significantly moderate the relationship between THC use and the other cognitive domains.

Conclusions: Positive symptoms moderated the relationship between cannabis use and processing speed among people with schizophrenia. The reasons for this are unclear, and require further exploration. Additional investigation is warranted to better understand the impact of THC use on other tests of neuropsychological performance and symptoms in schizophrenia.

Categories: Schizophrenia/Psychosis
Keyword 1: schizophrenia
Keyword 2: cannabis
Keyword 3: neurocognition
Correspondence: Jessica J. Woodyatt, University of Nevada, Las Vegas, woodyatt@unlv.nevada.edu

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53 Working Memory Network Load Engagement in Schizophrenia

John R. Duffy, Michael L. Thomas
Colorado State University, Fort Collins, CO, USA

Objective: Cognitive deficits in patients diagnosed with schizophrenia are a core feature of the disorder. There are currently no treatments for these cognitive deficits. Our aim was to examine and compare patterns of increased versus decreased activity in the central executive network (CEN), salience network (SN), and default mode network (DMN) between healthy controls (HCs) and patients diagnosed with schizophrenia (SZs) as well as to explore the influence of task load on these networks between HCs and SZs.
Participants and Methods: Analyses focused on a secondary dataset comprising Blood Oxygen-Level Dependent (BOLD) data collected from 25 HCs and 27 SZs who completed a working memory (WM) task (N-back) with 5 load conditions while undergoing functional magnetic resonance imaging (fMRI). Region of interest (ROI) data were analyzed using linear mixed-effects models.
Results: Group activation differences were found in the posterior salience network (pSN), default mode network (DMN), dorsal default mode network (dDMN), and ventral default mode network (vDMN) showing greater activity

for SZs. Specifically, pSN, DMN, dDMN, and vDMN all showed increased activity in SZs compared to HCs. The curve of brain activity was consistent between HCs and SZs with the exception of the vDMN, where HCs show greater activation at modest mental workload (quadratic curve) and SZs showed greater brain activation at lower mental workload (linear). In the CEN, there were no group differences, and the response curve was the same for both groups.
Conclusions: These group differences demonstrate network difference between HCs and SZs and could show value in treatments targeting cognitive deficits in SZs from a large-scale brain network connectivity perspective. Future studies are needed to confirm these results with larger sample size in order to examine potential subtleties of interactions between these networks.

Categories: Schizophrenia/Psychosis
Keyword 1: working memory
Keyword 2: brain function
Keyword 3: schizophrenia
Correspondence: John R. Duffy Colorado State University john.duffy@colostate.edu

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54 The Influence of Sex on Cognitive Control Performance and Frontoparietal Network Integrity in First-Episode Psychosis

Kaitlyn Greer[1], Sierra Jarvis[2], Ben Graul[2], Colt Halter[2], Aaron Clouse[2], Madeleine Reading[2], Braydon Lee[2], Karteek Popuri[3], Mirza Faisal Beg[4], Derin Cobia[2]
[1]University of Michigan, Ann Arbor, MI, USA.
[2]Brigham Young University, Provo, UT, USA.
[3]Memorial University Newfoundland, St. John's, Newfoundland, Canada. [4]Simon Fraser University, Burnaby, British Columbia, Canada

Objective: Cognitive deficits in first-episode psychosis (FEP) are well documented, particularly aspects of cognitive control, which is one of the primary hypothesized functions of the frontoparietal network (FPN). The clinical features of psychotic disorders are known to differ between men and women, but little work has systematically studied neurobiological differences between the sexes, particularly in