

Brain to Brain: New Ways to Help Couples Avoid Relapse

(Psychotherapy Networker, September/October, 2002)

Brent J. Atkinson, Ph.D.

Here we go again, I thought.

Loretta and Jack were back in my office, dispirited and fed up. "I don't think I love him anymore," Loretta began, and what caught my attention was not what she said but the way she said it. Quietly, flatly, as though she was beyond caring. During our first round of couple's therapy, one year earlier, 31-year-old Loretta hadn't said anything quietly. She had been chronically pissed off at Jack and had let him know via frequent, name-calling outbursts. Jack, 33, prided himself on his level-headedness and often responded with patronizing mini-lectures like "Try a little rationality, Loretta," which, of course, had only fueled her ire.

I had spent the first four months helping them defuse these automatic, self-protective reactions and coaching them to become more attuned to each other's feelings. Next, I helped them open up to one another about their deeper dreams and trepidations, nudging them toward an intimacy they hadn't enjoyed since their courtship days. Not long after that, they missed two appointments in a row and left me a voice-mail message saying goodbye and thanks for "saving our marriage."

Now they were back and worse off than before. When I first met Loretta and Jack, at least they'd been full of fight and feeling. Now they were curiously subdued and all but resigned, it seemed to me, to the death of their seven-year marriage.

"What happened?" I asked. Sighing, Loretta explained that after leaving therapy the first time, they had felt practically reborn as a couple, filled with a new delight in each other. Then Jack, a software developer, had been promoted to a high-powered management position requiring 60-hour workweeks. Stressed and preoccupied, Jack had begun to withdraw at home, playing computer games until far into the night. The more Loretta reached out to him, the more prickly and distant he became. Finally, she mustered the courage to tell her husband how lonely she was and he sincerely apologized. They decided to make Friday their special "date night," and Jack made it a point to bring his wife flowers once a week.

But something was missing. On date nights, they often ended up just going to a movie, then coming home and falling into bed, exhausted.

Meanwhile, "the flowers didn't do much for me. I'm not sure why," mused Loretta. Soon she formed a close friendship with a man at work whom she described as the "polar opposite" of her husband-- easygoing, playful, expressive. While she insisted to Jack that it wasn't a romantic involvement, the new relationship was forcing her to face up to the flatness of her marriage. "We've lost something. It feels like we're just going through the motions," she said. I looked over at Jack; he shrugged wearily.

I had a hunch about what was going on, but I felt deeply sad that my earlier efforts had borne so little fruit. It helped a little to know that I wasn't the only therapist who had ever encountered the "Teflon factor" in marital therapy. Controlled outcome studies show that only about half of couples improve with treatment. And even among those who do make progress, a disheartening chunk, 30 to 50, percent relapse within two years.

Why doesn't our work have more staying power? Marriage researcher John Gottman proposes that therapists focus too much energy on helping couples eliminate fighting and not enough on promoting a steady flow of positive interactions, which, according to longitudinal studies, is a critical ingredient of long and rewarding marriages. Unless clinicians also help couples build up a robust "emotional bank account" of mutual intimacy, goodwill and respect, says Gottman, they will be hard-pressed to buffer themselves against the inevitable stresses of married life.

That made perfect sense to me, but still I wondered: How can couples keep that bank account filled, once they leave therapy? Several years ago, frustrated to the max with my own regular influx of "boomerang couples" like Loretta and Jack, I began to look into new research on how our brains and hormones operate to promote and sometimes sabotage lasting intimacy. What I have discovered thus far has both humbled and inspired me.

I'm humbled by how thoroughly our emotional responses appear to be embedded in our brain circuitry and chemistry, which helps to explain why couples keep reverting back to their habitual fight-or-flight patterns with each other. But I'm newly optimistic, too. My explorations into the neural underpinnings of emotion have also given me a window into the depth of our intrinsic urges to give comfort and pleasure to those we love. We may be physiologically set up for conflict, but we're just as surely wired for connection.

