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# From Microaggressions to Neural Aggressions: A Neuro-Informed Counseling Perspective

Chad Luke, Frederick Redekop, and Jennifer Moralejo

Microaggressions are explicit and implicit forms of bias committed by many well-meaning and otherwise moral individuals, including counselors. This paradox has been explained in terms of socialized, systemic oppression of marginalized groups by those in power. In this article, the authors seek to extend this understanding by exploring the neurobiological dynamics underlying these systems. This understanding can aid counselors in increasing their multicultural counseling competence, spare clients from further injury, and model this prosocial orientation for clients and the community.

*Keywords*: microaggressions, empathy, counselor, neural aggressions, multicultural counseling comptence

Las microagresiones son formas de prejuicio tanto explícitas como implícitas cometidas por muchas personas con buenas intenciones y normalmente éticas, incluyendo consejeros. La explicación a esta paradoja se ha dado en términos de opresión sistémica y socializada de grupos marginados por parte de las personas que ostentan el poder. En este artículo, los autores buscaron la forma de expandir esta comprensión explorando la dinámica neurobiológica subyacente en estos sistemas. Dicha comprensión puede ayudar a los consejeros a aumentar su competencia en consejería multicultural, evitar mayores daños a sus clientes y modelar esta orientación prosocial para sus clientes y la comunidad en general.

*Palabras clave*: microagresiones, empatía, consejero, agresiones neurales, competencia en consejería multicultural

Society tends to favor the majority group of the population and those who hold the power (Sue et al., 2007) and, in turn, to disadvantage underrepresented groups. It is important for counselors to understand these oppressive phenomena and how they came to be because (a) they contribute to clients' worldviews and realities, and (b) counselors are often unwitting perpetrators of these same attitudes and behaviors toward clients (Hook et al., 2016). In this article, we argue for a counterintuitive approach based on the social neuroscientific view of prejudice (i.e., negative attitudes

*Chad Luke, Department of Counseling and Psychology, Tennessee Technological University; Frederick Redekop, Department of Counselor Education, Kutztown University of Pennsylvania; Jennifer Moralejo, Educational Psychology and Counselor Education, University of Tennessee, Knoxville. Correspondence concerning this article should be addressed to Chad Luke, Department of Counseling and Psychology, Tennessee Technological University, PO Box 5031, Cookeville, TN 38505-0001 (email: cluke@tntech.edu).*

or beliefs toward an individual or group; Reynolds & Klik, 2016). We begin with a discussion of microaggressions, follow it with an exploration of what we term "neural aggressions," and show how counselors can adopt a genuine attitude toward their own tendency to neuro-aggress.

## microaggressions

The concept of microaggressions was first described in the 1970s as "put-downs" that were typically subtle, automatic, and nonverbal (Pierce, Carew, Pierce-Gonzalez, & Willis, 1978, p. 66). Microaggressions have since been further examined, experienced, and defined (Sue, 2010) to include statements as well as other behaviors that are both conscious and unconscious, intentional and unintentional. The communication is demeaning or hostile and targets particular social groups (e.g., people of color, women, the LGBTQ community, and stigmatized religious groups; Sue, 2010). Microaggressions are committed by a variety of individuals—typically by members of the dominant group, but sometimes by members of nondominant groups as well (Nadal, Wong, Griffin, Davidoff, & Sriken, 2014). Such is the power of oppression that even marginalized individuals may turn microaggressions toward individuals with their shared marginalized identities.

Microaggressions have a nuanced nature, being expressed on a continuum of subtleness. On the one hand, microaggressions can be conscious offenses against the identity and value of another person. On the other hand, perhaps more commonly, microaggressions are unconscious, ignorance-based affronts (Sue & Sue, 2015). Regardless of the behavior, it is most commonly understood that the ideology behind the behavior may be outside the awareness of the individual. For example, a comment from a man speaking to a woman, such as, "You are an intelligent woman," can be so subtle and dependent on the motive, and the mindset underlying it so institutionalized, that the implicit meaning is most certainly missed by the speaker and possibly the hearer as well. Yet, the implication is real and palpable, even if unexpressed: "You are intelligent, for a woman." Microaggressions can be so insidious that it can be a challenge to communicate the experience to another person (Sue, 2010). For example, the hearer of this message tries to tell a friend about the comment. The friend, hearing only the actual words, struggles to understand the feeling of devaluation experienced, and in the moment, further devalues that experience.

