

Applying a psychobiological approach to the identification and treatment of social-emotional deficits in couple therapy

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By definition, love relationships require more social-emotional brain power and skills than do other relationships. Thus, any social-emotional deficits will most certainly be revealed in the romantic situation. STAN TATKIN draws on a psychobiological approach to couple therapy (PACT®), to highlight social-emotional deficits that could contribute to mutual dysregulation in adult romantic relationships, and threaten the safety and security system of the couple. These deficits are perhaps more common than most clinicians realise and can present diagnostic challenges. Deficits can be viewed as a 'hardware' problem in the brain, as distinct from a defense, which is more a 'software' problem related to personality. These hardware deficits often involve cortical midline structures of the brain, associated commonly with aspects of the self. This discussion is essential to begin to understand what adult romantic partners can and cannot accomplish when it comes to interactive regulation of arousal states. Three case vignettes illustrate the discussion.

Using a psychobiological approach to couple therapy (PACT®), the therapist is encouraged to be on the lookout for social-emotional deficits that could contribute to mutual dysregulation in adult romantic relationships and threaten the safety and security system of the couple. These deficits are perhaps more common than most clinicians realise and can present diagnostic challenges. Here we entertain the notion of deficits as a 'hardware' problem in the brain, as distinct from a defense, which refers to a 'software' problem related to personality. These hardware deficits often involve cortical midline structures of the brain, including the right ventromedial prefrontal cortex, anterior cingulate, and right anterior insula (Northoff & Bermpohl, 2004; Shamay-Tsoory, Tomer, Berger, & Aharon-Peretz, 2003). Midline cortical structures are associated commonly with aspects of the self (Northoff & Bermpohl, 2004; Schore, 1994).

This discussion is essential to begin to understand what adult romantic partners can and cannot accomplish when it comes to interactive regulation of arousal states.

No brain does everything well

Everyone has some form of relative deficit, in one or another area of functioning and/or performance. For example, some of us are strong in math, while others are strong in writing. Some are good at global processing of information, while others are better at detailed operations. No brain does everything equally well. We all have areas in which we perform well and others in which we perform less well.

Of particular interest to the couple therapist are differences in function and performance as these relate to the social-emotional realm. For example, how do individuals vary with respect to picking up facial cues, vocal cues, and bodily cues from another person? How do they vary with respect to

reading their own interoceptive cues and interpreting cues that have social-emotional relevancy and utility? How do they vary with respect to knowing what they feel at any given moment and being able to parlay that information into maintaining relationships that are safe and secure?

As a couple therapist, I see many partners who appear to have one or another social-emotional deficit that gets them in repeated trouble. These people appear to be missing something that would allow them to perform well in their relationships. Their deficits, however, may not show up as learning problems in school or work, and thus may go unrecognised and undiagnosed even if they create persistent social problems in school, work, and love relationships. In fact, social-emotional deficits often surface in couple therapy more starkly than in work or social situations.

By definition, love relationships require more social-emotional brain

power and skills than do other relationships. Thus, any social-emotional deficits will most certainly be revealed in the romantic situation. Children and adults with an inadequate repertoire of social-emotional skills

and emotional states to his or her self and to others through knowledge, understanding, imagining, and putting oneself in another's shoes. It requires a curiosity about one's own mind which, by extension, includes curiosity about

the thoughts, feelings, and intentions of others.

In my experience, theory of mind deficits appear relatively frequently in couple therapy. Many who have this deficit are law-abiding, loving, and successful people. Yet, their theory of mind deficit leads to interpersonal disturbances, particularly in the area of safety and security, and can wreak havoc in love relationships. It is possible, even likely, that individuals who lack theory of mind are unaware of any deficit, and it is equally likely that their partners view their disability as purposeful, dismissive, and persecutory. And for good reason, because the individual with this deficit is unable to locate his or her partner's mind.

Theory of mind is believed to be located in the orbitofrontal prefrontal cortex and the anterior cingulate, two major areas of the brain involved in self-awareness and self-regulation

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can be expected to struggle to at least some degree in their relationships with others. They may appear too aloof, too indifferent, or too inattentive; may seem lacking in empathy, oblivious, or unloving; or may simply appear too awkward, shy, or unwilling to engage. Alternatively, they may appear overly chatty, inappropriate, hyperactive, or dysregulated. These individuals may or may not have a learning disability; in fact, social-emotional deficits often appear in individuals who have no appreciable learning or cognitive problems.

