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CAN COGNITIVE AND NEGATIVE SYMPTOM
SEVERITY IN SCHIZOPHRENIA PREDICT
REWARD LEARNING ABILITY?

Maria Gehred

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Schizophrenia is a severe mental disorder consisting of positive, negative, and cognitive symptoms. The current project analyzes the link between cognitive and negative symptoms by examining how schizophrenia patients learn reward associations. It is increasingly indicated that people with schizophrenia experience reward-learning deficits. However, the literature investigating relationships between these deficits and the symptoms of schizophrenia is mixed. This study seeks to further examine the relationships surrounding reward-learning deficits in schizophrenia. Participants with schizophrenia (N = 49) completed clinical assessments measuring negative symptom severity and level of functioning, as well as running span and reinforcement learning tasks in the laboratory. Analyses revealed that working memory capacity, but not negative symptom severity, were related to reward-learning performance. However, there was some evidence that high and low negative symptom groups may learn reward and punishment associations in a different manner. In addition, reward processing was related to functional outcome among people with schizophrenia; better performance predicted higher levels of functioning. My findings suggest that further research is needed in order to reconcile conflicting evidence surrounding the relationship between negative symptoms and reward processing. With more information about both the intersection of negative symptoms and cognitive deficits as well as their underlying causes, treatments could be developed that would help improve both the quality of life and the practical functioning of people with schizophrenia.