



A TalkBack Session: Keys to Changing the Brain

with Helen Fisher, PhD; Ruth Buczynski, PhD; Ron Siegel, PsyD; and Kelly McGonigal, PhD

Dr. Buczynski: Now we are going to start our TalkBack Session and we are going to chew over some of the ideas that we heard here today. This helps us digest these ideas and understand them better, and sometimes expand them into applications.

We have each week my two friends and colleagues, Dr. Ronald Siegel and Dr. Kelly McGonigal.

Ron is a licensed psychologist and Assistant Clinical Professor of Psychology at Harvard Medical School. He is also author of several books including *Mindfulness in Psychotherapy*, which has been used widely by lots of health practitioners.

Kelly McGonigal is a psychology instructor at Stanford University – an award-winning psychology instructor – and the author of *The Willpower Instinct*.

What Stood Out Most

Dr. Buczynski: So, let me start with you, Ron, and let's start and think about what stood out to you most in this session.

Dr. Siegel: What stood out most to me was, "It is remarkable that I haven't heard anybody talk about this before," and how fascinating it is that she is simply turning the eye of a scientist toward things that are so

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important in our lives and yet we tend to think of them as magical or mysterious. She is looking at them as just phenomena: "What are the factors and forces that make these things happen?"

So there are many things that stood out to me.

First, is the idea that there are basically three drive systems that operate in our love affairs – the sex drive, which helps us to find the partner, romantic love that helps us to focus on one individual intensively – for a while at least, and the attachment system that helps us to be there as caregivers – to stick together and raise children.

That was just a very nice outline. I am sure we will talk more about those three systems.

“There are 3 drive systems that operate in our love affairs.”

Just how she went about studying this stood out for me. It was wonderful: the idea of evoking feelings of romantic love, putting people in an fMRI scanner, seeing what happens, and including the distraction period in between.

As she said, people get hooked on romantic love – we’ll never get them to think of something else unless we force their mind to go somewhere else. I thought that was fascinating.

Dr. Buczynski: Yes – and using our favorite “count backwards by seven!”

“Romantic love is an addiction.”

Dr. Siegel: Yes, exactly!

The idea that romantic love is an addiction really stood out. If my wife hears this, I may get in trouble!

But I often think of romantic love in that way and see it as not our most balanced state of mind.

I thought it was fascinating that she was exploring it in that way and pointing out, “Look at the damage that has been done in the name of romantic love” – all of the crimes and all of the irrational and foolhardy behavior that people have gotten into.

And here are just a couple more – so many things stood out to me. The downside of SSRIs in this arena is very interesting.

You were very careful to point out their utility and their importance for helping people, but indeed, they do dampen down things that are very dopamine-intensive, such as ambition.

Dr. Buczynski: I should stop you because I don’t think everyone on the webinar will know what an SSRI is.

“SSRIs are basically antidepressants.”

Dr. Siegel: I’m sorry – that’s a good point. SSRIs are Selective Serotonin Reuptake Inhibitors, which are basically antidepressants.

There is a large class of antidepressants that are used today. The ones that are most familiar to people – Prozac, Zoloft, Effexor, Paxil – are all in that category.

“The idea that prairie voles mate for life was fascinating.”

Then, finally, what stood out were her prairie vole studies. The idea that prairie voles mate for life, that you could splice their genes into mice, and then mice would start to bond, or create these kinds of relationships – was fascinating.

Then, ultimately – and I hope we will talk about this a little bit – her studies about who gets attracted to who and why stood out as well.

Dr. Buczynski: Yes. Kelly, what stood out to you with Helen – or in what Ron has said?

Dr. McGonigal: As someone who knows more about the neuroscience of addiction than the neuroscience of romance and sex, what stood out for me is how really well she was describing the process of addiction and how similar the processes seem to be in the brain, whether you are addicted to a substance or addicted to romance.

It definitely made me think about my own experiences with love and romance.

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I have been with my husband now for about fifteen years, so it has been a while, but I do remember, in the early days, thinking things like, “I’m not this crazy – why am I acting this crazy? This isn’t who I am!” and being really frustrated with the fact that I felt like I wasn’t being my best self – I was doing things that were not very rational.