One of the main negative consequences of undiagnosed social-emotional deficits is that the individuals and their partners rarely know these problems exist. Instead, the couple tend to perceive any problems in their relationship that arise from deficits as purposeful, intentional, and willful behaviour by one of the partners. In contrast, a true deficit implies something a person cannot do, never could do, and perhaps never will be able to do. Thus, becoming aware of the deficit is the first step toward repairing the relationship if the partners are able to incorporate that awareness into their interactions.

I would like to discuss three deficits here, accompanied by brief case examples, to illustrate the challenges social-emotional deficits can pose for the clinician and the couple:

- theory of mind problems;
- problems modulating the voice;
- memory problems.

Theory of mind

Theory of mind refers to the ability of an individual to attribute mental

the mind of others. Individuals with poor theory of mind may appear to lack empathy, complexity, and interest in the internal lives of others or to exhibit alexithymia, insensitivity, or some other aspect of personality development. They lack the ability to put themselves in another person's shoes and cannot mentalize or imagine



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(Abu-Akel & Shamay-Tsoory, 2011; Hughes & Beer, 2012; Moriguchi et al., 2006). Damage to either structure will affect the ability of an individual to reflect on himself or herself. In one famous 19th century theory of mind case, Phineas Gage (Damasio, Grabowski, Frank, Galaburda, & Damasio, 1994), a railroad foreman whose orbitofrontal area was damaged by a railroad spike through the head, suffered a dramatic personality change whereby he lost theory of mind, self-control, and a sense of morality. Numerous cases involving theory of mind have been documented and studied over several decades (Baird & Sokol, 2004; Loye, 2002; Moriguchi, et al., 2006; Nijenhuis & den Boer, 2007; Schore, 2002b; Siegal & Varley, 2002). Reflective functioning is sometimes used interchangeably with theory of mind (Fonagy & Target, 1997; Grienberger, Kelly, & Slade, 2005).

The case of Roger and Emilia

Roger (48) and Emilia (50) have been married for twenty years. Childless, they focused much of their energy on building a real estate business. Both are physically attractive, and both used their good looks to advantage in their work and social lives. Before going into real estate, Roger was a male stripper for a female-only night club. He describes his childhood as 'bizarre' and overly sexualised by both parents, but particularly his mother, whom he describes as 'seductive' and 'sexually inappropriate' during his preteen years. He regards his years as a male stripper as 'a big mistake' and feels ashamed that he exploited himself. Today he is increasingly ambivalent about being called handsome and sexy. He regrets that he did not complete high school or pursue an intellectual career. Emilia was prom queen in high school and modeled for a European magazine after graduation. She did not pursue college, but found modeling both lucrative and satisfying. Prior to meeting Roger, she described herself as party girl who liked attention from both men and women. Now she describes her childhood as 'normal', but admits her mother, a one-time model, probably exposed her to modeling too early by

putting her in beauty competitions at the age of seven years.

Roger and Emilia came to couple therapy because Roger had become increasingly depressed and suspected Emilia was having an affair, which she denied. Despite her denial, Roger continues to suspect her of lying and cheating. In therapy sessions, Roger refers to Emilia as a 'Barbie doll' whom he finds cold, distant, and lacking depth. Emilia frequently describes him as a 'depressed Ken doll' who is becoming whiny, overly clingy, and negative.

Discovery of the deficit

A problem arises during the first session when I ask both partners, "What drew you to each other?" Roger gives an extended response: "She was, and still is, lovely inside and out. I was intrigued by her strength of conviction about things such as... hmmm, how things should be, how people should be. I was attracted to her love of life and extroversion. I loved how people always seemed drawn to her. She was funny. Still is. I also loved her ambition."

When it is Emilia's turn to say what drew her to Roger, there is a long pause. "Well, he was handsome... and still is. Sexy. And still is." Emilia pauses again while Roger's head lowers. He begins to play with his wedding ring. Emilia has touted the two qualities from which Roger has been distancing himself.

"What else?", I ask Emilia.

"Well... attractive," she responds, followed by another pause.

I continue to prod. "What about him as a person? Why this guy and not other guys?"

"I don't know", she says slowly, as if straining to think. "He was cute. I guess cuter than the other guys."

"You're describing him as attractive, and that's nice. But if you look at Roger right now, what do you notice about his reaction to what you're saying?"

"I guess he's waiting for you to do something" she says, with a shrug, then turns to me. "I don't know what you want from me."

"Does he look pleased right now?" I ask.

"I don't know. You're the therapist", she snaps.

"See", Roger says, his eyes cast

down, his voice soft, but with a tone of hopelessness. "This is why I'm unhappy. I don't feel like you see me at all."

