a content analysis of empathy in the 47 social work textbooks that had been published since 2001 and were available in our university library. Twenty-six textbooks made no mention of empathy (including several human behavior and practice textbooks such as Corwin, 2002; Coulshed & Orme, 2006; Cournoyer, 2004; Feit & Wodarski, 2004; Greene, 2008; Long, Tice, & Morrison, 2006; Rogers, 2006). The 21 textbooks that did mention empathy often did so in a few short paragraphs (e.g., Ashford, LeCroy, & Lortie, 2009; DuBois & Miley, 2005; Saleebey, 2006; Sheafor

& Horejsi, 2006). Half of the 21 textbooks that did mention empathy provided no conceptualization or definition of the construct; in other words, they assumed readers already knew what empathy is and how one develops it. A common phrase was that social workers need “empathy, genuineness, and warmth.”

Our keyword search in Social Service Abstracts and our content analysis using a limited nonrandom sample of social work textbooks are not meant to be empirical justification for this article. For instance, our sampling method (i.e., using texts in one library) is not representative of social work textbooks and neither can we make any generalizations; yet, as faculty at a research-intensive institution, we find the results interesting and worth mentioning. We recognize that there is social work research and pedagogy that includes social cognitive neuroscience and human development perspectives of empathy, but we simply suggest that it is not as extensive or consistent as the coverage of other important aspects of social work practice, such as diversity and ethics. We think that more consistent

TABLE 1. Peer-Reviewed Articles on Empathy, Diversity, and Ethics in Social Service Abstracts

2000–2009	Total Number of Peer-Reviewed Articles	Teaching	Practice
Empathy	199	4	46
Diversity	737	64	215
Ethics	833	41	362

Note. Social Service Abstracts provides bibliographic coverage of current research focused on social work, human services, and related areas, including social welfare, social policy, and community development. The database abstracts and indexes more than 1,300 serial publications and includes abstracts of journal articles and dissertation and citations to book reviews.

and comprehensive coverage of empathy in social work curricula could enhance social work education and practice.

After surveying the literature, we concluded that although empathy is recognized as a very important part of social work education and practice, the profession lacks a well-articulated and driving strategy or conceptualization that we can apply reliably and utilize effectively in education and practice. We need a comprehensive strategy to teach empathy that gives it the same importance as diversity, ethics, and other foundational concepts, across the curriculum. During the last 10 years brain-based research from a variety of biological sciences, such as primatology and ethology (de Waal, 2003, 2008), neuroscience (Ramachandran, 2000), neurobiology (Iacoboni, 2008; Rizzolatti & Craighero, 2004), social cognitive neuroscience (Decety & Jackson, 2004; Decety & Lamm, 2006), and developmental psychology (Batson, 2006; Batson et al., 2003) has emerged, giving us a better understanding of how empathy is mediated in the brain. This research builds on existing theoretical knowledge including attachment theory (Bowlby, 1969, 1973) and self-psychology (Kohut, 1982) to give us a much richer and more empirical concept of empathy. It also elucidates research in intersubjectivity as a mechanism that creates or modulates empathy (Berrol, 2006; Stern, 1985). (We discuss this in more detail later in this article.)

A Multidisciplinary Conceptualization of Empathy

In 2004 two social cognitive neuroscientists, Jean Decety and Philip Jackson, set out to apply their specialized knowledge of empa-

thy as a brain phenomenon to the literature of social science. They surveyed the numerous definitions and conceptualizations of empathy found in the social science literature. Their conclusion was that the existing literature delineated four key components of empathy: (1) the capacity for an automatic or unconscious affective response to others that may include sharing others' emotional states; (2) a cognitive capacity to take the perspective of another; (3) the ability to regulate one's emotions; and (4) a level of self/other-awareness that allows some temporary identification between self and other, but also ultimately avoids confusion between self and other (Decety & Jackson, 2004; Decety & Moriguchi, 2007). All four components must come into play for a human to experience the full extent of empathy.

Social cognitive neuroscientists define empathy as an induction process that results from the dynamic interaction of the previously identified components that are physically observable and isolable neural networks (Decety & Moriguchi, 2007). Empathy, thus defined, is a multidimensional construct that includes both bottom-up and top-down components. The bottom-up part of empathy is the automatic or unconscious affective process that allows us to recognize another's emotional state. The top-down part of empathy is the conscious cognitive process that enables us not only to explain and predict our own behaviors, but the behaviors of others as well (Decety & Moriguchi, 2007). If we better understood these four components of empathy, the vagueness, contradictions, and confusions in social work literature might be far less prevalent and problematic.

