Practical Brain Science

Transcript of: Talkback Session
with Ruth Buczynski, PhD, Joan Borysenko, PhD
and Ron Siegel, PsyD
Talkback Segment with Joan Borysenko, PhD and Ron Siegel, PsyD

Dr. Buczynski: Welcome back. For anyone that’s new to this series, at the end of every session we have what we call the TalkBack Segment.

Here we have two experts, colleagues and friends. Dr. Joan Borysenko is a Harvard-trained medical scientist, cell biologist and psychologist, as well as author of many, many books including *Fried: Why You Burn Out and How to Revive*.

Dr. Ron Siegel is also a psychologist and Assistant Clinical Professor of Psychology at Harvard Medical School as well as the author of many books – and this time I think I’ll mention *Wisdom and Compassion in Psychotherapy*.

So, I’d like to first start by getting you both to share what you thought of the call tonight with Pat. Let’s start with you, Ron – what were your takeaways?

Dr. Siegel: I thought it was a great call and Pat is really a great pioneer.

I was thinking about the way in which – based on the various settings that I am in – people pay lip service to the idea of taking a bio-psycho-social attitude toward health, but few people really integrate it and think of all events that are happening on these multiple levels.

I was really impressed by the way that Pat sees any event in consciousness, or any aspect of learning as happening at the level of the brain, happening at the level of what we think of as the mind, happening as a bodily experience, and happening in an interpersonal context – and what happens to us as clinicians when we take this seriously and start to notice it.

For example, when we really notice that an emotion is a body event – that it is a proprioceptive event – there is some sensation happening inside here.

On top of that, there are narrative words and images passing through the mind – so all of that is occurring in an interpersonal and a relational context.

Considering that, in each moment, it frees us up from over-identifying with one or another aspect of experience and gives us flexibility, as clinicians, to look at all of these different levels.

But this is hard to do because you follow the ads of the pharmaceutical companies and you would come to think that everything has to do with neurotransmitters – and while it does, what is causing those neurotransmitters to flow the way they do has a lot to do with our interpersonal context, what is happening in the body at the moment, and really our whole position in the interconnected, interrelated world.
Dr. Buczynski: Thanks. So, Joan, let’s start with you. What are some exercises for integrating cortical and subcortical processes, or integrating brain and body?

Dr. Borysenko: First of all, I want to say that we’ve heard a lot about these in this brain series, Ruth. You have done such a great job bringing in people with practical skills.

So right away, I think about Dan Siegel – and of course Pat is very fond of his work and referred to it frequently in her time with you.

Siegel has an exercise called the Wheel of Awareness where first you get the “felt sense.”

Pat’s work is so important because the “felt sense” is very important – it is embodied emotions and we feel them.

You can get the “felt sense” of what it is to be peaceful – to be at the hub of the wheel of your awareness – to be present and to be in an observational mode.

With his Wheel of Awareness, you notice what’s going around the rim of the wheel in terms of other thoughts, feelings and perceptions, and you train yourself.

“Ah! That’s just a thought. It’s a perception. It’s a temporary emotion, but it’s not who I am. Who I am is awareness itself back at the hub of the wheel.”

We know that kind of mindful exercise actually integrates the brain; it integrates what Siegel might have called the “upstairs and the downstairs brain” – vertical integration – in terms of giving you a sense, a felt sense and a cognitive sense, at once.

Pat started out talking about the triune brain and the necessity of organizing it all vertically and then horizontally in terms of really what is going on between the right brain and the left brain – the different areas of the prefrontal cortex.

I would say that Kelly McGonigal, whom we have heard, also has some great exercises for this kind of integration.

For example, she has a breathing exercise that just involves breathing in and breathing out slowly, as if you have a straw in your mouth.

If you do that for just a minute or two, your breathing calms down. Your out breath becomes longer than your in breath and you actually change the relationship of your prefrontal cortex to your amygdala – you’re able to secrete an inhibitory neuropeptide, GABA, that calms the amygdala down.

