# Cautions About Applying Neuroscience to Batterer Intervention

## **Edward Gondolf**

esearchers have recently pointed out the high prevalence of "intermittent explosive disorder" (IED) underlying many of the violent outbursts in our society.1 They estimate that at least a third of domestic violence perpetrators, or those we frequently refer to as "batterers," are likely to suffer from this disorder.<sup>2</sup> This claim, along with a number of related findings, appears to have implications for domestic violence courts and judges' decisions to mandate offenders to batterer programs. The issue is that if this disorder is related to brain activity that warrants medical treatment, then in many cases, domestic violence offenders may be unresponsive to more conventional counseling and education efforts that typify batterer intervention. The assertions about IED come from a rapidly advancing line of research in neuroscience—that is, brain activity and its association with behavior. The emerging concern is that the implications stemming from this research are subject to misuse and overuse and therefore warrant some clarification and caution.3

### **NEUROSCIENCE AND ITS IMPLICATIONS**

Advances in neuroscience over the last decade are increasingly entering the courtroom. Specifically, research on the brain has established associations between certain brain activity and outward behavior. Current brain activity has, in turn, been traced to developmental experiences, such as traumatic events in one's past.<sup>4</sup> The research has led to a broader and more complex view of how individuals think and act, but it has also raised questions about how to deal effectively with the more violent offenders.<sup>5</sup> Parts of the brain that regulate moral

reasoning and judgment, for instance, may not be sufficiently or fully developed, and an individual with this type of brain function may therefore be prone to violent outbursts. Brain scans tend to corroborate this association. To what extent do we, then, "blame the brain" for violent behavior and treat it in the course of intervention? The implications of neuroscience seem to be that medication that influences the brain's activity, or incarceration may be more appropriate than trying to persuade the person to change through conventional cognitive-behavior counseling. The latter may appeal to a reasoning capacity that many violent offenders simply don't have.

This view has immediate implications for so-called batterer counseling or education programs used with men who are arrested for domestic violence.<sup>6</sup> These programs typically follow cognitive-behavioral approaches that prompt men to take responsibility for their behavior. They imply that some "free will" is possible in making a choice not to act violently toward others. They also shift attention toward the well-being and safety of the victim, rather than the men's self-centered wants and desires. Those who doubt the effectiveness of these programs are likely to see the implications of neuroscience as an answer.<sup>7</sup> Many men might not have the capacity to benefit from such programs and may need biomedical treatment that addresses their brain development or deficiencies.

The recent brain studies substantiate the diagnosis of "intermittent explosive disorder" (IED) to explain much of the anger-filled violence in our society—from road rage to domestic violence.8 As the name suggests, intermittent explosive disorder is typified by outbursts of temper and violence that occur

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### **Footnotes**

- Ronald Kessler et al., The Prevalence and Correlates of DSM-IV Intermittent Explosive Disorder in the National Comorbidity Survey Replication, 63 Arch. Gen. Psych. 669 (2006).
- 2. Ronald Kotulak, *Anger Attacks Common and Research Tells Why: Intermittent Explosive Disorder Affects 1 in 20*, CHICAGO TRIBUNE (June 6, 2006), available at http://www.chicagotribune.com/news/nationworld/chi-0606060117jun06,1,868023.story.
- 3. NEUROSCIENCE AND THE LAW: BRAIN, MIND, AND THE SCALES OF JUSTICE (Brent Garland & Mark Frankel, eds. 2004); see also Nigel Eastman & Colin Campbell, Neuroscience and Legal Determination of Criminal Responsibility, 7 NATURE REV. NEUROSCIENCE 311 (2006).
- 4. Nitin Gogtay et al., Dynamic Mapping of Human Cortical