Microaggressions have been extended to include microinvalidations, microassaults, and microinsults (Sue et al., 2007). Microinvalidations are "communications or environmental cues that exclude, negate, or nullify the psychological thoughts, feelings, or experiential reality of certain groups" (Sue, 2010, p. 37). Sue explained microinvalidations as perhaps the most insidious form of microaggression because of the way they impose reality upon marginalized groups. Microassaults are "conscious, deliberate, and either subtle or explicit

racial, gender, or sexual-orientation based attitudes, beliefs, or behaviors that are communicated to marginalized groups through environmental cues, verbalizations, or behaviors" (Sue, 2010, p. 28). Examples include using epithets for individuals or groups that devalue the humanness and individual identity of the person or group. An even more explicit example would be placing a "build the wall" poster on a manager's office wall. Microinsults are "interpersonal or environmental communications that convey stereotypes, rudeness, and insensitivity and that demean a person's racial, gender, or sexual orientation" (Sue, 2010, p. 31). These, too, are often unconscious because of the socialization of the members of the majority power group.

One of the components of microaggressions in particular—and bias in general—is the implicit nature of "us" versus "them" found throughout the world among humans and nonhumans alike. Microaggressions imply that the user of the microaggression is somehow more fully human and more entitled to the rights and privileges thereof than the one against whom the microaggression is aimed. This "us-versus-them" motif has been identified in the literature as the in-group/out-group bias (Cikara, Botvinick, & Fiske, 2011), and it leads to related behaviors, both overt and covert. Although microaggressions are described as unintentional or unconscious, and even denigrated as "micro," they cause major impacts on the targeted individuals and groups. Sue (2010) explained that the prefix *micro* only speaks to the subtle manner in which this kind of discrimination happens, making it difficult to address, detect, and recognize. These messages spread through strangers, the media, educators, friends, peers, and even family members. The literature demonstrates that microaggressions affect the mental health of the individuals of these marginalized groups (e.g., by causing a decrease in self-esteem; Nadal et al., 2014).

The challenges described in the preceding paragraphs prompt counselors to reflect on what the profession is to make of those who perpetrate microaggressions. The counseling profession must consider what it means when counselors microaggress against their clients and what can be done about it. Unfortunately, it does happen, and when it does, it hurts clients (Constantine, 2007; Owen, Tao, Imel, Wampold, & Rodolfa, 2014). The counseling field must be prepared and willing to address it (Hook et al., 2016). Addressing this issue will likely cause a visceral reaction, because prejudice is incompatible with counselors' self-concept and the ethos of the counseling field, and therefore acknowledgment of these microaggressions can create dissonance (Boysen, 2009). The response to this dissonance is often any one or combination of defense mechanisms, from denial (e.g., "I can't be a racist, so I'm not!") to reaction formation (e.g., "I can't be a racist; in fact, I like other races more than my own"). Likewise, counselors are also vulnerable to the nefarious effects of their own embedded, implicit, and unconscious prejudices. This conflict may be communicated to clients implicitly, evoking an unspoken response from them (Boysen, 2010) in which they may have thoughts such as, "There's something not right, but I can't put my finger on it" (Brosch, Bar-David, &

Phelps, 2013). In sum, Sue (2010) says that because microagressions are implicit and resistant to change, "it is possible for someone to consciously denounce racism, and believe they would never willingly discriminate against others, but still harbor unconscious racial beliefs and attitudes" (p. 122).

## microaggressions to neural aggressions: bias in our biology

### IN-GROUP VERSUS OUT-GROUP

Sue's (2010) compassionate, empathic challenge has led the field of counseling to take a harder look at standards of practice and attitudes of relevance (Ratts, Singh, Nassar-McMillan, Butler, & McCullough, 2015). One approach to understanding the conflict described by Sue is through an understanding of in-group/out-group bias. Molenberghs (2013) reviewed the literature on intergroup relations (e.g., Allport, 1954/1979; Sherif, Harvey, White, Hood, & Sherif, 1961) and the neural mechanisms related to in-group/out-group bias and associated prejudices. In his review, he identified four key findings in the cognitive and affective neuroscience literature: "We categorize in-groups differently; we experience the actions of in-group members differently; we empathize more with in-group members; and we perceive the faces of in-group members differently" (pp. 1531–1534). In commenting further about these dynamics and complexities of empathy from a neural perspective, Molenberghs (2013) effectively summarized the role of counselors: "Not only do we want to understand what a person is feeling or thinking but we also want to respond in an appropriate way to other people's emotions by regulating our own emotions and expressions" (p. 1533). As implied, this empathic experience and expression is more complex than at first may be perceived. In fact, the hallmark contributions to our understanding of empathy by Decety (2015) and colleagues (Coutinho, Silva, & Decety, 2014) have both complicated and clarified the work to be done by counselors.