Nature Plus Nurture in the Development of Empathy

Although the focus of this article is the relatively new social cognitive neuroscience on empathy, it must be understood that there is an inexorable connection between human development in the context of healthy relationships and the vigorous growth of the four observable empathy-related networks or components in the brain (Perry, 2002). We are hard-wired for empathy (Iacoboni, 2008). However, as attachment theory (Bowlby, 2004; Masur, 2009), self-psychology, and intersubjectivity (Kohut, 1982; Stern, 1985) informed us decades earlier, empathy and emotion regulation are facilitated and developed through the nurturing relational context called the “attachment system.”

The attachment system is crucially important in the parent–infant relationship (Masur, 2009). For many years, creating a basis for empathy during an infant’s earliest years was seen as fundamental to an individual’s empathic capacity throughout life. However, recent findings about the brain shed new light on the nature and function of empathy, greatly enriching the potential contributions these areas of research can offer social work practitioners and educators. Most important, we now know that the brain does not settle into a rigid hard-wired state after childhood, but remains dynamic and malleable throughout life (Schwartz & Begley, 2003). This neuroplasticity suggests that even people whose attachment systems are weak in childhood, or those who experience devastating disruptions of their attachment systems as adults, may be able partially or fully to rewire their brains,

healing the damage that may—as attachment theory convincingly demonstrates—prohibit the development of empathy.

The relationship between neuroplasticity and the development of empathy is now physiologically observable through brain imaging. Each of the four empathy-related neural networks in our brains consists of synaptic pathways, which according to Perry (2002) tend to have a “use it or lose it” arrangement (p. 79). This means that infants and children who grow up with a stable emotional attachment to a nurturing caregiver are strengthening the existing synaptic pathways necessary to experience empathy. These children’s synaptic pathways are undergoing physical changes that make neurotransmission, both within any given component and among the four empathy-related components, more efficient. As children mirror the emotions and behaviors of the nurturing caregiver, they are able to internalize the relationship and use it to help them develop spontaneous, healthy, and interdependent relationships with peers—further strengthening their synaptic connections.

On the other hand, infants and children who are neglected or who do not have a consistent, stable relationship with a nurturing care provider experience less brain activity in the four empathy-related neural networks. Therefore, their synaptic connections are weakening, perhaps even dissolving. The more severe the neglect, the fewer the opportunities to mirror and internalize healthy relationships, and the more likely the child is to have an empathy deficit as an adult. Early intervention can help an infant or child to strengthen weakened synaptic connections

and even rebuild dissolved connections, but the longer the child's deprivation, the more difficult the task becomes (Perry, 2002).

That said, neurologists have now observed many cases of adults changing or repairing damage to the brain. To offer perhaps the most dramatic documented example, Harvard neuroanatomist Jill Bolte Taylor described her own recovery from a massive left-hemisphere stroke, detailing her literal rebuilding of neural tissues and connections (see Bolte Taylor, 2009). This new neurological paradigm is revealing clear empirical connections between attachment theory, self-psychology, intersubjectivity, and the conventional wisdom of social work. We are beginning to understand the physical process of empathy.

Mirror Neurons: The Physiological Component That Mediates Empathy in the Brain

To emphasize further the importance of a healthy relational context for the development of empathy we need to recognize and better comprehend the synaptic connections or the physiological component (i.e., mirror neurons) necessary to develop and mediate the affective and cognitive components of empathy. In 1992 a group of Italian neuroscientists who were studying motor behavior in macaque monkeys (di Pellegrino, Fadiga, Fogassi, Callese, & Rizzolatti, 1992) accidentally discovered mirror neurons—nerve cells that allow humans to understand one another's experiences by undergoing a kind of involuntary neurological "echo" while observing one another's behavior (Fadiga, Fo-

gassi, Pavesi, & Rizzolatti, 1995; Rizzolatti & Craighero, 2004). The discovery of mirror neurons has been said to be for psychology what the discovery of DNA was for biology. This incident sparked a revolution in the way scientists understand the brain, emotions, and human interactions.

The mirror neuron system (MNS) is a network of brain cells that fire during our own motor behaviors but, more important, also fire when we hear other people speak; listen to their vocal nuances (Gazzola, Aziz-Zadeh, & Keysers, 2006); and view or observe their posture, gestures, actions, and facial expressions (Enticott, Johnston, Herring, Hoy, & Fitzgerald, 2008). The MNS is stimulated by a shared representational network of common mental states that enables us to experience and understand the emotions and intentions/state of mind of others just by hearing and watching them (Enticott et al., 2008; Gazzola et al., 2006; Jackson, Meltzoff, & Decety, 2006; Kaplan & Iacoboni, 2006; Pfeifer, Iacoboni, Mazziotta, & Dapretto, 2008).

