LINKS TO JOHN A. JOHNSON'S 2 COMMENTS, WHICH ARE REPRODUCED BELOW

https://www.psychologytoday.com/us/comment/542939#comment-542939

https://www.psychologytoday.com/us/comment/556448#comment-556448

Perhaps Prause's preconceptions led to a conclusion opposite of the results

Submitted by John A. Johnson Ph.D. on September 22, 2013 - 9:00pm

My mind still boggles at the Prause claim that her subjects' brains did not respond to sexual images like drug addicts' brains respond to their drug, given that she reports higher P300 readings for the sexual images. Just like addicts who show P300 spikes when presented with their drug of choice.

How could she draw a conclusion that is the opposite of the actual results? I think it could be do to her preconceptions--what she expected to find. I wrote about this elsewhere. http://www.psychologytoday.com/blog/cui-bono/201308/preconceptions-may-color-conclusions-about-sex-addiction

Reply to John A. Johnson Ph.D. | Quote John A. Johnson Ph.D.

A gap in logical inference

Submitted by John A. Johnson Ph.D. on July 19, 2013 - 2:35pm

Mustanski asks, "What was the purpose of the study?" And Prause replies, "Our study tested whether people who report such problems [problems with regulating their viewing of online erotica] look like other addicts from their brain responses to sexual images."

But the study did not compare brain recordings from persons having problems regulating their viewing of online erotica to brain recordings from drug addicts and brain recordings from a non-addict control group, which would have been the obvious way to see if brain responses from the troubled group look more like the brain responses of addicts or non-addicts.

Instead, Prause claims that their within-subject design was a better method, where research subjects serve as their own control group. With this design, they found that the EEG response of their subjects (as a group) to erotic pictures was stronger than their EEG responses to other kinds of pictures. This is shown in the inline waveform graph (although for some reason the graph differs considerably from the actual graph in the published article).

So this group who reports having trouble regulating their viewing of online erotica has a stronger EEG response to erotic pictures than other kinds of pictures. Do addicts show a similarly strong EEG response when presented with their drug of choice? We don't know. Do normal, non-addicts show a response as strong as the troubled group to erotica? Again, we do not know. We don't know whether this EEG pattern is more similar to the brain patterns of addicts or non-addicts.

The Prause research team claims to be able to demonstrate whether the elevated EEG response of their subjects to erotica is an addictive brain response or just a high-libido brain response by correlating a set of questionnaire scores with individual differences in EEG response. But explaining differences in EEG response is a different question from exploring whether the overall group's response looks addictive or not. The Prause group reported that the only statistically significant correlation with the EEG response was a negative correlation (r=-.33) with desire for sex with a partner. In other words, there was a slight tendency for subjects with strong EEG responses to erotica to have lower desire for sex with a partner. How does that say anything about whether the brain responses of people who have trouble regulating their viewing of erotica are similar to addicts or non-addicts with a high libido?