Out-group prejudice is highlighted in the neurological basis of the phenomenon known as schadenfreude. Heider (1985) defines schadenfreude as "malicious joy" wherein the perception of a negative event occurring to another creates a positive emotion for the observer. Cikara and Van Bavel (2014) have explored the neurobiology of this phenomenon by examining the neural substrates of these reactions. The authors note that not only do groups demonstrate an "intergroup empathy bias," they also show signs of pleasure activity in the brain when viewing out-group members' experiences of pain (i.e., schadenfreude). Studies using fMRI have demonstrated increased activity in the anterior cingulate cortex, revealing neural correlates of both empathy and schadenfreude (Takahashi et al., 2009). These findings support our contention that these attitudes are implicit and must be owned in order to act congruently, and without bias in counseling. This assertion is not new

(Sue & Sue, 2015); what is new is the underlying neurobiology of implicit bias and microaggressions, even among counselors, and how this insight can bring about acceptance and change. Next, we examine acceptance of these brain-based proclivities by discussing bias as adaptive.

## BIAS AS ADAPTIVE: THREAT ASSESSMENT AND RESPONSE

Humans are made to judge. Survival depends upon this judgment of the environment and those in it, and it is as natural as breathing. In fact, survival is somewhat dependent upon our ability to continuously assess our environment for threats. This threat assessment process is neurologically based and evolutionarily determined (Garrett & Hough, 2018). One feature of this assessment involves facial recognition and social group behaviors. Individuals who are like us are viewed as less threatening; those who look less like us are more so (Reynolds & Klik, 2016). This all takes place at primitive levels in the brain, and this even before experience is considered. Once the recognition of an out-group individual is triggered, key brain regions react, preparing the body to respond.

Survival is, in essence, about threat assessment, both in terms of access to available resources (and scarcity of the same), as well as in physical threats from the environment (Coutinho et al., 2014). These external threats to well-being and survival require rapid response systems as well as social heuristics that make fast reactions possible, thereby promoting survival of the species (LeDoux, 2015). Molenberghs (2013) demonstrated empirically both the neural correlates of in-group bias and perception, as well as the fact that individuals view in-group behavior more favorably than out-group. Furthermore, out-group member behaviors are much more likely to be interpreted as threatening. The point here is that the adaptive nature of in-group/out-group bias is biologically derived and therefore intended to protect the individual and their group from annihilation.

The claim that racism and racial bias may be adaptive and biologically hard-wired is a difficult concept to absorb. In addition, these biases are difficult to detect. Historically, researchers asked participants via surveys to respond to items designed to help determine bias. As expected, subjects were apt to "fake" good on the surveys. Later, Harvard researchers developed tools such as the Implicit Association Test (Greenwald, McGhee, & Schwartz, 1998), which use subtle items to determine racist orientations; however, these are also difficult to use because subjects can still fool the tests. Therefore, Brosch et al. (2013) designed studies using functional magnetic resonance imaging (fMRI). They used blood oxygen level–dependent imaging of the brains of participants as the participants viewed out-group members. They focused particularly on the fusiform gyrus and the fusiform facial area, both areas implicated in face recognition. Remarkably, the researchers were able to predict the race of the person being observed by subjects, according to the race of the subject and their fMRI results (Brosch et al., 2013). Studies like this indicate that the brain is primed to recognize differences and to assess threat based on

those differences. When individuals judge themselves for these preconscious, preverbal responses, defensiveness almost inevitably follows. Yet, when this is experienced as a brain phenomenon and the individual has the choice to accept or reject the experience, they gain control over it (Badenoch, 2008).

Threat responses in the primal levels of the brain (hindbrain and sympathetic nervous system) are set to react to perception, regardless of its accuracy (Garrett & Hough, 2018). This means that the initial, biologically based response to an "other" is to fight, flee, or—in the case of neurochemical overload—freeze. This has important implications for training and supervision of counselors in that visceral reactions are just that: implicit, less-than-conscious, primitive responses to the potential for threat (LeDoux, 2015). This does not mean that the other individual is inherently malevolent; rather, they are "other" (Reynolds & Klik, 2016).

## understanding experience as a path forward

In framing microaggressions as neurologically based, it is useful to identify and understand the neural correlates of bias, prejudice, and microaggressions. This work is built on a translational model of social neuroscience (see Feldstein Ewing & Chung, 2013), which looks for the neural substrates of attitudes and behaviors. As such, microaggressions have their basis in neurobiology. Understanding these connections adds to counselors' ability to modify attitudes and behaviors related to microaggressive biases and prejudices (Boysen, 2010). As a step toward greater ownership of prejudice attitudes, it can be helpful to identify their neurological roots. Amodio (2014) described the prejudice neural network, which is comprised of the structures listed in Table 1.