Detailing all of the brain studies on the MNS is beyond the scope of this article. However, it is important that we recognize the interpersonal neurobiology of empathy and use the contributions from neuroscience that are presently making the definition of empathy richer, more precise, and more actionable. Therefore, we have highlighted some of the recent MNS findings in Figure 1. For example, initial brain research indicates that the brain architecture that governs empathy is somewhat different between the sexes (Schulte-Ruther, Markowitsch, Fink, & Piefke, 2008). Although there is still not enough research to

guide differential empathy interventions, it is important for students to know that men and women may have slightly different experiences of empathy. Two questions that arise from initial research on men's and women's brains are: (1) Are there ways to help guide and develop our innate capacity to feel emotion? and (2) Are there ways to help develop and utilize cognitive processing techniques to protect us (e.g., boundaries) from the emo-

tional contagion aspects of affective empathy? We hope future research can answer these and other important questions about empathy.

Although we have long been advocates of infant mental health, early intervention, and prevention, mirror neurons add a new layer of understanding and a renewed sense of urgency to promote healthy child development. At the same time, they offer new hope for people who did not experience healthy

FIGURE 1. Highlights From Recent Studies on Mirror Neurons and Empathy

- Females frequently score higher than males on standard tests of empathy. The difference in empathy scores can be explained, in part, by male–female differences in the brain regions that mediate empathy. For example, the mirror neuron activation system is stronger in females. The neural circuitry connected to emotion perception (cognitive empathy) is generally equal in males and females; however, females have stronger activation in neural networks connected to affective responsiveness. In other words, female brains are wired to have more emotional resonance, whereas males are wired in such a way that they remain more detached/distant or cognitively driven in their empathic responses (Schulte-Ruther, Markowitsch, Fink, & Piefke, 2008).
 - Brain lesions on or damage to the MNS can lead to an alteration of empathy or even a lack of empathic ability (Eslinger, 1998).
 - Adults with Asperger's syndrome have lower levels of cognitive empathy than a typical person but comparable levels of emotional empathy (Dziobek et al., 2008). Researchers now believe that autism may in part be explained by a failure to develop or form adequate neural circuitry or mirror neurons that enable language and social brainways to mature (Decety & Moriguchi, 2007). This is an indication that genetics may play a role in any human's capacity to experience affective sharing.
 - People with autism have altered function in the MNS that prevents them from imitating facial expressions and emotions in the same way a typical person would. In addition, some anticipatory muscle activation in children with autism has been found to be inhibited. Both of these findings have implications for the children's ability to develop empathy (Buccino & Amore, 2008; Iacoboni & Dapretto, 2006).
 - Some mental disorders are associated with empathy-related deficits—for example, narcissistic personality disorder, borderline personality disorder, and antisocial personality disorder (Decety & Moriguchi, 2007).
-

attachment systems as infants—changing the brain after childhood is often difficult, but by no means impossible. Part of this interdisciplinary model is known territory for social work researchers, and the neurological evidence of the MNS supporting the model has powerful implications for how we can cultivate social and cultural empathy in our students. However, neuroscience is not driven by the same imperative for social justice as is social work, and neither does that discipline prioritize actively catalyzing empathic behavior. Our profession does.

In service of that imperative, the remainder of this article discusses a way in which empathy can be understood and taught using both longstanding psychological theory and new discoveries from neuroscience. We then describe a few ways in which our framework for empathy might be taught. These examples are pragmatic and immediately actionable. We believe that the two-tiered process of understanding empathy and using it “on the street” (in this case, in the classroom) serves social work’s commitment to research and practice. As our understanding of empathy continues to grow, we may more closely deconstruct and test aspects of empathy. However, our aim in this article is to sketch a conceptual path social work educators can follow to help social work students develop empathy and comprehend empathetic practice with clients.

A Social Work Framework for Empathy

We propose a conceptualization of empathy that joins the findings of neuroscience and social and developmental psychology with the imperatives and values of social

work. The three components of our framework are: (1) the *affective response* to another’s emotions and actions, (2) the *cognitive processing* of one’s affective response as well as the other person’s perspective, and (3) *conscious decision making* to take empathic action (Gerdes & Segal, 2009, in press). Table 2 outlines the components of our framework. Though this is a convenient way to conceptualize empathy as a phenomenon, we understand and emphasize that empathy as experienced by humans contains intermingled affective, cognitive, and decision-making elements. Separating them is a heuristic device, like describing the wave frequency of different colors in a rainbow; just as each color of the spectrum is always present (but identifiably separate) in each rainbow, each aspect of empathy is present but independently discernible.