"I see you!" replies Emilia. "What? I liked how he looked at me?"

"How did he look at you?" I ask.

Roger's eyes begin to train on Emilia's eyes, awaiting her answer.

"Directly," she responds. But Roger again drops his head and eyes. "I don't know what you guys want from me."

I roll my chair slightly forward toward Emilia to help calm her.

"I know this is frustrating. When I asked Roger what drew him to you, he listed several things he admired about you beyond your beauty. What do you remember—better yet, why do you want to stay married to him today?"

"I love him", she replies, with another shrug.

"What about him do you love?" I ask.

Emilia laughs. "I don't know. I just do." There is another long pause. "He's Roger."

"Who is Roger?" I ask.

"The man I married", she replies.

"How is she doing?", I ask Roger.

With head still down, fingers alternately removing and replacing his wedding ring, Roger says, "I hoped she would say I was a good person, that she thought I was smart and capable, that she saw me as more than sexy."

Emilia sits motionlessly and stares at Roger for several moments. "I said I loved you", she finally offers.

As the session continues, in my role as a PACT therapist, I begin to think strongly in terms of a theory of mind deficit. Despite my prompts, Emilia is unable to imagine what Roger thinks, feels, or intends at any given moment. She is unable to put herself in his shoes and unable to provide any insight into her own internal world. She feels persecuted by Roger's disappointment and can't understand his complaint that he doesn't feel seen. As a means to further confirm this assessment, I ask if she and Roger would be willing to journal their thoughts and feelings between sessions. Emilia says, "Of course, no problem." Roger also agrees. However, despite the agreement, Emilia is unable to bring any journal entries to the following session, stating she had nothing to say.

Suspecting a deficit, I investigate further during this session by asking

Emilia and Roger to switch chairs and roles. Each must describe and explain his or her complaints from the other person's perspective. I ask Roger to go first.

Assuming Emilia's position, he says, *"I wish Roger wouldn't make such a big deal of everything. He's always so insecure about himself and about my commitment to him. He thinks I'm having affairs."* Roger pauses while searching Emilia's face for a reaction. *"But I'm not."* He pauses again. Emilia smiles. *"I do worry that I am getting older."*

I consider theory of mind issues during the interview process when one partner appears unable to adequately describe the other, cannot read mental or emotional states in the other, or appears to lack curiosity about self and other.

Emilia feigns surprise and they both laugh. *"I don't know about you"*, she says with animation, putting her hands on her hips, *"but I'm getting younger."*

When it's Emilia's turn to express Roger's concerns, she pauses for a significant time.

"Hmm", she says with a finger on her mouth. *"This is hard."* She turns to me. *"Am I supposed to act like him now?"* She begins to change her posture and facial expression in an attempt to imitate Roger.

"Not act like him", I say. *"I want you to put yourself in his shoes, so to speak, and complain about Emilia. In other words, if you were Roger, what would you say about Emilia?"*

"I think she's terrific!" Emilia blurts out. *"She's beautiful and sexy and..."*

"No", I interrupt, *"I mean taking Roger's perspective: How does he feel about you? Why is he in therapy with you? What is his complaint about you?"*

"He complains a lot", she responds.

"Emilia", I ask her, *"have you ever been able to imagine what it is like to be in another person's skin?"*

"No", she replies. *"That's their skin. I don't know what you're asking."* She begins to sound frustrated.

"I know I'm confusing and frustrating you right now, but just give me another

few minutes here. Do you remember ever questioning yourself, wondering who you are or how you came to be who you are?"

I ask.

"Not really", she says with uncertainty. *"You mean like the diary you wanted me to do?"*

"Yeab", I respond.

She laughs. *"I guess you figured out that I don't like doing that. Right? I'm not the kind of person who questions everything. I don't know. Maybe I'm not very deep."* She laughs again.

"Are you curious about yourself?" I ask.

"Not really", she replies. *"I mean, who cares?"* She makes a face that implies incredulity.

I turn to Roger. *"Do you care who Emilia is? Are you curious about who she is inside?"*

"Absolutely", he responds. *"I absolutely want to know. And I'm trying to figure that out."*

I turn back to Emilia. *"Are you curious about who Roger is and how he works inside?"*

"Sure", she responds cautiously. Roger lowers his head, apparently in hopelessness.