- Development During Childhood Through Early Adulthood, 101 PROCEED. NAT. ACAD. SCI. U.S.A. 8174 (2004); see also Henry Cellini, Child Abuse, Neglect, and Delinquency: The Neurological Link, Juv. Fam. Ct. J. 1 (Fall 2004); JAN VOLAVKA, NEUROBIOLOGY OF VIOLENCE (2d ed. 2002).
- 5. Garland & Frankel, supra note 3.
- EDWARD GONDOLE, BATTERER INTERVENTION SYSTEMS: ISSUES, OUTCOMES, AND RECOMMENDATIONS (2002); for a summary see Edward Gondolf, Evaluating Batterer Counseling Programs: A Difficult Task Showing Some Effects, 9 Agg. Viol. Beh. 605 (2004).
- 7. Donald Dutton, *Treatment of Assaultiveness*, Intimate Violence: Contemporary Treatment Innovations (Donald Dutton & Daniel Sonkin, eds. 2003).
- 8. Kotulak supra note 2; Carey Goldberg, Out of Control Anger: As Many as 5 Percent of People Suffer from a Disorder That Can Ruin Their Lives, BOSTON GLOBE (August 8, 2005), available at www.boston.com/news/globe/health\_science/articles/2005/08/08/out\_of\_control\_anger?mode=PF.

in response to minimum provocation. A low-level of activity appears in the cognitive and reasoning part of the brain, which checks impulsive reactions. IED proponents argue that the biological and structural roots of violence warrant treatment along the lines of hypertension or diabetes—that is, as a medical problem, rather than treatment of character, beliefs, and actions.

### **LIMITATIONS AND CONCERNS**

The main concern in the legal field has been in the potential misuse and overuse of neuroscience research and its application in classifications like IED.9 The tendency among practitioners in general is to draw conclusions based on the bottom-line of research, which is complex, nuanced, and qualified. Most of the neuroscience researchers themselves caution against this. One recent review of the applications of neuroscience concludes:

Neuroscience is increasingly identifying associations between biology and violence that appear to offer courts evidence relevant to criminal responsibility.... However, there is a mismatch between questions that the courts and society wish answered and those that neuroscience is capable of answering. This poses a risk to the proper exercise of justice and to civil liberties.<sup>10</sup>

A recently commissioned book on the topic, *Neuroscience* and the Law, similarly questions using the implications of neuroscience in legal decision-making.<sup>11</sup> It cautions that the law assumes that individuals are responsible for their actions and are capable of learning and abiding by the rules of society. The assumption that an individual is not capable of these behaviors enters an arena of competency that requires a stronger body of evidence than is currently available in neuroscience.

Researchers themselves point out several limitations. <sup>12</sup> How the brain works and translates into "mind" is still a mystery. The association between brain activity and violent behavior is just that—an association and not necessarily a "cause." Moreover, the effectiveness of brain-related treatments is still uncertain. Most researchers, including those promoting IED, still acknowledge a role for cognitive-behavioral group counseling. <sup>13</sup> The research does not therefore indicate replacing current batterer counseling and education but raises additional considerations and supplemental treatment for extreme cases. In fact, proponents of IED acknowledge that conventional cognitive-behavioral approaches can assist and reinforce behavioral changes, but the focus of treatment does clearly shift under IED assumptions.

# QUESTIONS FOR BATTERER INTERVENTION

At the heart of the issue is the extent of brain-related problems like "intermittent explosive disorder" among domestic violence offenders and the need for medically oriented treatments. Should most batterers first go through an extensive assessment for such The assertion that as many as onethird of batterers may be acting out of IED seems high in light of our batterer research.

disorders and brain problems? Should batterer treatment be delivered in medical settings or clinics that may recommend counseling as a supplement to the medical treatment for violence? Or is it sufficient to keep batterer programs in the community with the possibility of additional referrals for extreme behavioral problems?

The fundamental question is the numbers of men who might be identified as having brain-related impairments that warrant medical treatment in addition to, or instead of, batterer counseling or education. The assertion that as many as one-third of batterers may be acting out of IED seems high in light of our batterer research. In our court-mandated samples, we found very little evidence of symptoms associated with A psychological test (Millon Clinical Multiaxial Inventory-III) administered to 864 batterers in four different cities showed less than 10% having symptoms of impulsivity, post-traumatic stress, or borderline disorders.<sup>14</sup> similar results using the Brief Symptoms Inventory (BSI) with nearly 1,000 men in Pittsburgh.<sup>15</sup> Moreover, approximately two-thirds of the men who screened positive on the BSI for psychological distresses, and received a clinical evaluation at a major teaching hospital, were diagnosed with an adjustment disorder requiring no further treatment. Only 5% received a diagnosis related to impulse control. An additional study of the women's descriptions of violent incidents produced very few cases in which the pattern of violent events could be characterized by independent outbursts or explosions of rage. 16