The first component, affective response, encompasses the involuntary physical and emotional reactions (MNS) that are triggered by our exposure to external events. The second component of empathy is the cognitive processing of mirrored emotions and actions. This process is voluntary mental thought that strives to interpret the physiological sensations as well as the thoughts that mirroring triggers. It includes the components of self/other-awareness, mental flexibility, and emotion regulation. This process results in an understanding of the lived experiences of others.

The third component, conscious decision making, is part of social work’s well-established tradition of taking action. From a micro perspective this includes empathy-driven helping behaviors that empower clients, rather than sympathy or pity-driven

action that generally enables clients. From a macro perspective the profession's imperative to promote social justice requires us to engage in practices that advance social and economic fairness. Social empathy is the ability to understand people by entering into their situ-

ations in ways that reveal inequalities and disparities and then acting to effect social change (Segal, 2006, 2007b). Once we have empathic insights into discrimination, injustice, or inequality, we are better able to take action that promotes social justice.

TABLE 2. Social Work Framework for Empathy

Component	Definition	Key Aspects	Ways to Develop
Affective response	Involuntary physiological reaction to another's emotions and actions	Mirroring ^a Mimicry ^b Conditioning ^c	Promote healthy neurological pathways
Cognitive processing	Voluntary mental thought processes used to interpret one's affective response; enables one to take the other person's perspective	Self/other-awareness ^c Mental flexibility ^{d,e} Role-taking ^c Emotion regulation ^d Labeling ^c Judgment ^c Perspective-taking ^{d,e} Self-agency ^e	Set boundaries Practice mindfulness Use role-plays
Conscious decision making	Voluntary choices for action made in response to cognitive processing	Empathic action ^f Social empathy ^g Morality ^b Altruism ^h	Helping Advocacy Organizing Social action

^aIacoboni (2008); Kaplan & Iacoboni (2006); Gallese & Goldman (1998); Rizzolatti & Craighero (2004)

^bHoffman (2000)

^cDavis (1996)

^dDecety & Moriguchi (2007)

^eDecety & Jackson (2004)

^fGerdes & Segal (2009)

^gSegal (2006, 2007a, 2007b, 2008)

^hBatson (1991); Batson et al. (1991, 2003)

Implications of the Empathy Framework for Social Work Education

The most basic implication of our empathy model for social work educators is that we can facilitate opportunities for students to increase the breadth or range and the accuracy of their affective responses and perspective-taking efforts with clients. At the same time, we need to give students the tools they need to increase self/other-awareness and emotion regulation. Finally, students need to learn to use these abilities to guide their empathy-driven intervention decisions.

What Does It Take to Cultivate Empathy?

Substantive or prominent change in the brain “requires the stimulation of affect and affect-based understanding,” primarily through experiential learning (Schachter et al., 2008, p. 8). When we engage our students in activities designed to change their brains (develop pre-existing neural pathways and create new pathways), we must appreciate the intensity the task requires. For example, Hildenbran and Pithers (1989) developed a group intervention for sex offenders who themselves had been the victims of sexual abuse. Participants were required to complete the following experiences over a period of 4 to 6 months (Pithers, 1999, p. 271):

1. Read recollections of abuse survivors such as *I Know Why the Caged Bird Sings* by Maya Angelou. They were required to underline passages where they became

sexually aroused and identify instances in which their own victimization was similar.

2. Watch videotapes of survivors discussing their victimization.
3. Write narratives from the perspectives of their victims. Without reading from the narrative they had written, they were required to verbally deliver as much of the narrative as they could.
4. Role-play both the parts of their victims and their own parts as the abusers. The role-plays were videotaped and the participants watched themselves afterward.
5. Disclose offenses in great detail.

The intervention was successful in that self-reported empathy was increased even during the times offenders were experiencing the precursor mood or the predominant emotions they experienced prior to their sexually abusive acts. The simulations provided experience that either did not exist in their brains already or had been inhibited by their own victimization. There are obvious limitations to offender self-reports, but this experiment helps us to understand the intensity and diversity of human experiences required to change a person’s brain.