This also builds resilience – it builds activity in the left prefrontal cortex.

It’s so important with our clients to give them exercises that are doable. You can do Dan Siegel’s Wheel of Awareness anytime; you can use the breathing exercise anytime.
The last thing I want to say is that many people will really never be able to sit for meditation – for a variety of reasons, they’re not going to be long-term meditators.

But they will do those short exercises or perhaps a body-based meditation like yoga or tai-chi or chi gong, and these definitely integrate the three parts of the brain, the body and mind.

By focusing on a yoga pose, you’re focusing on breath, on mindfulness of the stretch – and all these help people to integrate the brain, both vertically and horizontally.

**Dr. Buczynski:** Thanks! Now to you, Ron, Pat told me that providing brain basics to a traumatized patient can jumpstart their recovery. What do you think? Would that apply to other types of patients as well as trauma?

**Dr. Siegel:** I think it definitely can. This is a theme that’s come up throughout the series, which is how helpful it can be to patients to begin to see whatever their personal struggle is as the natural unfolding of neurobiology – the natural unfolding of the evolutionarily determined structure of their brain interacting in a lawful way with the environment.

For example, when she gave the example of her patient who, when he went to hug, passed out, she could explain to him what was going on in terms of the vagus nerve and other brain structures.

Then, he could feel much less ashamed about it; he could feel relatively comfortable with the fact that he had had that experience.

I find that in working with a wide variety of patients, if I can describe to them some kind of neurophysiological model for what is happening as they’re having the experience, then instead of feeling ashamed – instead of feeling like they have to defend against it and say, “Oh, no, that’s not me – I’m strong – I’m not weak,” all of that tends to fall to the wayside.

I will give you an example with a non-traumatized patient of mine – she had simply suffered a great deal of childhood neglect with a mom who just didn’t know how to be very responsive or affirming of her, and she – not surprisingly – developed a lot of social anxiety later in her life.

She would come into social situations and she would feel floods of anxiety. She would interpret this as, “There’s something grossly wrong with me. I’m not meant for the interpersonal world. I can never have friends.”

But then she came to see it instead as, “You know, this is a pretty natural consequence. The fight or flight system comes up when you’re in a circumstance which is frightening to you.

These situations are frightening to you because your past experience was people won’t be accepting of you, they won’t be interested in you – so naturally this is being aroused.
You can simply feel the arousal and notice it as a psychophysiological event and stay in the room with the other people.”

Just interpreting this as a psychophysiological event – rather than about her character, her worth, her capacity in the world – made it much easier for her to engage with other people.

**Dr. Buczynski:** Thanks – that’s really helpful. Joan, what are some specific exercises to use when practicing embedded relational mindfulness?

**Dr. Borysenko:** First of all, embedded relational mindfulness is a fabulous idea. It’s something that I’ve been involved in with clients for many years, but I never had a name for it!

> “If you have a client who’s reporting their internal experience out loud to you, you come into relationship with them in a very different way.”

But embedded relational mindfulness brings into account the relational connection between people.

If you have a client who’s actually reporting their internal experience out loud to you, you come into relationship with them in a very different way.

It was interesting that Pat reported a study that Vincent Felitti from the ACE studies had done. That study showed how a person reporting their trauma had fewer medical visits – that resulted after sitting with a physician who was relational just for a single visit.

Here’s an exercise that I have found very, very useful with clients. It’s an inquiry exercise, and it can be done specifically – as I will explain – or it can be done generally.

This is what I do: I ask people who are sitting with me simply to go inside, close their eyes for a minute, and take a few deep breaths, and then report to me what their inner sensations are.

Somebody might say something like, “Well, I’m feeling a sense of tightness around my heart and I’m feeling that my stomach is in knots.”

What is very interesting, as somebody reports these anxious feelings, is that just as they are witnessing them, they know that I am witnessing them, and in a fairly short order they will start reporting other sensations that may be more peaceful sensations.

I’ve found that to be extremely useful – that kind of relational medicine. I believe, indeed, that we are the medicine.