Discussion

As a PACT therapist, I consider theory of mind issues during the interview process when one partner appears unable to adequately describe the other, cannot read mental or emotional states in the other, or appears to lack curiosity about self and other. Other cues that lead me to suspect theory of mind issues include one partner complaining, *"You don't see me, you don't understand who I am"* or repeatedly stating, *"I don't know why that bothers you. It wouldn't bother me."* In this case, I was cued initially to suspect a theory of mind deficit when Emilia was unable to substantiate her

attraction to Roger. I gained further evidence when Emilia failed to imagine herself as Roger or to view herself from his perspective in the self-object reversal exercise I asked the couple to perform.

You may recognise Emilia's theory of mind problem as common feature of a cluster B personality disorder (e.g., narcissistic personality disorder [NPD] or histrionic personality disorder). Though many individuals with disorders of the self exhibit lack of empathy, psychological fusion of self and other, reflective function, and other social-emotional functions, poor theory of mind can and does exist in individuals who do not meet the criteria for a personality disorder. The therapist should be on the look out for theory of mind deficits and not confuse them with defense mechanisms or simply features of a personality disorder. It is important to consider this deficit as reflecting both structural and functional problems in the brain, and not simply as serving a defensive psychological function. In the case of Emilia, her developmental history suggests that both her mother and father lacked the ability to mentalize, to see into her, to infer her mental and emotional states, and to understand her intentions.

According to Fonagy (2007), the capacity to mentalize develops out of a secure attachment with one's caregivers. Schore (1994) would agree that theory of mind emerges out of a secure attachment relationship, but not necessarily due to mentalization, which he considers more of a left hemisphere, cognitive function. Rather, Schore focuses on experience-dependent right hemisphere development through attuned caregiver interactive regulation via face-to-face, eye-to-eye, and skin-to-skin contact. Still others attribute theory of mind problems to pervasive developmental disorders such as autism (Baron-Cohen, 1995; Brent, Rios, Happe, & Charman, 2004; Koshino et al., 2008; Mitchell, 1997). Whatever the root cause of theory of mind deficit, the problem is not merely functional. It involves structures in the brain that are not operating properly. For this reason, it may not be a deficit that is fully treatable in couple therapy. Having said that, experts such as Dan Siegel

(2009) believe that this function can be taught. Siegel's term for theory of mind is 'mindsight' which he believes is a matter of presence which includes the ability for interoception. Mindfulness techniques may be a powerful tool for improving mindsight through increased presence.

Both partners are affected when one has a theory of mind deficit. In this case, Roger felt slighted and disappointed by Emilia's lack of understanding. He was inclined to take her problem personally, as if she were doing it purposely. Thus, my focus as therapist was to explore with the couple what it meant to their relationship for one partner to have a deficit that was

she's thinking right now"), face scanning (*"Did you notice how his/her face changed right now?"*), and interpretation of facial and vocal expressions (*"What's going on in him/her right now?"*). After several sessions, Emilia's ability to read Roger's mental and emotional states, as well as her own, improved enough to save her marriage.

Problems modulating the voice

Chronic, lifelong problems with voice modulation can point to a cultural or familial pattern of speech and vocal prosody (i.e., volume, pitch, stress, timing, and intonation). Hearing loss also can cause problems with both volume and prosody.

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always there. This reveal led Roger to view Emilia differently. This did not take away his disappointment with the level of complexity available in the relationship, however, and the couple had to deal with issues in addition to theory of mind in order to save their marriage.

Persons with poor theory of mind are often disinterested in improving this function, which complicates treatment outcomes, especially in couple therapy. However, if the partner fears losing the relationship, the therapist can leverage the fear by motivating him or her to develop this function. In this case, Roger became so frustrated with Emilia's indifference that he filed for divorce. This created a crisis for Emilia, who admitted she'd had an affair, ended it, and pleaded with Roger to continue therapy with her before going through with divorce.

In subsequent sessions, work centered on repairing Emilia's betrayal and her poor theory of mind. I employed a range of PACT interactive activities with the goal of improving Emilia's reflective functioning. Activities included mind reading (*"Be like a mind reader and tell me what he's/*

However, problems related to voice production can also point to a deficit involving the brain.

Most of us can recall hearing someone's voice overpower other voices in a restaurant, airplane, or other public setting. Sometimes that voice is not only loud but higher in pitch or without melodic variation. Such voices can be irritating, dysregulating, even threatening. They draw our attention and make us look at who is making the sounds that grate on us. These individuals are not annoying on purpose; in fact, they are likely unaware of their impact on our nervous system. Sometimes these individuals come to couple therapy with partners who have become inured to their rigid vocal patterns; at other times, the voice quickly becomes a central issue in the therapy.