Although most of our students and their clients are not sex offenders, interventions designed to cultivate or increase affective and cognitive empathy, at minimum, require students to have intense cognitive, emotional, and behavioral experiences to develop new “tracks” in their brains. Affect-based experiential learning engages mirror neurons at the visual, auditory, and somatic levels, helping us to relate to experiences we may never have

had, thereby increasing empathy. Strategies to enhance affect-based experiential learning are outlined in the next section.

Teaching Strategies Designed to Cultivate Empathy

It bears repeating that although the three components of our empathy model (affective, cognitive, and decision making) are linked, they can be developed both separately and simultaneously. We now identify a number of teaching techniques that can be used throughout the curriculum, particularly in diversity and practice classes, to develop and enhance the three components of empathy.

Students need a basic understanding of neuroplasticity and mirror neurons, which could easily be incorporated into human behavior courses. In diversity and practice classes we can use a range of experiential activities to help nurture and promote stimulation of students' MNSs, to enable them to experience and understand the emotions and intentions/states of mind of their future clients. Essentially, we want to give rise to "simulations" or "videos" that will play in students' brains when cued through their interactions with clients. Figure 2 outlines a classroom activity that can be used to develop and enhance mirror neurons.

FIGURE 2. Mirror Neuron Activity

1. Identify an intense or highly emotional scene from an old movie (preferably one students have not seen), such as *Ordinary People*, *All the Right Moves*, *How Green Was My Valley*, *Gaslight*, or *Evelyn Prentice*. Try to limit the video or DVD clip to scenes with only two to four characters.
2. Divide the class into three groups:
 - First Group: Sit in the front row and watch/listen to the scene.
 - Second Group: Sit behind the first group, watch/listen to the movie while mimicking the character's gestures and body positions. Ask them to pay special attention to how their bodies react as they assume the posture of the character.
 - Third Group: Sit in the back with backs turned to the screen and only listen to the scene.
3. When the scene is over, ask all of the students to write down the feelings they think their character experienced during the scene, as well as what they think the character's motivations and intentions are.
4. Have the students discuss their assessments of the characters in the context of mirror neurons, mirror neurons with the addition of mimicry, and auditory neurons only.
5. Based on your full knowledge of the characters' motivations, intentions, and the outcome of the movie, evaluate which group's empathy assessment was the most accurate.

Ideally, show three scenes from three different movies and allow the students to rotate through all three versions of the assignment: (1) visual and auditory mirror neurons plus mimicry; (2) visual and auditory mirror neurons; and (3) auditory mirror neurons only.

Psychodrama, Gestalt Techniques, Role-Playing, and Imitative Play

Psychodrama, Gestalt techniques, role-playing, and imitative play are methods educators can use to promote affect-based understanding and generate opportunities for perspective-taking insights, self/other-awareness, and emotion regulation (Calley & Gerber, 2008; Pearson, Russ, & Cain Spannagel, 2008). Role-playing is an empathy-enhancement intervention that focuses heavily on imitation and mimicking to exploit the natural tendency of mirror neurons to create shared subjective experience. Mirroring activities can be especially useful when emphasizing cultural and social empathy (Chung & Bernak, 2002; Segal, 2007a).

Iacoboni (2008) describes ongoing mirror neuron research as it applies to children with autism. Therapists who are able to engage the child by imitating him or her often discover that, eventually, the child reciprocates by imitating the therapist. Activating the mirror neurons by presenting a close facsimile of the child's behavior seems to allow more mirror neuron activity in the child, who is then able to "mirror" the behavior of people without autism. If we flip the therapist-autistic child experience on its head, the action implication appears to be that we need to provide students with opportunities to have mirroring experiences with clients or with experiences clients have as part of classroom and volunteer activities, as well as in their field practicum. (See Figure 3.)

Psychodrama is guided dramatic action that allows participants to examine problems and issues (Moreno, 1999). It facilitates insight, personal growth, and integration on cognitive,

affective, and behavioral levels. Students can use a psychodrama intervention by replaying various scenes from their interactions with their families and/or clients or by role-playing a particular scenario that they may not have experienced. The drama or play is changed over multiple repetitions. For instance, students might replay a real scene in which their parent acted aggressively toward them, and then change the "script" and play the scene again, this time using more personal emotion regulation and reacting to their parent with less aggression and more empathy.

Another example might be a student who has never experienced depression role-playing the part of a depressed teenager. The student is encouraged to use a Gestalt methodology, "playing the role" of the teenager and imitating his or her body posture, verbal expressions, and descriptions of experiences at school. The use of role-plays and acting in ways that require students to take on behaviors that are different from their own can be most effective when repeated opportunities occur over the course of a semester.