In a way, it was comforting because I could better understand what happens when it comes to addiction – why people do things that are destructive and seemingly irrational when they are under the influence of addiction in its other forms.

It is nice to have that window into my experience with love and romance.

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But what I really appreciated was the discussion of the fMRI differences between people who had been in love for a very long time versus newly infatuated.

That also mirrored my experience with my husband – the reward feels the same, the desire to approach feels the same, but there is an

incredible calm and sense of safety that goes along with it.

That description of an ideal long-term love really resonates with me.

How the Addiction of Romantic Love Impacts Rejection

Dr. Buczynski: Ron, let's stay with this idea of addiction just a little bit longer. If we see romantic love as a type of addiction, does that help us in any way to better understand rejection? Or, does it help us recover from rejection any better?

Dr. Siegel: I think very much so.

One of the things that tends to keep us trapped in our addiction to romantic love, including the feeling of unrequited longing that can interfere with living life for quite some time after a relationship goes sour, is the cultural support for romantic love as the highest possible ideal, as opposed to seeing it as an addictive process.

“One of the things that tends to keep us trapped in our addiction is cultural support for romantic love as the highest possible ideal.”

In my work as a psychotherapist, so often when people are struggling with this, I am working to try to deconstruct the whole mystique of romantic love for them so that they can see it for what it actually is.

So, what is that exactly?

The plus sides of romantic love are obvious – it feels really nice, and it can make us act charitably, generously, and compassionately toward another. It can bind us together so that we can begin living a life together. It certainly has its upsides.

“The plus sides of romantic love are obvious but the downsides keep us stuck in the paralysis and pain of rejection.”

But the downsides, particularly if a relationship has broken up tend to keep us stuck in the paralysis and pain of rejection.

When the relationship is going on, it gives us this exaggerated fear of loss: “I wouldn't be able to live without you.”

It leads to possessiveness – all of the ways in which people don't let their partners change, or let their partner express themselves fully, for fear that the state of mutual romantic love will be disrupted.

A lot of people aren't able to communicate honestly in relationships. They are afraid of losing the *high* – losing this experience of romantic love.

So it can be very helpful to look at it as a biological drive system – to see how it had an evolutionary purpose, but also to see that it may not be optimal for our well-being now, or it can get in the way of our well-being. That gives us much more freedom of choice.

What Helen Fisher didn't go into, but is really very interesting, is exactly how this drive manifests psychologically in humans, which I suspect is somewhat different than in other animals.

For us, when we are under the spell of romantic love, there is a tremendous amount of projection – we see the other as the idealized “prince” or “princess” that we have always wanted and that will complete us and

will somehow compensate for all of our feelings of inadequacy or incompleteness.

“Romantic love involves trying to work through out own feelings of deficiency or incompleteness.”

A lot of romantic love involves trying to work through our own feelings of deficiency or incompleteness, and when we can see that process for what it is – to see it both as a drive as well as a

psychological process to try to heal these past kinds of hurts – then it can free us to see it more objectively, and that helps us to get less caught up in it.

How Romantic Love Is a Basic Drive

Dr. Buczynski: Kelly, by recognizing the brain's reward system when it is in love, Helen is suggesting that romantic love, not just sex and mating, is a basic drive.

Do you agree with this? What are your thoughts on that?

Dr. McGonigal: I do agree. I am not an expert in this area, but certainly through the description that Helen offered about how the brain operates under romantic love, I definitely recognize it as a manifestation of other drives we are aware of, such as the drive to approach and consume food.

It is interesting to think about how a drive relates to our actual needs across the lifespan.

Biologically, it definitely seems as though the desire for romantic love, when it is triggered by a potential mate and maybe a particular point in your own physical maturation and development, will definitely manifest as a drive that propels motivation and cognition and shapes our experience of life in the same way that other drives can.

“It’s interesting to think about how a drive relates to our actual needs across the lifespan.”

But that is different than saying that romantic love is a drive that needs to be met in order to be psychologically healthy or fulfilled.

“People have times when they were in contact with this romantic love drive, and yet, at other times, that drive may not have been fulfilled due to grief, loss, not finding the right partner, or being divorced.”