What excites me most about this emerging neurobiology of emotion, however, is that it offers something deeply useful to clinicians. More than just a high-tech explanation for why couples fight, make up, and drift apart as they do, the new affective neuroscience provides a rough but valuable guide to helping couples protect their relationship for the long haul. It is

also therapist-friendly, in the sense that it doesn't require clinicians to throw out their current therapeutic approach in favor of a whole "new paradigm;" in my own case, it has simply informed my integrative approach with a new power to inoculate clients against relapse. With clients who stick with therapy a bit longer than Jack and Loretta did, I teach a marriage survival skill: how to identify, and shift, brain-mediated emotional states. Now, as I follow up with former clients, I find that far fewer couples are calling it quits. Even more heartening, more of my ex-clients report that they've been able to sustain "that loving feeling" long after therapy has ended.

The New Anatomy of Emotion

Once upon a time, scientists believed that our emotions resided in a kind of undifferentiated jumble, deep in the subcortical reaches of the brain. While they were reasonably certain that this "limbic brain" was where the emotional action took place, they remained fairly clueless about how or why one particular feeling tended to arise or dominate others. Why grief instead of anger? Why fear instead of love? And why the troublesome penchant for getting mired in one mood or another, rather than moving fluidly from one emotional state to another? Recently, using increasingly refined tools that can electrically and chemically stimulate the brain, as well as make images of our neural turbulence, scientists have begun to construct some persuasive hypotheses. They now propose the existence of seven discrete neural systems that we could roughly call brain "circuits," each of which activates a specific emotion along with its accompanying, self-perpetuating thoughts and behaviors. The seven primal networks are rage, fear, separation distress (which provokes loneliness and sorrow), nurture, play, lust, and what scientists call "seeking," the powerful hunting quality that propels us toward our goals.

Apparently, when we are confronted by a particular stimulus, a cascade of neurohormones prompts one or more of these "Big Seven" mood circuits to activate and commandeer the brain, causing us to feel, think and behave according to the dictates of the lit-up circuit. Because the emotions, thoughts and actions of a single mood state tend to powerfully reinforce each other, once we're in the grip of any particular neuroemotional state, it's hard to even conceive of being in another. Think back to the last time you were really ticked off at your partner or another family member. You may have felt a kind of blood-pumping, heart-pounding fury, fueled by such thoughts as "How could he/she do that to me!" which in turn may have spurred you to let loose with a few epithet-laced accusations or icily refuse

to even speak to the object of your ire. You may recall how each of these reactions--wrathful feelings, surly thoughts and outraged behaviors--had a way of bolstering one another over and over, creating within you a kind of thicket of anger that was hard to find your way out of.

Brain scientists can chemically or electrically stimulate specific structures of the brain, then carefully observe the affect and associated behavior of the subject. For instance, in a series of much-publicized studies by Robert Heath of Tulane University School of Medicine, individuals' moods, perceptions and behavior dramatically shifted in response to the activation of particular limbic structures. In one study, a subject's rage circuit was electrically stimulated, whereupon he felt suddenly offended and threatened by an experimenter whom he had previously perceived as friendly. In another study, a 34-year-old woman whose lust circuit had been activated via an electrode implanted in the septal region of her brain, reached orgasm within a few minutes, without external stimulation of any sort. It's important to point out that human research on these specialized brain circuits is still in its infancy; thus far, the best evidence for these hardwired and wetwired emotional systems comes from animal studies. Still, as pioneering neurobiologist Jaak Panksepp of Bowling Green State University points out, the clear survival utility of these pre-packaged emotional systems suggests that they are shared by all mammals, humans included. How would we have made it through the ages without robust impulses to escape, attack, nurture, and mate? Before I go on, I'd like to acknowledge something that might be called the "conehead factor." When we peer inside the brain to try to better understand human emotion, we inevitably face a kind of culture clash between the steely, almost robotic language of neuroscience and the warm, pulsing nature of emotion itself. I will do my best to keep conehead-speak to a minimum; where I can't, I ask you to simply bear with the linguistic limitations of brain science.