Imitative or pretend play and role-playing can help in developing mental flexibility in addition to self/other-awareness. For example, Braun, Cheang, and Shigeta (2005) effectively increased the empathy of nurses and human service workers toward older people by having them put cotton in their ears, tie yellow cellophane around their eyes, put on latex gloves, and then try to read the newspaper, pick things up, and button or zip and unzip clothes. Although these techniques help to engage people in mirroring actions, they also help build self/other-awareness, understanding of others, and mental flexibility—the

cognitive capacity to imagine the situation of another firsthand. These strategies can help our students literally change their brains, enriching preexisting shared representational networks (i.e., common experiences stored in memory that help individuals understand one another's experiences) and creating new networks by better understanding people from diverse backgrounds.

Mindfulness Practice

The cognitive processing components of empathy (self/other-awareness, perspective-taking, and emotion regulation) are not automatic. On the contrary, they are sophisticated cognitive skills and as such can be learned, increased, perhaps even “mastered” (Decety & Lamm, 2006). The question then becomes

FIGURE 3. Mirroring a Client's Experience

One purpose of this assignment is to help you occupy the ground on which clients so often find themselves, if only for a short while. Hopefully, this can help you better relate to many of the diversity issues that will be discussed in class. You are being asked to expand your “standpoints” by constructing an experience you may not have encountered before. This should also enable you to become more empathic—a hallmark of a good social worker. In addition, because a major role for social workers is information and referral, this assignment will help you learn more about resources available to clients. Do this assignment outside of class. It consists of these parts:

- A physical visit to the assigned community resource—you are required to use some form of public transportation to get to your resource from your home.
- A personal interview with someone in that system—not just a casual conversation about the services the agency/program provides (interview questions will be provided in class).
- A written summary of your personal reaction to the resource experience (two pages).
- A one-page summary of the resource for the whole class that includes contacts, phone numbers, pertinent information, and so forth for each student.
- Create a poster board using material found at the site location. Be creative and educate your audience about the resource. Business cards, brochures, examples, pictures are all significant parts of the grade. Attach a bus pass or transfer to your poster board.
- You have 5 minutes (you will be timed) for an oral presentation of your poster board to the class highlighting your findings about the resource (do include your personal reaction) and overview of the resource you investigated.

The objective of this assignment is to gain knowledge and insight into the systems and community resources that most clients (and social workers) encounter or need (or at least need to be familiar with) at one time or another. If there are 25 students in the class, you will have detailed information on 25 significant systems—to use and reference in your field placement when working with clients. A signup sheet will be distributed in class.

how do we teach these three skills? Self-awareness requires a person to be able to maintain internal focus (self/other-awareness) despite anxiety or distressing emotions (emotion regulation) or other external distractions. Mental flexibility requires a logistical, rational understanding of other people's experience; for example, a parent may have to logically take the perspective of an infant to imagine what it would be like to be weak, small, helpless, preverbal, and so on. At the same time, the parent must be aware of his or her own perspective. Mental flexibility is the understanding that "the other person is like me, but is not me," whereas emotion regulation requires an internal ability to change or control one's own emotional experience.

Over the last 20 years mindfulness practice—techniques based on meditation practices that have long been the cultural norm in non-Western cultures—has moved from being alternative, unusual, and misunderstood to the mainstream of many social science intervention models (Coffey & Hartman, 2008). Mindfulness practices have proved to be empirically driven and effective interventions in social work (Coffey & Hartman, 2008). The key element of mindfulness techniques is to encourage individuals to heighten their awareness of present experience with non-judgmental acceptance (Germer, 2005). This requires the ability to maintain internal focus (self/other-awareness) despite anxiety or distressing emotions (emotion regulation) or other external distractions. People who practice mindfulness develop enhanced abilities of concentration and attention. Their emotion regulation also improves, as they progressively recognize that stressful, worrying, or upset-

ting thoughts are not always accurate representations of reality (Linehan, 1993).

There is a growing body of evidence (more than 34 published works between 1993 and 2008) that mindfulness practices reliably increase emotion regulation (e.g., Baer & Krietmeyer, 2006; Linehan, 1993). For instance, research indicates that focused, mindful breathing can lower negative affect (Arch & Craske, 2006) and intensity and frequency of unpleasant feelings (Brown & Ryan, 2003), as well as increase the ability to tolerate uncomfortable emotions (Levitt, Brown, Orsillo, & Barlow, 2004). Mindfulness is a skill that can help students increase empathy and prevent compassion fatigue and burnout. The overwhelming empirically based literature that mindfulness practices are an effective method for increasing self/other-awareness and emotion regulation (e.g., Block-Lerner, Adair, Plumb, Rhatigan, & Orsillo, 2007) means it is time to consider including mindfulness techniques and practices as a prominent, perhaps even mandatory, component of the social work practice curriculum.