The couple therapist might hear complaints such as, *"The tone of your voice totally makes me crazy!"* Or *"You're so monotone. You're like a robot."* Or *"You're always so loud when you talk, it's embarrassing."* Or *"Her face goes with her voice; both are kind of lifeless."* Like other deficits, prosody issues do not represent a defense, do not serve a personal or

interpersonal purpose, and are likely not within the individual's control.

Because the brain's auditory cortex is proximal to the amygdala, sounds can trigger implicit traumatic memories more rapidly than can any other sensory perception (Brunet, Birchwood, Upthegrove, Michail, & Ross, 2012; Díaz-Mataix, Ruiz Martinez, Schafe, LeDoux, & Doyère, 2013; Schröder, Vulink, & Denys, 2013). Stephen Porges (2010) has written about the role of prosody in social engagement systems, whereby problems involving an individual's use of vocal tone impinge negatively on self and interactive regulatory functions. Others have written about the role of prosody in interpersonal relationships, ranging from the mother-infant relationship to the adult primary attachment relationship (Butler & Randall, 2013; Chang, 2013; Mancina, 2006; Schore, 2002a).

In my practice, I have witnessed several instances wherein at least one partner demonstrated problems in the area of vocal modulation. In each case, one or both partners experienced relatively moderate to severe episodes of mutual dysregulation as a result of dysprosody. In one recent study (Pichon & Kell, 2013), dysprosody was found to involve both right hemispheric and lateralised basal ganglia in both the motor production and perception of emotional prosodic communications. Some have viewed problems of vocal modulation as linked to autistic spectrum disorders (Kjelgaard & Tager-Flusberg, 2013; Pichon & Kell, 2013); however, not all vocal problems fall under that diagnosis. The couple therapist should also rule out hearing loss as a strong contributor to issues of volume management.

The case of Mina and Bertie

Mina (27) and Bertie (30), a lesbian couple who have been together for five years, came to couple therapy because of an equity dispute over shared property. Mina, a financial consultant, is the couple's breadwinner, while Bertie struggles with an acting career. Mina's demeanor is calm, yet she speaks consistently at a louder volume and a higher-than-expected pitch that do not appear to serve any affective purpose. She also has a fairly strong

Southern drawl. Bertie, in contrast, shows no discernible problems with vocal modulation when interacting either with me or Mina.

"I just wish you would reconsider a different career path than the one you're on", says Mina, her voice loud, harsh, and monotone.

Bertie face winces. *"I feel you're always yelling at me."*

"I'm not yelling at you", says Mina, her body relaxed, but her voice sounding as if she is yelling in an unmelodic manner. *"She's a talented actor, you know",* Mina says, directing her comment to me, with no change in her vocal tone or volume. *"I think she's just holding onto something that's never going to happen. It's not her, it's the business."*

The discovery of deficit

I roll closer to the couple and have them roll their chairs closer to each other, close enough for each to see the pupils of the other's eyes. *"Carry on",* I say.

Mina continues her point to Bertie. *"Like I told him, you're a good actress, but you're not getting any younger and you're not making any money doing it."*

Mina's voice is remarkably unchanged at this closer distance—pitched a bit high, and monotone without inflection. Her vocal modulation problems are difficult to ignore. She is unable to recalibrate her voice to the new, closer distance to her partner.

"Bertie", I say, *"you seem to react strongly to Mina's voice. Am I right?"*

"Oh yeah!" she says. *"You noticed, huh?"*

I continue, *"Has her voice always been like this?"*

"Always", she replies.

"Mina", I ask, *"have others ever commented on how you use your voice?"*

"I hear comments, yeah. Like I'm too loud or my voice grates."

"Do know if you have any hearing problems?" I ask.

"No, I had my ears checked, and I've got perfect hearing", says Mina, her voice still unchanged.

"Can you say something romantic to Bertie for me, please?" I ask. *"Face her and look into her eyes and say something that might soften her face—something loving."*

BRIAN, ARE YOU AWARE THAT WHEN YOU SPEAK TO SALLY, YOU USE AN UNUSUALLY **LOUD** AND **HARSH** TONE



J. WRIGHT

After a considerable pause, Mina says, *"I think you look pretty today".* This time, her delivery is not only overly loud considering her distance from Bertie, but her flat, monotone manner causes Bertie to wince and almost turn her face away.

"What happened?" I ask Bertie.