I want to say this to everyone: this is useful not only with your clients – it’s useful for all of us as human beings.

Here is one of the things that I frequently do personally with my husband, Gordon, if one of us seems upset to the other. We’ll just make the invitation, “Would you like to inquire into it?” and we’ll do just that.
One of us will close our eyes, inquire into, and report out loud the sensations while the other one listens.

It creates a tremendous empathy, a tremendous rapport, and often there is a working-through just in doing that practice. It’s an excellent practice.

**Dr. Buczynski:** Ron – Pat and I talked about the effects of mindfulness on the brain, particularly in cultivating empathy.

> “To experience what another person is feeling, we have to be able to be attuned to what is happening in our own mind and body.”

How else can we help our patients and the people we work with – how else can we help them increase their empathy?

**Dr. Siegel:** This dovetails very nicely with what Joan was just discussing…but first, let’s step back and see what empathy is.

Carl Rogers had a beautiful definition of empathy many years ago where he said, “Empathy is experiencing what another person is feeling as if it were your own experience but without losing the awareness that it is ‘as if.’”

To experience what another person is feeling, we have to be able to be attuned to what is happening in our own mind and body.

The recent research on empathy is showing that this capacity for attunement, the capacity to feel what is happening inside – exactly what Joan was just talking about – of making the inquiry to say, “What’s happening right now inside?” is very similar to what Eugene Gendlin did for years as a focusing technique.

When we can notice this, then we can also notice what another person is feeling.

The way in which we become attuned to another’s feeling (ostensibly because we don’t know for sure) but it’s probably through the operation of mirror neurons – when we sit with another person and they are having an emotional experience, that emotional experience resonates with us and we feel it within our own body.

Actually, anything that increases our capacity to notice what is happening inside us *will* increase our capacity for empathy with the other.

It requires a few other things, such as what we call “theory of mind,” which is the realization that “Everybody isn’t living in my head” – that people have other experiences born of other life courses, and it might be different for the other person so we need to be open-minded about that.

There are these wonderful studies and they are preliminary at this point, but they’re suggesting – in training psychotherapists and in teaching them mindfulness practice, which has as one of its effects the development of the insula and this attunement to proprioceptive experience – that teaching them this helps them to be experienced as better therapists.

Their clients or patients find them to be more empathically present and attuned. So many, many discoveries are all pointing in the same direction around this.
**Dr. Buczynski:** Thank you. Take good care, everyone.
About The TalkBack Speakers:

Since 1989, Ruth has combined her commitment to mind/body medicine with a savvy business model. As president of The National Institute for the Clinical Application for Behavioral Medicine, she's been a leader in bringing innovative training and professional development programs to thousands of health and mental health care practitioners throughout the world.

Successfully sponsoring distance-learning programs and annual conferences for over 20 years, she's now expanded into the “cloud.” During the past few years, she's developed intelligent and thoughtfully researched teleseminars, and most recently webinars, which continue to grow exponentially.

Joan Z. Borysenko, PhD, has been described as a respected scientist, gifted therapist, and unabashed mystic. Trained at Harvard Medical School, she was an instructor in medicine until 1988.

Currently the President of Mind/Body Health Sciences, Inc., she is an internationally known speaker and consultant in women’s health and spirituality, integrative medicine and the mind/body connection. Joan also has a regular 2 to 3 page column she writes in Prevention every month. She is the author of nine books, including New York Times bestsellers.

Ronald D. Siegel, PsyD is an Assistant Clinical Professor of Psychology at Harvard Medical School, where he has taught for over 20 years. He is a long time student of mindfulness meditation and serves on the Board of Directors and faculty of the Institute for Meditation and Psychotherapy. Dr. Siegel teaches nationally about mindfulness and psychotherapy and mind/body treatment, while maintaining a private clinical practice in Lincoln, Massachusetts. He is co-editor of Mindfulness and Psychotherapy (Guilford Press) and co-author of Back Sense: A Revolutionary Approach to Halting the Cycle of Chronic Back Pain (Broadway Books).