**Supplementary Material**

**Participants**

We recruited outpatients with schizophrenia or schizoaffective disorder (SCZ; total: N = 66, schizophrenia: n = 54, schizoaffective: n = 12) as part of two independent studies (years: 2015 and 2016) investigating negative symptoms of SCZ using EMA. The study samples were recruited sequentially from outpatient and local mental health clinics, and flyers posted around the community. Participants from the first study were not allowed to participate in the second. Participant demographics (reported in Table 1) did not differ between samples. Consistent with prior EMA research (Myin-Germeys, Nicolson, & Delespaul, 2001), participants with less than 33% response rate to the EMA survey (n = 3) were excluded from the analyses (final N = 63). This sample size meets or exceeds the range of ~63% of EMA studies within a schizophrenia population (Vachon, Viechtbauer, Rintala, & Myin-Germeys, 2019). Of note, the sample did not include a healthy control group as the study goals were to dimensionally explore symptom and behavioral correlates of goal-directed behavior within a schizophrenia population.

Participant diagnoses were confirmed using the Structured Clinical Interview for DSM-IV-TR (American Psychiatric Association, 2000). Exclusion criteria included (1) DSM-IV diagnosis of substance abuse or dependence in the past 6 months; (2) DSM-IV diagnosis of a current mood disorder; (3) changes in medication within two weeks prior to consent; (4) IQ less than 70 as measured by the Wechsler Test of Adult Reading (WTAR; Wechsler, 2001), and (5) history of severe head trauma and/or loss of consciousness. All participants provided written informed consent to the protocol approved by the Washington University Institutional Review Board. Aside from exclusion for fMRI contraindications (e.g., metal in the body), in the second study, inclusion and exclusion criteria did not differ between the studies.

**Clinical Assessment and Behavioral Tasks (additional details)**

***Clinical Assessments***

At the first study visit, participant diagnoses were confirmed through the DSM-IV-TR Structured Clinical Interview for Axis I disorders administered by a master’s or PhD level clinician. At the second study visit, additional clinical assessments were administered to assess for symptoms during the EMA week. Negative symptoms were assessed with the clinician-rated Clinical Assessment Interview for Negative Symptoms (CAINS; Kring, Gur, Blanchard, Horan, & Reise, 2013), which includes Expression and Motivation and Pleasure (MAP) subscales. We used the total MAP subscale, which includes sections related to motivation and frequency of pleasure for social relationships, work and school, and recreation. State depression symptoms for the EMA week were assessed using the Beck’s Depression Inventory—Second Edition (BDI-II; Beck, Steer, & Brown, 1996) self-report measure. Higher scores on both the CAINS and BDI indicate increased impairment.

***Behavioral Tasks***

**Effort Expenditure for Rewards Task (EEfRT).** Participants completed a modified version (Barch et al., 2014b; Moran et al., 2017a) of the original EEfRT task (Treadway, Buckholtz, Schwartzman, Lambert, & Zald, 2009). On a series of trials, participants decided whether to complete an easy (low-effort) or hard (high-effort) task based on monetary reward value and probability of reward receipt. For the easy task, participants used their dominant index finger to make approximately 20 button presses in 7 seconds, with a chance to win $1. For the hard task, participants used their non-dominant pinky finger to make approximately 100 button presses in 21 seconds, with the chance to win between $1.24 and $4.30. To make their task decisions, participants were presented information prior to each trial about the probability of reward receipt for successful task completion (50% versus 88%), and the reward value for the hard task for that trial ($1.24-$4.30). Participants completed 57 trials and were paid up to $9 for this task. The ECDM outcome measures were the total number of hard task choices (Total Hard), the percent change in hard task choices as reward probability increased from 50% to 88% (Probability Increase), and the percent change in hard task choices as monetary reward increased from low ($1.24 -$2.77) to high ($2.77 - $4.30) values (Monetary Increase).

**Running Span Task.** Participants completed a Running Span Task to assess their working memory. The task asked participants to remember the last x number of letters in order from an unpredictable number of letters presented on a computer screen (2-s apart). The earliest trials asked participants to remember the last letter presented (level 1), and this increased up to the last 5 letters presented (level 5). Participants advanced to the next level if they correctly recalled at least 2 out of 4 trials on the previous level. The outcome measure was the total number of correct letters recalled across trials.

**University of California, San Diego Performance-Based Skills Assessment- Brief (UPSA-B).** Participants also completed the UPSA-B task to measure their ability to perform functional activities. This task included 1) a Financial Skills section in which participants completed tasks such as making change, and paying makeshift bills, and 2) a Communications Skills section in which participants were assigned tasks such as dialing the emergency number (911) or identifying relevant information from a mock appointment letter. The outcome measure was participants’ total score across these subtasks.

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