"Mina is such a caring person, but the way she talks to me makes me want to scream", Bertie says, with her neck pulled back and her face appearing sour. *"I think she means what she says, but it just bugs me."*

Discussion

Although the presenting problem in this case was about Bertie pulling her financial weight, Mina's inability to modulate her voice during stressful or loving interactions quickly became a focus. Further investigation revealed the extent to which Mina had received negative feedback from co-workers and even grade school teachers. She reported being teased in high school and college.

In sessions, as a PACT therapist, I guided Mina to experiment with whispering, singing, and reading a children's story, and each time she performed poorly. I eventually ordered a workup with a neuropsychologist to rule out other concerns and referred her to a speech pathologist for treatment. Mina showed no signs of alexithymia or affect blindness (inability to

recognise certain affects). She cried, laughed, became angry, and was able to recognise these affects in Bertie. Her theory of mind was good, as was her ability to empathise with Bertie.

Relief came for Bertie when she realised that Mina's problem was a deficit and that her complaint of being yelled at was not something Mina did purposely or with anger. However, due to Mina's dysprosody, she and Bertie had difficulty generating positive feelings and soothing negative each other. In therapy, they learned to work around vocal obstacles to interactive regulation by employing more tactile strategies (e.g., cuddling, hugging, kissing, sensual touching, and sexual engaging). These improvements led to mutual reports of high relationship satisfaction. The changes that were necessary were relatively small, but they were the correct changes for Bertie and Mina.

Memory problems

Memory is perhaps one of the most common deficit complaints couple therapists hear, yet it is a particularly tricky deficit to investigate because the actual problem may not occur in the way the partners describe it. For instance, one partner comes in complaining that the other is forgetting important tasks and duties. But the 'forgetful' partner counters, *"You think you tell me things, but you*

actually don't say them out loud. Instead of talking to me in your mind, you need to use your speaking voice if you want me to remember anything."

Memory can be affected by lack of sleep, anxiety, depression, medications, pre- and peri-menopause, hormone replacement therapy, drugs or alcohol, physical illness, and aging, as well as by chronic stress (Perlmutter & Colman, 2005). Chronic relational stress can lead to hippocampal damage and other cortisol-related health problems (McEwen, 2000, 2001; Roozendaal, Griffith, Buranday, de Quervain, & McGaugh, 2003; Teicher et al., 2003). The hippocampus is essential for short-term memory and for contextualising, sequencing, and placing events. You should keep chronic stress in mind when assessing a couple with memory-related complaints.

The case of Bill and Delia

Delia (35) was married once before becoming engaged to Bill (30), who had never been married. Bill, a psychologist, met Delia after she recovered from a traumatic brain injury (TBI). It was her second TBI as an adult. Despite her brain injuries, Delia has been a successful scientist for ten years. Bill and Delia came for a weekend couples' group at Bill's request. His complaint was Delia's memory. He said she frequently forgot things he said, requests he made, and promises she made.

"I'm sure he's right", she says. "He's the expert, anyway. He's a psychologist. I've had two major brain injuries and I have no doubt I have memory problems."

"Was that established by your physicians?" I ask.

"I'm not sure, but you can check my medical records if you like."

There was no way to access her records over the weekend.

"I'm not sure if she's forgetting or if she's just selectively remembering things", Bill says.

"What do you mean?" I ask.

"Well, she's very passive aggressive. She told me she did similar things in her past relationships. She passively ignored her partners' complaints and avoided conflict at any cost. I see her doing that with me, and it irks me to no end."

I turn to Delia and ask, "Is he correct?"

"I think that's a fair assessment, yes. I don't like conflict. I often angered my ex-husband because I would forget things or just put them off."

Between sessions over the weekend, we take breaks for lunch or dinner. Each time Delia and Bill return, they fight over what happened during the break. Bill claims Delia once again forgot something she promised, changed her story about something important, or otherwise did "the same things that piss me off." Each time, Delia's story is almost completely different from Bill's.

I have noticed this kind of disparity in other couples, but typically the event and their report of the event were weeks apart. I usually expect the event to have been dysregulating for both partners and assume the relationship has been too threatening for both. But Bill and Delia's case was different. The discrepancies between their reports were astonishing, given the short periods between sessions. It seemed reasonable that the problem resulted from Delia's brain injury and memory. However, during sessions, Delia performed well, with little sign of problems related to brain injury. In fact, most of Bill's complaints could be explained by Delia's personality and attachment history.

"You did it again!" Bill yells as he explains how Delia has once more let him down. "You promised me we would take a nap and go to lunch together. And what did you do? You made an appointment for a spa treatment. You keep doing this to me."

"I told you this morning I made an appointment at the spa. You said you understood that I needed some time alone." Delia replies plaintively. "And I was angry because you avoided sex with me. We're in a romantic hotel, and yet you won't touch me. Why?"