Putting Neural Know-How to Work

From my standpoint, it doesn't take a brain scientist to figure out that some of these "Big Seven" neural states are more apt to promote satisfying marriages than others. I remember my excitement upon first reading about these neuroemotional systems, wondering: What if we could teach couples not only to modulate their rage and fear systems, but also to build up their emotional bank accounts via strengthening access to "intimacy circuits"-- those controlling nurture, separation distress (which spurs us to seek connection), play and sexual attraction? While other mammals may have no need for such tinkering, we human beings, with our more complicated

craniums, are uniquely gifted at getting our emotional wires crossed. Our early childhood experiences, intercut with the everyday storms and stresses of marriage, may spur us to feel furious with our spouse when no actual threat exists, or distant when our partner badly needs nurture, or sexually frozen on the very night the kids are at their grandparents, the champagne is chilled, and Chet Baker is pouring sweetly out of the stereo, doing his best to get us in the mood.

A couple might go through the motions of connection as Jack and Loretta did when they set up regular "date nights," but if they don't know how to activate their intimacy circuits, their hearts simply won't be in it. I believe that this is why so many couples wind up like Jack and Loretta, relapsing quickly and convinced that the "juice" has irretrievably leaked out of their marriage. While couples are in therapy, good clinicians help them effectively calm their anger and fear circuits as well as stimulate the more vulnerable, connection-generating states. The therapist acts as a kind of neural chiropractor, making regular, finely-tuned adjustments to each partner's out-of-sync brain.

But once couples leave therapy and face the slings and arrows of intimate partnership on their own, they all too readily revert back to their deeply conditioned, default brain states. The next time their partner is critical or distant or sharp-tongued, they're apt to flip back into their neural safety zone of anger or fear--in a nanosecond. Moreover, once they've plunged into one of these intimacy-zapping states, they may find it difficult to shift out again at will. If they aren't truly in the mood, that is, in the right brain state, for intimacy all the flower deliveries and date nights, and diaphanous nightgowns in the world aren't likely to bring a couple back into connection.

This points to a key benefit of behavioral brain science for clinicians: it helps us identify the real target of our work -- brain-mediated mood states. Cognitive or behavioral interventions work only when they influence underlying mood states, and they fizzle when they fail to promote "Big Seven"-type shifts. Even the best-rehearsed self-statements or the most insightful re-storying may fail to trigger confident, intimacy-seeking, or collaborative internal states. Without the needed mood states to sustain them, new stories will fade, and new behaviors will eventually peter out. Brain science encourages us to not settle for changed thinking or actions without evaluating whether these changes activate internal states that naturally pull us toward intimacy.

Helping clients shift mood states is essential, but it's not enough. We need to give our clients the tools to shift from one brain state to another entirely on their own. If the new affective neuroscience shows therapists

anything, it is the critical importance of our role as teachers of emotional literacy. Notwithstanding the clinical scenarios that many of us were schooled on, featuring therapy masters who transformed a couple or family with a single, brilliant directive, the new behavioral brain science suggests the profound improbability that such "aha" moments will have any staying power. The human brain is simply too volatile for that. Instead, we therapists need to turn our energies toward training clients to gain some control over their conditioned neural turbulence, by teaching them how to "brain shift" from defensive mood states to intimacy-generating ones.

In my experience, teaching this crucial skill to clients gives them a fighting chance to survive, and even flourish, post-therapy. But it's no quick or casual undertaking, to be wrapped up in a couple of role-play exercises. Exerting an impact on lifelong neuroemotional conditioning requires serious training, much as athletic or musical ability is honed through constant skill building and practice. When clients first experience the dramatic effects that often follow internal state shifts, it's tempting for them to conclude that they have "arrived." Usually, however, the work has just begun. Lasting change requires new emotional habits that are formed by making the same internal shifts over and over.