A practical issue is the resistance of court-ordered batterers to comply with psychiatric or neurological evaluation and treatment. Their resistance to such referrals appears in our studies to be very high, and the ability and willingness of psychiatric clinics to supervise compliance seems low.<sup>17</sup> Less than a quarter (23%) of the men who were required to obtain mental-health referrals were actually evaluated; 15% were advised to receive treatment; and 8% attended a treatment session. Only 6% of voluntary referrals ever received an evaluation. This low compliance rate, even under the mandated stipula-

- 9. Garland & Frankel, supra note 3.
- 10. Eastman & Campbell, supra note 3, at 31.
- 11. Garland & Frankel, supra note 3.
- 12. Goldberg, supra note 8.
- 13. Id
- 14. Edward Gondolf, MCMI Results for Batterer Program Participants in Four Cities: Less "Pathological" than Expected, 14 J. FAM. VIOL. 1 (1999).
- 15. Edward Gondolf, Implementation of Supplemental Psychological Treatment for Batterer Program Participants, Paper at Int'l. Ass'n. For. Mental Healt Svcs., Amsterdam, Netherlands (June 13-16, 2006).
- 16. Edward Gondolf & Angie Beeman, Women's Accounts of Violence Versus Tactics-Based Outcome Categories, 9 VIOL. AGAINST WOMEN 278 (2003).
- 17. Gondolf, supra note 15.

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tions, suggests the impracticality of sending men directly to mental-health treatment for evaluation. Batterer programs typically provide case supervision and violence education, which have much higher compliance rates. In our multi-site evaluation of batterer intervention, over two-thirds of the men completed a minimum of three months of weekly sessions—resulting in a 50% reduction in re-

assaults during a 15 month follow-up, according to the men's female partners. 18

### THE CASE FOR BATTERER COUNSELING

The case can certainly be made that the structured cognitive-behavioral approach is appropriate for the vast majority of the men court-ordered to batterer programs. This approach is generally prescribed for individuals with narcissistic and antisocial tendencies, and the majority of men in our studies show either or both of these tendencies.<sup>19</sup> The reviews of intervention research, moreover, identify cognitive-behavioral approaches as the most effective in dealing with violent criminals.<sup>20</sup> According to batterer-program evaluations, cognitive-behavioral approaches produce at least equivalent, and perhaps more efficient, outcomes compared to other approaches or formats.<sup>21</sup> The vast majority of men's partners endorse these programs, attribute the men's change to them, and feel safer as a result.<sup>22</sup>

Additionally, victim advocates have raised concerns over the implications of brain-based and pathological explanations for domestic violence.<sup>23</sup> The explanations appear to displace the responsibility for the violence from the individual and reinforce batterers' tendency to project blame and accountability. Batterers frequently play out this displacement of responsibility in their presentation of violent incidents.<sup>24</sup> They describe themselves as losing control or "snapping" to make the violence appear accidental or to minimize a constellation of abuse. Without corroborating information carefully gathered

from victims, what appears like IED may be a form of narcissistic or antisocial manipulation.

The brain-based explanations for violence may also counter batterer counseling or education programs that emphasize the need and ability to acknowledge and take responsibility for one's behavior.<sup>25</sup> In the cognitive-behavioral approaches, this acknowledgment is considered a key step toward the motivation and empowerment necessary to create change. The pathological explanations, furthermore, naively shift the focus from the institutional and social supports that reinforce—if not promote—domestic violence and the need to address the socialized beliefs, attitudes, and expectations that underlie domestic violence. There is much more to violence than "he just snaps." Even violent outbursts associated with IED might be reduced if the expectations that cause frustration were lowered or changed.