"I never said I didn't want sex. You got up early and went to the gym, leaving me in the room. Remember? Do you remember?" Bill is so angry that his face is red and his eyes are glaring.

"Honey, listen to me", Delia says, lowering her voice in an attempt to calm Bill. "I always work out first thing in the morning. You know that. When I came back from the gym, I felt very in the mood. I lay down on the bed and kissed you all over. How can you say I left you

when you were asleep when I came back? But you were fully awake when I told you about the spa appointment."

"I can't believe this!" Bill shouts. He turns to me and says, "See what I'm dealing with? It's crazy-making! She remembers everything incorrectly." He turns back to Delia. "You have a brain injury, Delia. No, two brain injuries. I think your credibility is rather poor, don't you?"

The discovery of deficit

To check for problems with short-term and working memory, I used Imago Therapy's couples dialogue, developed by Harville Hendrix (1992). The couples dialogue is used by Imago therapists as an intervention; however, I use it here as a memory test. The test has two parts: the first involves low emotional stress memory, and the second involves high emotional stress memory.

"Bill", I explain, "I'd like you to tell Delia something about a day you had or a dream or any true story that has no real emotional consequence for the two of you. Delia, I'd like you to stop Bill as he talks so you can repeat what he says to you verbatim. This means you will have to stop him at relatively short intervals so you can remember all the details."

Bill starts a story about family members. Delia stops him and repeats the first fragment with only minor errors.

"Okay", I say, "ask Bill if you got it right." She does, and he says that she did.

Bill continues his story, and Delia's ability to repeat what he says improves. After several minutes of this back and forth, I instruct Delia to repeat the entire story back to Bill. Despite some errors, Delia does remarkably well in feeding back all the material she heard.

Moving on to the second part of the test, I say to Bill, "Now I would like you to do the same thing, but this time talk about sex with Delia. Go." I pick this subject because I know Delia is upset about her sex life with Bill. With the added emotional stress, I expect Delia's performance to deteriorate to some degree. The emotional stress component should use up valuable internal resources necessary for short-term and working memory.

Bill starts his narrative on the

matter of sex, and as expected, Delia is unable to repeat accurately the first fragment she heard.

"Ask him to tell you again", I say. With the repeated fragment from Bill, Delia is able to echo accurately what was said. Delia realises that, to succeed, she needs to stop Bill sooner and deal with smaller chunks of information. Proceeding in this way, Delia's performance improves dramatically. When it comes time for her to feed back the entire narrative, Delia makes some errors but generally fairs well.

Now it's Bill's turn. As before, Delia starts by telling him a true story with little emotional consequence. Bill's performance in this low emotional stress segment starts off poorly, perhaps due to performance anxiety, but he quickly shows significant improvement. For the second part of the exercise. I tell Delia to talk about Bill's disappointment in her.

As expected, Bill starts off poorly and needs to have each fragment repeated to him. What I did not expect, however, is that Bill is unable to feed back accurately what he heard after it has been repeated to him. In fact, this inability remains consistent throughout the rest of the exercise: the information is altered in some way, parts are dropped, and Bill's own interpretations are added.

Discussion

This case illustrates the maxim '*Things are not always what they seem*'. The person you would assume to have a memory problem does not, and the person you would not assume to have one does. However, in this case, we have to differentiate between a memory problem and a problem of misappraisal. When Bill attempted to recall a topic he felt to be emotionally laden, his ability to hear correctly what was said was distorted by his aroused state of mind. In other words, he felt so threatened by the subject matter that he had few resources to encode information accurately due to dysregulation. We might say that the faster, automatic parts of his brain hijacked resources from the slower, error-correcting parts. His amygdala, for instance, over-responded to threat cues (both internal and external), which triggered a hypothalamic stress

response, which in turn compromised hippocampal, anterior cingulate, and ventromedial prefrontal cortical function. This is not a memory problem, per se, but it might as well be.

This discovery explained the disagreements that arose between Bill and Delia during every session. Had I not conducted a memory assessment with them, I might have accepted Bill's argument that Delia's memory and brain injuries were to blame. In the role of therapist, it is your responsibility to anticipate that things are not always what they seem.

The greatest challenge for the therapist of a patient with a deficit is to discern the difference between the deficit and a defense. The two often coexist making differentiation more difficult.