That is a real tension that many people experience – they have had across their lifespan times when they were in contact with this romantic love drive, and yet, at other times, that drive, as a basic need, may not have been fulfilled due to grief, loss, not finding the right partner, or being divorced.

It is interesting to think about other ways that this reward system in social relationships can be used and met.

I have seen some research looking at the brain as it is affected by becoming a parent, and it seems to be very similar.

We know that when a mother becomes a biological parent, the reward system refines itself to be extremely reactive to her own infant. The amygdala and the general anxiety and alarm system of the brain also tend to be structurally strengthened.

You have this experience that is very much like being in love: you are obsessed with your infant – you have heightened vigilance, concern, and care.

“When a mother becomes a biological parent, that is very much like being in love: you are obsessed with your infant.”

It is clear that this drive in the system may change its focus and direction depending on the different points of your life.

I wish I could ask Helen what she thinks about how this need can be met for people who are not in romantic

relationships.

Dr. Buczynski: Right.

Sex Drive, Infatuation, and Attachment

Dr. Buczynski: Ron, let's look at Helen's idea about the three schemes for mating and reproduction: sex drive, infatuation, and attachment.

What are your thoughts – does that, in your mind, help us understand romantic love any better?

“Often people feel there is something wrong with them for whatever feelings they happen to be having around romantic love.”

Dr. Siegel: I think it does very much, in ways that both Kelly has been talking about and I have mentioned before. So often people feel that there is something wrong with them for having the feelings they happen to have around romantic love.

So often people feel uncomfortable that they are feeling too much or too little romantic love in a given situation, or that they are

feeling feelings toward people that they shouldn't, and this becomes very problematic.

If we see these drive systems as objective phenomena, then they become much less painful.

I am reminded of a study that was done by the Kinsey Institute, the heirs to Kinsey's original sex research. They did a very large study with people who self-identified as being bisexual.

They asked them about who they had romantic longings for and who they had actual romantic relationships with, who they had sexual longings for and who they had actual sexual relationships with, and who they had lifetime partnerships with and who they had short partnerships with.

They found that there was a great deal of inconsistency, even about which gender people chose for each of those six different categories.

There might be somebody who has romantic fantasies about one gender but actual romantic relationships

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with another; there would be people who had actual sexual relationships with one gender but romantic fantasies about another; there were people who are in happy life partnerships with one person, even though that wasn't the person they had a lot of sexual and romantic fantasies about.

“To see these as 3 drive systems frees us up to be honest with ourselves about what we feel toward all the people in our lives.”

So to see these three drive systems then frees us up to be honest with ourselves about what we do feel toward all the different people in our lives.

The answer is often surprising because it often doesn't fit some kind of stereotype.

Again, I draw on my work as a clinician. I have seen so many people who felt so badly about either not feeling the kind of love they felt they should feel toward a partner, or who are tortured by the feeling of: “How come I'm still pining for somebody who I lost so long ago?”

I am often reminded of how these feelings are culturally embedded – in the nineteenth century, you see all of these Victorian novels that say, “If the gallant gentleman or knight wasn't still pining after his beloved decades after parting, he must not have loved truly,” versus, “You're not over her yet? It's been a week! What's wrong with you?”

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Seeing these feelings as drives helps to free us from being in bondage to various expectations about what we are supposed to be feeling.

Thoughts on Sexual Desire, Sex, Touch, and Touch-Deprivation

Dr. Buczynski: Kelly, let's talk about sexual desire a little bit. Helen talked about how one of the best ways to increase sexual desire is to have sex.

First, I would like to know your thoughts on that, but in addition to that, not everyone is in a sexual relationship and that leaves me thinking about the whole broadening idea of touch and touch deprivation.

What do we know about all this, and what are your thoughts?

“When you rehearse a behavior, it primes the brain to look for and be more responsive to that opportunity.”

Dr. McGonigal: I am not an expert on increasing someone’s sex drive, but it definitely is consistent with everything I know about: when you rehearse a behavior, it primes the brain to look for and be more responsive to that opportunity. That is also part of the process of addiction.

So if there is an experience you want to have, giving yourself that experience, even if it feels like you are faking it a little bit, makes it much more likely that you will be in that spontaneous state later on.

