2016 CAOT Conference keynote address: Compassion in action

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Over 30 years ago, a core aspect of occupational therapy curriculum was a course entitled "Therapeutic Use of Self." It questioned how we could use ourselves to regulate and support others, as a therapeutic tool. Many students thought of the curriculum as fluffy—its content couldn't be proven at that time—but its premise that everything we do impacts others seemed intuitively and experientially accurate. I loved that course and have proceeded ever since to explore the neurobiology of relationship and its impact on our physiology and behaviour.

In 1997, a groundbreaking study by Dr. Geraldine Dawson paved the way for researchers to begin to understand the impact of early relational experiences and how they shape the architecture of a child's developing brain. Electroencephalogram (EEG) brain imaging between moms and babies was recorded, discovering that the activity in the mother's brain is mirrored in the baby's brain (Diamond & Hopson, 1999). Having an attuned caregiver who is able to "put their mind in the mind of the child" activates the brain structures that are necessary for cognitive functions (Siegel, 2001). Other factors being equal, the more caregivers do what I call "gleaming and beaming" with their children, the more the children will develop into compassionate adults who can focus, think clearly under pressure and self-regulate (Hollingsworth, 2008).

Around the same time as those early studies, I was working in orphanages across Eastern Europe. Despite caregivers' best efforts with limited resources, severe neglect was immediately evident to me. With 60 or so children and only one caregiver in each room, these children were so neglected that they presented with a wide variety of developmental diagnoses.

All this information began to integrate holistically in my clinical reasoning. I knew "there's always a reason for the behaviour," but didn't internalize just how profoundly neglect and developmental trauma impact mental health and development. What happens to us when we don't have the human connection we're neurologically wired to expect?

As I describe in my book, *Conversations with a Rattlesnake* (Fleury & Barthel, 2014), attachment theory helps to explain the critical "connection" between caregivers and babies. It provides an understanding of our adaptive behavioural strategies, based on our earliest non-verbal relationship experiences, which keep us safe. These early adaptive behaviours become our default strategy, being the easiest strategy of coping when we are under conditions of stress. Whether we up the ante to attract connection, or whether we encourage emotional distance, what we are all ultimately looking for is emotional safety. This is important because these social patterns are wired in our brains subconsciously as young children, before we have recall. We don't always know how our actions are impacting those around us (Crittenden, 2015). It seems that by understanding the roots of these triggered responses, we are better able to understand why others respond the ways that they do.

Relationships are highly affected by non-verbal cues even for adults. Our brains are wired to detect negativity ahead of positivity, as our survival depends on it (Hanson, 2013). Subsequently, we are sensitive to cues that signal rejection, abandonment, disapproval or anxiety (Burklund, Eisenberger, & Lieberman, 2007).

Reflective therapists can harness the power of this knowledge about gleaming and beaming, remembering that what they consciously bring to every interaction continues to shape the circuits of the neuroplastic brain and is a valuable component of the therapeutic process (Cozolino, 2014). As therapists, we aim to increase our ability to be aware of ourselves (our personal triggers and projections) and the effect we have upon our clients. This mindful process develops a sense of "you and me," creating a secure sense of "we." By putting our mind in the mind of the other, while also being conscious of what's going on for us, there is room for compassion to grow. As I envision it, if we are too much in our own mind, we are dysregulating to the other, and if we are too much in the mind of the other, we are dysregulating to ourselves. It's when we have a concept of ourselves and the other, separately but at the same time, that we are attuned and then truly capable of supporting the other.

Research has also informed us about the effects of chronic stress on our lives and our cells. One particular study looked at the stress of moms with chronically ill children (Epel et al., 2004). The study investigated telomeres, which are like the tips of shoelaces at the ends of our DNA strands. Elisa Epel and her colleagues (2004) discovered that chronic stress affects telomeres, resulting in DNA that becomes vulnerable to premature aging. It has been further theorized that mindfulness meditation may protect against this cellular aging (Epel, Daubenmier, Moskowitz, Folkman, & Blackburn, 2009). Additionally, evidence is emerging that healthy relationships can buffer stress and that helping is healing (Thotis, 2011).

It is amazing to think that therapeutic relationships can strengthen our DNA. Like our DNA, our brains have the potential to change and improve function every day of our lives until we stop breathing.

Through His Holiness the Dalai Lama's Mind and Life Institute, brain imaging is demonstrating the benefits of meditation and prayer, no matter the religious background. The frontal cortex and the cingulate gyrus (structures that are a part of the attachment network) were shown to light up when monks and nuns were praying (Kabat-Zinn & Davidson, 2011). This is the same part of the brain that lights up when moms and babies are gleaming and beaming (Noruchi et al., 2008). This suggests that when we are connected to something (either to the concept of something greater than

ourselves, or to another being), we are helping our brain function better and we become better able to self-regulate (Newberg et al., 2002). Remarkably, there are health benefits to both the one doing the caring as well as to the one receiving the care (Post, 2009; Baumgartner, 2011). The therapeutic relationship embedded in occupational therapy has a power beyond the visible effects we observe in our clients.

As occupational therapists, many of us feel overwhelmed when we set out to support our clients and face the myriad of challenges they are facing. Yet we try our best to do what we can in the time we have, based on what we know. When we go about this, one thing to keep in mind is that the relationships we develop with clients truly matter. Very often, how people feel about an assessment, consultation, learning experience or therapist matters, and this is remembered as much or more than the functional focus that our sessions embody. Science is telling us that it's not what we do but how we do it that is critical. We have known this intuitively in our practice, but now, thanks to incredible research over the last 20 years that is beginning to validate this premise, we now have full permission and encouragement to see the art of therapeutic relationship as science. By being increasingly self-aware of how we impact those around us, we become more attuned to others and are better able to envelop our clients with the healing forces of compassion.

Relationship matters. The healing power of compassionate and attuned relationships is an important foundation of the profession of occupational therapy.

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About the author

Kim Barthel, OTR, has over 30 years' experience blending intuitive problem solving with neuroscience, supporting individuals with complex mental health concerns and helping build healthier social environments. Kim teaches a range of professionals and recently co-authored a book with fellow mental health advocate Theo Fleury called *Conversations with a Rattlesnake.* To find out more about Kim: see www.kimbarthel.ca, find her on Facebook under Kimberly Barthel and join her on Twitter, @kimbarthelotr