Neuroscience has done much to elaborate the development of behavior over time and to confirm the impact of childhood experiences on adult behavior. Questions remain as to the centrality of brain activity in determining behavior and the malleability of behavior. An analogous controversy has emerged over "attention deficient and hyperactivity disorder" (ADHD).<sup>26</sup> One side has promoted the use of drugs like Ritalin to alter the brain activity underlying the problem, while opponents argue that the ADHD diagnosis and its assumptions have been overused and misused for a problem that has primarily social roots and corrections.<sup>27</sup> Interestingly, several books by psychiatrists, psychologists, and researchers are now exploring the development of aggression, bullying, and violence in boys.<sup>28</sup> The consensus of these experts is that social messages, interactions, images, and roles pressed on boys today warrant our primary attention. Our best intervention is ultimately to help boys and young men recognize and counter the socialization and social pressures that result in aggression and violence. The implication is that we need to do the same with adult men as well.

### **CAUTIONS FOR THE COURTS**

The point here is for the courts to be cautious about applying the implications of neuroscientific research at this stage. As another article examining the advances of neuroscience concludes: "From the legal and research perspective, available

- 18. Edward Gondolf & Alison Jones, The Program Effect of Batterer Programs in Three Cities, 16 Viol. Vict. 693 (2001); Alison Jones et al., Assessing the Effect of Batterer Program Completion on Reassault Using Propensity Scores, 19 J. Int'l Viol. 1002 (2004).
- 19. Robert White & Edward Gondolf, Implications of Personality Profiles for Batterer Treatment: Support for the Gender-Based, Cognitive-Behavioral Approach, 15 J. INT'L VIOL. 467 (2000).
- 20. Frank Pearson et al., *The Effects of Behavioral/Cognitive-Behavioral Programs on Recidivism*, 4 CRIME DELINQ. 476 (2002).
- 21. Edward Gondolf, A Comparison of Reassault Rates in Four Batterer Programs: Do Court Referral, Program Length and Services Matter?, 14 J. INT'L VIOL. 41 (1999); Daniel Saunders, Feminist-Cognitive-Behavioral and Process-Psychodynamic Treatments for Men Who Batter: Interaction of Abuser Traits and Treatment Models, 11 VIOL. VICT. 393 (1996).
- 22. Edward Gondolf & Robert White, "Consumer" Recommendations for Batterer Programs, 6 Viol. Against Women 196 (2000).
- 23. Lundy Bancroft, Why Does He Do That? Inside the Minds of Angry and Controlling Men (2002). See also Lundy Bancroft, The Parenting of Men Who Batter, Court Review, Summer 2002, at 44.
- 24. Kris Henning & Robert Holdford, Minimization, Denial, and Victim Blaming by Batterers: How Much Does the Truth Matter, 33 CRIM. JUS. BEHAV. 110 (2006).
- 25. Id.
- 26. WILLIAM POLLACK, REAL BOYS: RESCUING OUR SONS FROM THE MYTHS OF BOYHOOD (1998); DAN KINDLON & MICHAEL THOMPSON, RAISING CAIN: PROTECTING THE EMOTIONAL LIFE OF BOYS (2000).
- 27. Id.
- 28. Cellini, supra note 4.

findings (regarding neuroscience) must be viewed as preliminary at best, and caution must be exercised so the information is not inappropriately applied from general findings to a specific case."29 In sum, it makes sense for now to continue to refer men to batterer programs and reinforce their compliance with this programming through supervision and sanctions, much as has been established in the "drug court" model.30 Batterer programs obviously need to send men with problems of explosive rage, depression, and alcohol abuse for additional evaluation and treatment. But most importantly, interventions need to better contain men who do not comply to batterer programs or those who re-offend, and provide more protection and safety planning for their victims. The striking finding in our batterer intervention research has been the apparent failure of the intervention system to restrain repeat offenders and the most violent offenders, which allows them to continue getting away with it.



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ment programs. Gondolf is the author of numerous articles and books on these topics, including Assessing Women Battering in Mental Health Services (1998) and Batterer Intervention Systems: Issues, Outcomes, and Recommendations (2001).

29. Gondolf, supra note 21.

30. Id.