The most important considerations from the descriptions of these neural structures are that (a) as humans our perceptions and judgments of others are neurologically based and (b) these interconnections are complex, involving threat detection, reward, sensory and somatosensory experiences, and are both cognitively and affectively based, and within the sociocultural milieu of the individual. In essence, humans are wired neurally to suspect—and even aggress against—those who are different from us. Our suggestion is that in order to move forward, we need to understand and accept implicit, neurologically based in-group/out-group bias. It seems clear that shaming one group about their attitudes and behaviors leads to either an overt reaction (e.g., rebel flags waving from the backs of pickup trucks) or more sophisticated, covert reactions (e.g., patronizing victims of abuses and milquetoast legislation; Amodio, 2014). We also are aware that through training, dispositional assessment, and supervision, counselors seek to reduce incidents of bias in their behaviors (Mullen, Morris, & Lord, 2017). What may be called for, based on the neuroscience of implicit in-group/out-group bias, particularly for meeting the explicit goals of counselor education, is to understand, embrace,

## TABLE 1

## Structures of Amodio's (2014) Prejudice Neural Network

| Term | Description |
|---|---|
| Amygdala | The amygdala supports adaptive behavioral responses by processing social cues, such as fear, in facial responses and coding these inputs as aversive or rewarding. It receives input directly from all sensory organs. It may also be that the amygdala responds not only to out-groups but also to appearing to be prejudiced. Amodio (2014) summarized the amygdala's role:<br><br>> One pattern reflects a learned threat response to racial outgroups, which is ostensibly rooted in fear conditioning. A second, but still speculative, pattern may reflect the threat experienced by a perceiver who worries about appearing prejudiced in the eyes of others when viewing faces of racial outgroup members. Both of these patterns probably represent activity of the CeA [central nucleus], given its known role in fear conditioning and anxiety. A third pattern seems to reflect instrumental (that is, goal-directed) responses, suggesting approach-related motivation and attention towards members of the ingroup (which can be based on race or other social categories). (p. 672)<br><br>Essentially, the amygdala features most prominently in studies of race and social decision-making due in large part to its connections to fear conditioning and threat assessment, as well as its physical connection to the cerebral cortex (Kubota, Banaji, & Phelps, 2012). |
| Anterior cingulate cortex (ACC) | The ACC is involved in mediating the conflict between implicit attitudes and socially desirable behaviors. "It has been proposed that the ACC is involved in monitoring for response competition and, once a conflict is detected, serves to engage executive control" (Kubota, Banaji, & Phelps, 2012, p. 942). |
| Fusiform facial area (FFA) | Part of the fusiform gyrus, the FFA perceives faces from non-faces, distinguishes faces known to us from those that are unknown, and recognizes faces that may indicate threat. |
| Insula | The insula connects the prefrontal cortex and ACC and "broadly functions to represent somatosensory states (including visceral responses) and emotions related to such states (such as disgust)" (Amodio, 2014, p. 673). |
| Medial prefrontal cortex (mPFC) | The mPFC is a "humanizing" structure connected with the ACC and cortex and is "primarily associated with the formation of impressions about other people especially impressions that require mentalizing—the process of considering a person's unique perspective and motives (that is engaging in theory of mind)" (Amodio, 2014, p. 675). |
| Nucleus accumbens | The nucleus accumbens is the location of oxytocin receptors, and it appears to respond to pain observed in members of out-groups—particularly racial out-groups (Luo et al., 2015). |
| Orbital frontal cortex (OFC) | The OFC exerts executive control while receiving input from the sensory organs, amygdala, and striatum (Amodio, 2014). |
| Striatum | The striatum is involved in goal-directed and habitual behaviors (Koob & Volkow, 2010) and is therefore implicated in reward processes related to in-group success and pleasure over out-group failure. |

and overcome these biases through greater cognitive control and affective empathy (Molenberghs, 2013).

## conclusion

Humans, it seems, are neurologically predisposed to bias (Cikara & Van Bavel, 2014), prejudice (Amodio, 2014), and a general antagonism toward the other (Takahashi et al., 2009). These emerge in the form of microaggressions, or as we have shown in this article, neural aggressions, and have to be assessed using implicit measures (i.e., Implicit Association Test; Greenwald et al., 1998) and even neurological measures (i.e., fMRI; Amodio, 2014). As discussed, the social brain perceives threats in the environment at an implicit, preconscious level, with tangible emotional and relational effects, and when we as counselors ignore this reality, we are at greater risk of committing neural aggressions. An understanding of our inherent tendency to neuroaggress, coupled with good-faith efforts that are committed to changing attitudes and thought patterns (Boysen, 2010), can assist counselors in achieving greater multicultural competence.

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