That is truly consistent with what I know about emotion regulation and the process of addiction.

But I am a little more interested in this topic of touch deprivation.

In one of my side roles, I work as a yoga teacher and a yoga teacher trainer. What has been most striking to me over the years is how many people come to a yoga class because they are hoping to be touched.

There is a moment at the end of the class where a yoga teacher might put a blanket over you in Shavasana, or might give you a temple massage. Or there may be physical adjustments in the class where you get hands on your back in forward folds.

“What has been most striking to me over the years is how many people come to a yoga class because they are hoping to be touched.”

I kept hearing over and over again that people were coming to class because it was the only place they were being touched. It is not affectionate touch and certainly not sexual touch – it is just touch.

“There can be such a psychological consequence of being touch-deprived.”

I have heard from people who work in places like prisons that sometimes you are not even allowed to touch other people, and there can be such a psychological consequence of being touch-deprived.

Helen talked about this – the importance of hugs and touch for having healthy levels of oxytocin and other neurochemicals and hormones that support resilience and well-being. This is something we need to take seriously as a fundamental need.

It’s easy for us to talk about needing sex, but we don’t always talk about the fact that we need to be touched.

“It’s easy for us to talk about needing sex, but we don’t always talk about the fact that we need to be touched.”

People should give themselves permission, for example, to get a massage as a part of fundamental self-care.

If there are not people in your life who are providing that, then you can look for other ways of creating the experience of touch through pets and animals – be willing to offer touch to others in your life.

Just doing the movement of yoga may stimulate some of the same body processes as receiving a massage or having affectionate touch.

Touch is a basic need we should think about a little bit more.

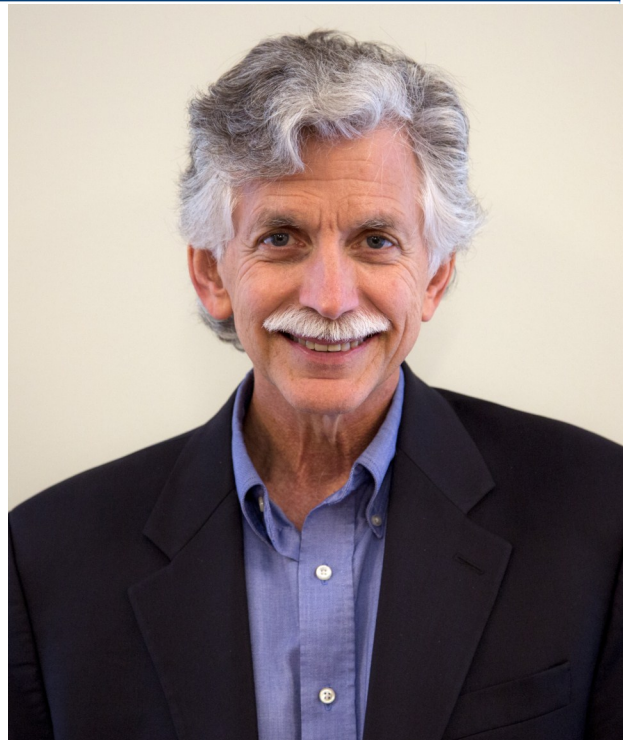
Dr. Buczynski: Thanks a lot everyone. Take care.



About the speakers . . .

Ron 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 for the Institute for Medication and Therapy.

Dr. Siegel teaches nationally about mindfulness and psychotherapy and mind/body treatment, while maintaining a private practice in Lincoln, MA. He is co-editor of *Mindfulness and Psychotherapy* and co-author of *Back Sense: A Revolutionary Approach to Halting the Cycle of Chronic Back Pain*.



Kelly McGonigal, PhD is a health psychologist and lecturer at Stanford University, and a leading expert in the new field of 'science-help'. She is passionate about translating cutting-edge research from psychology, neuroscience, and medicine into practical strategies for health, happiness, and personal success.



Her most recent book, *The Upside of Stress: Why is Stress Good for You and How to Get Good At It*, shows readers how to cultivate a mindset that embraces stress, and activate the brain's natural ability to learn from challenging experiences.