The new, brain-savvy therapist will need to fine-tune very particular clinical qualities, among them patience, the ability to motivate, a kind of bulldog persistence, and the capacity to issue strong challenges without activating defensive states in clients. To do this, therapists must be expert in influencing their own internal states. Therapists who can avoid feeling defensive or critical when clients question or reject their challenges will be much more successful than those who can't. Those who are able to feel empathy in the face of resistance or rejection will be even more successful.

Born to Nurture

Back to Jack and Loretta, still slumped on my couch, their bodies angled away from each other and their voices utterly drained of energy or affection. But I had faith that their potential for intimate connection still lived. For like all humans, deep in their brains they possessed a neurochemical operating system that is specially designed to promote caring. While this neural nurture circuit probably originally evolved to prepare adults to ensure the survival of helpless infants, it also spurs caregiving behaviors toward peers, especially family members.

The neuropeptide oxytocin, which floods a human mother's body when her newborn suckles for the first time, appears to galvanize this nurture response. Other research suggests that upsurges in the neurochemical

prolactin help to sustain this caring impulse over time, along with naturally occurring, feel-good opioids such as endorphins. It is worth noting here that while the nurture circuitry of females is typically quite vigorous, males, too, have fully functioning if slightly more sluggish brain operating systems for caregiving.

But what jumpstarts this care circuit? What kind of stimuli might trigger the free flow of nurturant neurochemicals through brain pathways, prodding a person out of resentful indifference and spurring a genuine desire to tend and give? The short answer: A partner's cry for help.

It is a tribute to nature's wisdom that each of us is equipped with a brain operating system that controls separation distress, which can range from mild loneliness to all-out abandonment panic. When these loneliness circuits are electrically stimulated in animals, they emit distress vocalizations that are virtually identical to those emitted by young animals that have been separated from their mothers. When other members of their species hear such a cry, they speedily come to the agitated animal's aid, for their caregiving circuits have been activated by their companion's distress. Jaak Panksepp and other neurobiologists believe that human beings do a similar, brain-mediated dance of need and nurture. Ideally, when we call for help, a loved one runs to our side.

"Ideally," of course, is the operative word here. While animals naturally do this kind of keep-in-touch tango, we find all kinds of ways to sabotage opportunities to get love and comfort. Instead of crying out for contact, we may get angry and decide we don't want anything to do with our spouse, or we may communicate an off-putting mix of need and blame. ("You're so insensitive!") The separation-distress circuit may be particularly difficult to fully activate, since it puts us directly in touch with our vulnerability--a vulnerability that may have caused us great pain in the past. Sadly, by keeping that system partially closed down, we cheat ourselves of the nurture we might otherwise enjoy. Some of us may not even realize how lonely and isolated we are.

Retraining the Brain

This was certainly the case with Jack. The youngest of four children of an overworked, single mom, he had learned from babyhood that his cries were likely to be ignored. Gradually, he had shut down his separation-distress system and detached from his need for human closeness. By the time he and Loretta got together, Jack rarely even knew he needed comfort and was proud of his manly self-reliance. The consequences were devastating. Unable to recognize his own need for nurture, Jack truly

couldn't understand his wife's loneliness and need for his attention. "You know I love you," he would say impatiently. "Why can't you just believe that and pull yourself together?" Of course, Loretta didn't make it any easier by communicating her hurt with a barrage of furious insults.

In our earlier round of therapy, I had just begun to help reconnect Jack with his separation-distress circuit, thereby allowing him to receive his wife's tenderness. Meanwhile, Loretta had begun to deactivate her hair-trigger rage circuit and express her needs in a softer, more heartfelt way. It was at this point that they had quit therapy, confident that they had found the secret to keeping their relationship strong and vital. But I knew that this second honeymoon couldn't last.