Use of Art

Often people will describe a book, cinema, music, dance, or a piece of art as "moving" or "eye-opening" or "touching." What they are describing is their reaction to a visual, auditory, and possibly somatic stimulus that engaged them in the experience. Using the medium of art can be a way to engage people in training or retraining the mirror neurons for affective sharing and the cognitive pathways for self/other-awareness, mental flexibility, and emotion regulation. The previous example of interventions used with sex

offenders included reading fiction, watching videotapes, and writing, demonstrating the usefulness of art in teaching empathy.

Each of us can probably recall a movie or book that touched our lives deeply and created a way to understand social conditions different from those we have lived. Davis (2004) conducted a case study of audience response by White female participants in Oprah Winfrey's televised Book Club. She discovered that for these women there was an empathic response to the African American fictional characters in the books, and that they felt more politicized and interested in fighting racism in public forums. She concluded that fiction reading can create empathetic connections and, if coupled with critical reflection, can lead to ideological change, in this case antiracism, and political action (Davis, 2004). This is another way of using art to engage people on an empathic level.

Many of the teaching techniques outlined previously are familiar to social work pedagogy. However, what is new is the explication of the teaching activities in the context of developing mirror neurons and the cognitive skills needed to experience the fullest extent of empathy. Our curriculum could include more experiential activities in the classroom to help students develop self/other-awareness, emotion regulation, and perspective-taking abilities.

Conscious Decision Making for Empathic Action

Empathy is a critical component of developing a deep understanding of people's life experiences and a necessary ingredient in becoming a civically engaged person. When individuals gain understanding of the condi-

tions and needs of others, they are more apt to become socially involved (Frank, 2001). Empathy fosters people's involvement in social change (Loeb, 1999) and civic involvement (Astin, 2000). Empathy is a skill that deepens students' understanding of our society, can lead to greater tolerance of difference, and enhances civic involvement.

Social work students need to develop empathy, but empathy alone will not help them generate interventions to alleviate poverty or help clients obtain a better quality of life. Social work education can be added to the knowledge, values, and skills that already power the social work engine. Empathy is a metaphorical compass, guiding the engine toward social and economic justice. Interventions that move individuals toward that goal can occur at the individual level or on the societal level. Regardless of the focus, micro or macro, the final component demands a conscious decision to take action. This imperative to act differentiates a social work model of empathy from those of other disciplines. The following example highlights how social policy can be developed with an eye toward empathic action at the macro level. (See Figure 4 for a micro practice activity.)

Empathic Action: A Policy Example

It is interesting to note that one of the key pieces of social legislation in the United States, the Social Security Act of 1935, was sponsored by two members of Congress, both of whom intimately understood the limitations of poverty and social inequality:

On January 17, 1935, President Roosevelt asked Congress for social security

FIGURE 4. Empathic Action: Micro Practice Activity

1. Provide students with the following scenario: A social worker has a client who is a young single mother. Her name is Monique, and she is 18 years old. Monique dropped out of school. She works at a fast-food restaurant for \$7.15 an hour and depends on family and friends to help watch her child.
2. Ask students to identify the mainstream values and expectations that are used as a lens by the public and politicians to “judge” or evaluate Monique’s situation. Be sure the following values are discussed: work ethic, education, individualism (e.g., pull yourself up by your bootstraps), and sexual morality. Ask students to pay special attention to any judgmental feelings that arise within them. For example, do they identify with the belief that Monique got pregnant because she was promiscuous or that she deserves everything she has? Do they feel angry at Monique during any part of the assignment?
3. Ask students to use the social work values including self-determination and a nonjudgmental approach to put themselves in Monique’s shoes. What do you think she was feeling/thinking/experiencing when she got pregnant? When she dropped out of school? What are her challenges as a single mother? How might she perceive herself? What are her expectations and dreams? Students should write down their thoughts and impressions, and then make note of the feelings and thoughts they can most identify with or perhaps are overidentifying with; that is, where do Monique’s feelings begin and end as opposed to the student’s own personal feelings?
4. Ask for two volunteers to role-play a worker–client interview wherein the social worker is trying to understand Monique’s perspective on her current situation and what she wants to do with her life. After watching and listening to the role-play, ask students whether any of their original impressions and thoughts about Monique change. What do students now think about Monique’s feelings, intentions, and goals? Do the student who role-played the worker and the student who role-played Monique have similar impressions about Monique’s feelings and state of mind?
5. Ask students to write down what they think the social worker could do to help Monique, and then discuss their answers. Which actions seem to be most driven by empathy?
6. Ask students for a broader analysis of what needs to change in society to prevent more situations like Monique’s and to improve the economic circumstances of those who do find themselves in a similar situation.

