

Review of: "Effects of Schizophrenia on Attention"

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The article addresses a very interesting topic - the relationship between attention and schizophrenia. Definitely, the author has made a huge effort to review and integrate the extensive literature on the subject. However, the manuscript contains too many unclear statements, unjustified generalizations, and lacks more recent citations, making it of limited utility in its current form. Furthermore, the author does not critically evaluate sources, leaving the reader uncertain which findings are more significant or important for forming an opinion about the main topic. This is of key importance since schizophrenia is a very complex clinical entity. There is a lack of basic methodological information such as sample sizes, not to mention purely statistical parameters like effect sizes. Regarding recommendations, I suggest a major revision.

Other major concerns:

1. Lack of clear attention definition - The definition provided at the beginning of the paper is too general: "Physiologically, visual attention can be defined as a neural signal that modulates main signal." Such a definition could also apply to neuromodulatory systems that have functions other than attentional. Equating attention (a theoretical term at the level of cognitive functions) with a single type of neural activity can be considered a category error. Moreover, it is not entirely clear what "main signal" means - this is only explained at the end of the article. I would advise the author to construct the definition that follows the classic Aristotelian rule: per genus et differentiam.
2. There is also a lack of clear definition of attention types - the author attempts to define them through tasks (section 2.2), but this is a confusing way of defining the cognitive function.
3. The text is filled with very general and vague statements that do not meet the criteria for high-level scientific writing. I gave several examples below:

Specific Section Concerns:

Section 2.3

"Neurotransmitters dopamine and glutamate, which are linked with attention and working memory, are disrupted by schizophrenia" - How exactly are they disrupted? What does "disrupted" mean? This was not explained by the author.

Section 2.4

"Since attention modulates BOLD signal in the fusiform gyrus (GF), which interacts with amygdala, attention may have effects on emotional and reward related facial stimuli" - What does "interact" exactly mean? What does it mean that "attention may have effects on emotional and reward related facial stimuli"? What kind of effects? Also not explained by

the author.

Section 2.5

"Attention and working memory (WM) are closely related cognitive processes" - What the author means by "closely related" is not explained in any way; furthermore, what kind of attention does he refer to here?

Sections 3.4 and 3.5

"Schizophrenics show abnormal neural responses to emotionally salient stimuli in the amygdala, ventral striatum, and visual cortex" and "Schizophrenics show abnormal functional MRI response to photic stimulation in visual area" - What does the author mean by "abnormal responses"? This was not explained in any way, yet it is important to gain a better understanding of the altered neuronal circuitry in schizophrenia.

Methodological Issues

There is a lack of a more causally oriented approach aimed at ascertaining the causal mechanisms, e.g.: "Schizophrenics do not show right hemisphere advantages on the facial task whereas normal controls do." Can the lack of RH advantage be regarded as the cause of the altered brain activation, or is it rather an effect of the disorder? There's no clear attempt to categorize the reviewed empirical evidence in such a way. Moreover, the author does not mention which studies include patients who are medicated or unmedicated, or chronic or after the first episode. These aspects may, in fact, have a profound influence on understanding the results.

Conclusion

Unfortunately, there are too many vague and general statements in the manuscript. This vagueness and lack of many important details about the cited studies negatively affect the credibility of the conclusions reached by the Author. These weaknesses should be addressed if the paper is to be considered for publication.