The problem, in a word, was me. Loretta and Jack had learned how to access their intimacy circuits, but only within the protective umbrella of weekly therapy, where I had endlessly soothed, coached, and prodded them back into onnection. They didn't know yet how to stimulate these neural nurture systems on their own. If they were to keep their marriage alive, I would need to teach them to rewire their emotional brains.

First, though, I needed to help them reactivate the nurture circuits that had briefly lit up their marriage a year ago. "Jack, what's going on?" I asked after Loretta had wrapped up her summary of their troubles. "You seem sort of sad." He straightened up immediately. "No," he demurred, "I think Loretta's probably right. We're just too different to make a go of it." As I allowed these words to hang in the air for a moment, I noticed that his eyes looked sad, a sign that his separation-distress circuit was firing. "Jack," I asked softly, "how are you feeling right now?" His eyes filled and he remained silent for perhaps 20 seconds. Then, his voice wavering, he said: "I don't know what I'm going to do without her."

At this, Loretta spontaneously reached over and touched his hand. "I don't want to hurt you, Jack," she said gently. I imagine that her oxytocin had begun to flow, but she couldn't yet sustain it. "I'm not sure I can go on like this," she continued, her voice rising in irritation. "When you hang out with your damn computer every night of the week ."

I stopped her short. "He needs you now, Loretta," I encouraged her. Following my lead, Jack added: "I know I didn't let you in, Loretta and I'm sorry." Loretta snapped: "Yeah, that and three bucks will get you a cup of coffee at Starbucks." Jack looked hopeless. "You're right, Loretta," I said. "Nothing will change until Jack learns how to let you in. And I can show him, if he wants." Jack bit his lip, then nodded. I pulled out my appointment book and scheduled a meeting with him.

I opted for a one-on-one session because I didn't want to forever facilitate emotional closeness between this couple, in the process

reinforcing an endless dependency on me. Instead, I wanted to teach Jack to contact his need for Loretta entirely on his own. (I would teach Loretta a similar process). Later, I would bring them back together to help them put their new skills into practice. In my experience, a stint of individual work is indispensable to the kind of brain reconditioning couples need to avoid relapse.

Alone with Jack, I began with a bit of teaching, describing in simple terms how his brain is already set up for intimacy. I let him know that he could learn skills that would allow him to more readily get in touch with connection-promoting feelings such as sadness and disappointment. At this, Jack grinned and shook his head. "I can't believe I'm sitting here about to learn how to feel depressed. This is a good thing?" We shared a good laugh, and then I clarified. "A little bit of sadness is a good thing," I said. "It's not something to be afraid of." The first step would simply be getting into the habit of noticing everyday disappointments and allowing himself to fully feel them.

In doing this work with clients, many therapists may wonder whether it's really necessary to explicitly refer to the role of the brain. Can't we just help people learn to shift their moods without muddying the conversational waters with neurospeak? Probably, we can. But I have found that rather than turning off clients, most are intrigued and even relieved by the impact of brain processes on thoughts, emotions and behavior. It has a way of softening blame as clients begin to understand that the brain, in its natural, unruly state, does things that its "owner" may not really want or approve of. This doesn't mean we allow clients to pass the emotional buck ("Whoops, my rage circuit made me do it!"), but it does encourage a bit more compassion toward oneself and one's partner. It also offers a potent message of hope. Clients learn that no matter how emotionally shut down, self-protective, or stuck in anger they or their partner may now be, they still have the potential to restore intimacy.

I tell my clients, however, that they will have to work hard to make it happen. I told Jack, for example, that I would be giving him regular homework assignments, such as paying close attention to his feelings as they came up, especially the more vulnerable ones--and writing down how his body felt as he experienced them. I explained that if he could learn to tune into his body's telltales signs of loneliness--a tightened throat, a sick feeling in his gut--he could then do something to relieve it. I encouraged Jack to think of his daily awareness work as a spiritual practice, a regular inventory of self that would slowly help him discover what he most valued and needed.