Bill became aware of his problem through doing the Imago Therapy's couples dialogue and watching a brief video playback. This led to an exploration of Bill's past relationships, including his relationship with his parents, which revealed a long history of abandonment anxiety. Bill's inability to process accurately social-emotional information while under mild to moderate emotional stress suggested a deficit whereby his brain made frequent misappraisals of meaning and intent.

Once she felt exonerated with respect to the memory problem both Bill and she assumed she had, Delia threatened to leave Bill. She stated she was unwilling to tolerate his frequent anger toward her and their daily fights over who did or said what. Her history of avoidance in relationships then became center stage, which in turn activated Bill's abandonment fears and led to a cycle of dysregulation and frequent misappraisals. In other words, the reveal that provided relief for Delia exposed the real work this couple needed to do in therapy: heal attachment injuries and learn how to interactively regulate distress.

Differential diagnosis: Personality or deficit?

The greatest challenge for the therapist of a patient with a deficit is to discern the difference between the deficit and a defense. The two often coexist, making differentiation more difficult. Generally speaking, defenses serve the purpose of protecting the self from harm. Defenses have historical meaning and are developmentally explainable as features of personality structure. Deficits, on the other hand, do not appear to be explainable in the same way. They can appear as separate

from personality or they can appear consistent with a personality disorder, in which case they are an expected developmental feature of the disorder.

For instance, NPD commonly features problems with psychological fusion or one-mindedness (Masterson, 1981), such that the individual is unable to separate self consistently from other, as in Kohut's self object (1977). Although this is a personality feature, it is also a deficit because that individual is unable to view self and other in any other way. It is a deficit, not a defense, because areas of the brain employed for distinguishing between self and other (likely in the high right hemisphere) are as yet undeveloped. Another feature of NPD is difficulty with empathy. This, again, is not a defense but rather a deficit—a brain problem likely involving the anterior insula, anterior cingulate, and the orbitofrontal cortex.

In another example, individuals with borderline personality disorder commonly are unable to read faces properly when stressed and are more likely than healthy people to read neutral faces as angry (Donegan et al., 2003; Meyer, Pilkonis, & Beevers, 2004; Wagner & Linehan, 1999). Frequent misappraisals of facial expression, vocal expression, and intention, especially in the absence

of a real environmental threat, likely involve malfunction in such areas of the brain as the ventromedial prefrontal cortex, anterior cingulate, amygdala, and hippocampus.

Patients' defenses typically produce negative countertransference reactions in the therapist, particularly when attempting to confront or interpret what appears to be a defense or a resistance to the therapy. However, individuals with deficits often do not elicit such negative reactions, especially when the therapist begins to notice that the behaviour has no defensive purpose. The patient does not understand, or 'get it', and upon further historical investigation, clearly never did.

Summary

My purpose here is to alert couple therapists to the existence of social-emotional deficits in one or both partners. Therapists should not make this a central concern of couples' work, nor should they presume to diagnose deficits in individuals. However, couple therapists are encouraged to remain aware of things that people can and cannot do as a matter of neurological function. Social-emotional deficits will contribute to mutual dysregulation in adult romantic relationships and will threaten the safety and security system of the couple, primarily because these deficits are misinterpreted by a partner (and often the therapist) as purposeful, intentional, and as such, meaningful.

Human pair-bonding depends on a psychobiological process of recognition between partners that confers upon them a sense of familiarity. Because partners usually do not pick each other by accident, the problematic features of a deficit should not come as a surprise to either partner. For instance, consider this analogy: suppose I always knew my partner walked slowly and that irritated me to no end, but for some reason I was later surprised to realise she had a prosthetic leg. So she wasn't walking slowly just to annoy me! Now, this may sound ridiculous because you would think I must have known my partner had a prosthetic leg. But, to extend the analogy, would you believe she herself did not know her leg was artificial, and so by the same token, it looked perfectly normal to me? In

fact, the implausibility of this analogy highlights why identifying deficits can be such a challenge for couple therapists.

Often couples with discovered deficits can find workarounds, improvements, and fixes for problems that their deficits produce. However, it is unclear how effective a couple therapist can ultimately be in 'fixing' or even improving problems that may lie beyond the scope of their practice. Moreover, in many cases, the deficit-bound partner is unwilling, disinterested, or unable to work on that particular problem. In yet other cases, the other partner, despite understanding his or her partner's deficit, is unwilling to remain in the relationship because a particular need is not being met.

Whether or not deficits exist, the work remains the same. PACT therapists strive to move partners toward a more secure-functioning relationship, greater safety and security, and better mutual regulation of positive and negative mental and emotional states. Awareness of deficits should free partners to achieve this end.

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AUTHOR NOTES

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