The key to the assignment is not discussing any action implications until after the students have tried to understand what Monique is feeling, thinking, experiencing, and so forth. This activity requires students to use all of the components of empathy, affective response, self/other-awareness, mental flexibility, and emotion regulation. Finally, they have to identify empathy-driven actions they might take.

legislation. That same day, the administration's bill was introduced in both houses of Congress by men who had felt keenly the meaning of social insecurity. Robert Wagner, who steered the social security measure through the Senate, was the son of a janitor; as an immigrant boy, he had sold papers on the streets of New York. Maryland's David Lewis, who guided the bill through the House, had gone to work at nine in a coal mine. Illiterate at sixteen, he had taught himself to read not only English but French and German. (*Congressional Record*, 74th Congress, 1st session, p. 5687, cited in Leuchtenburg, 1963, p. 131)

Wagner's and Lewis' personal experiences with poverty helped them to have empathic insight into structural poverty. Because policymakers and those in positions of economic and social power are often far removed from the day-to-day experiences of people who are poor, it is sometimes necessary to help them to understand what it means to live in poverty. The more empathy policymakers have, the more likely they are to relate to the lives of the people affected by social policies and programs.

Empathic Action, Not Sympathy

Empathy can expand understanding among all citizens. When individuals become more empathic, they become more emotionally intelligent and are able to better navigate through life (Goleman, 1997). So too, when society as a whole becomes more empathic, positive changes in social policies and condi-

tions can follow. However, this benevolent cycle may not occur if actions that are intended to be empathic veer instead toward pity or sympathy. Although a complete analysis of the differences between sympathy and empathy is beyond the scope of this article, a note of caution is worth mentioning. One study of physician-patient care found that "pity rarely helps, sympathy commonly helps, empathy always helps" (Wilmer, 1968, p. 246). Although we do not yet have an equivalent study in social work, our practice wisdom tells us that pity and sympathy often result in enabling interventions, whereas empathy guides empowering interventions. The action implication of our framework is what separates social work from merely academic or scientific conceptualizations of empathy.

Conclusion

In the past, social work educators have focused primarily on teaching students the skill of cognitive and verbal expressions of empathy (Erera, 1997; Vinton, 1994). Therefore, it makes sense that practitioners also have focused on cognition-based education interventions designed to increase knowledge to cultivate empathy in clients. Our model suggests that it would be helpful to teach students the basic process of neural pathway development that determines their affective responses, along with new findings about the plasticity and flexibility of the brain and theoretical foundation knowledge particularly regarding attachment theory.

In addition, students could benefit from learning the components of empathy and experiencing various heuristic devices designed to help them develop and maintain the

cognitive aspects of empathy (perspective-taking, self/other-awareness, and emotion regulation). Educators and social scientists from a variety of fields are presently designing and implementing methods for such affect-based experiential learning. Social work educators can remain alert to new developments as new research from brain science becomes available, creating, adopting, or testing new ways to help students to develop empathy in the classroom. We can provide tools (e.g., mindfulness practice) and experiential learning opportunities necessary for them to practice the dynamics of empathy, with feedback and discussion to clarify what they are learning. Rather than overfocusing on content-driven activities and ideas, students could learn through activities that help them learn at the “gut” level of shared experience—the way neurologists now know we learn most deeply and effectively (Medina, 2009).

The benefits of teaching empathy in this way are virtually limitless. Students can use their experiences of enhanced and well-understood empathy to guide them as they implement the knowledge, values, and skills social work has always taught. They can approach individual and social well-being and social justice with more sophisticated understanding. In the process, they may create more and more effective interventions, particularly with clients from different backgrounds. They will also be better prepared to empower their clients and help them cultivate empathy.

We want this article to be a catalyst for social work educators to begin a discussion about making empathy more prominent in our curriculum and helping students develop

concrete skills that allow them to experience the fullest extent of empathy. We hope our proposed framework will be considered, discussed, refined, and eventually used to help guide social work education, along with research and intervention practices. Empathy has always been part of social work’s very foundation. Now, with new science enriching our understanding of empathy itself, we believe that foundation, and the structures built on it, can become even stronger.

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