After Jack had faithfully practiced these new awareness skills for several

weeks, I encouraged him to begin acting on them. With Loretta's permission, Jack began to call her whenever he felt lonely, sad or disappointed. Then, during a joint session, Jack recounted an incident at work in which he had inadvertently offended a client and lost an important account. In the middle of the story, he fell silent for a moment, and then told Loretta that he felt a kind of queasy, hollow sensation in his stomach. "I'm sorry, honey," responded Loretta quietly. "I can imagine how that feels."

Her care system activated by her husband's sadness, Loretta impulsively scooted toward Jack on the couch and put her arm around him. Instantly, his whole body tightened in an instinctive attempt to short-circuit his vulnerability, I guessed. I asked him to pay attention to the tension in his body, then to simply notice the softness of Loretta's hand on his neck. Closing his eyes, Jack visibly relaxed, resting his hand on Loretta's knee. After about 30 seconds, I asked him to check again how he was feeling. "Warm and calm," he reported, surprise edging his voice. Chuckling softly, he added: "I must be high on those opioids you were talking about!"

It was a pivotal moment. Before, Jack hadn't even noticed that he usually resisted the comfort Loretta offered. Afterward, he began to consciously allow himself to be soothed by Loretta's gentle support, and a few sessions later, he reported that he often missed his wife during his long workdays and looked forward to being with her in the evenings. Before long, Jack began to spontaneously ask Loretta about her own emotional ups and downs.

This didn't come easily. At first, when Loretta loudly voiced her frustration about some problem she was experiencing, he lapsed into his old style of lecturing her that she simply shouldn't get so upset. But gradually, Jack discovered that if he simply gave his wife his unreserved, sympathetic attention, she usually became calmer and clearer after a few minutes. To his surprise, he found himself beginning to enjoy giving her support. I no longer needed to help Jack jump-start the process of comforting his wife; he was activating his care circuit on his own. Jack's experience jibes with brain research suggesting that each time neurons fire in a new pattern, those neural pathways get strengthened as though new emotional grooves are being dug in the brain. No question, Jack was getting into the groove of connection.

Of course, intimacy takes two. I also worked with Loretta individually, assigning homework in which she stopped to reflect on each interaction with Jack that triggered her own default mode anger. I asked her to try to identify what important need, belief, fear, or dream was at risk when Jack didn't give her the attention she craved.

At first, Loretta firmly resisted thinking in these terms. Her husband

could be an insensitive jerk, end of discussion! But as she repeatedly stopped and listened to herself whenever she felt Jack withdrawing, and paid close attention to her body's signals at these moments, she began to identify deeply-rooted fears of invisibility and aloneness. The more she practiced, the more she was able to pause in the face of conflict, identify her fear, then speak to Jack from her yearning rather than from her anger. From a neural perspective, she was learning how to keep her loneliness system up and running, which was exactly the signal her husband needed to stimulate his nurture circuit. Finally, Loretta and Jack were beginning to do the intimacy tango and better yet, they were now learning the dance steps on their own.

Still, this was no fairytale makeover. It took several months before Loretta could trust that Jack would not emotionally disappear on her again. Jack, meanwhile, struggled mightily to keep in touch with his more vulnerable feelings, especially when Loretta would occasionally revert to her old fury mode. But as both kept up the inner workouts I had taught them, their efforts to stay in contact with their deepest needs, and to dare express those needs to each other, began to pay off. One turning point was a "date night" that, once again, ended in bed but this time for a night of lovemaking that, they shyly told me, was marked by tenderness and passion that they hadn't felt in many months.

A year later, when I saw Loretta and Jack for a follow-up assessment, they scored high on most measures of marital satisfaction. But that wasn't what pleased me most. It was several months after that, when they sent me a holiday card that featured a photo of them, both grinning broadly as Loretta held up their new baby daughter. The note on the card, in Jack's handwriting, inquired: "Brent, how do you get to Carnegie Hall? Turn the card over!"

I already knew the answer, but I flipped over the card anyway and smiled at the single, scrawled word.

"Practice."