duration including measures of geolocation, physical activity, screen use, cognition, and self-reported surveys. In-clinic assessments at study start and at three months assessed cognition (Brief Assessment of Cognition in Schizophrenia), psychosis symptoms (Positive and Negative Symptom Scale; PANSS) and other measures. Clustering and correlational methods were utilized to compare active and passive data streams both within and across groups.

Results: Adherence to active data (surveys and cognitive assessments) on the phone was roughly 50%, both for those with schizophrenia as well as for the healthy controls. Four unique clusters that included both active and passive data emerged for each group and the clusters were distinct with unique symptoms, cognition, and passive data metrics. Each group also possessed distinct correlations between active and passive data, with the schizophrenia group having more statistically significant findings especially around sleep.

Discussion: Digital phenotyping methods offer the potential to identify unique clusters of patients based on both their self-reported as well as passive data. Future research will explore the utility of these clusters in predicting functional outcomes and offering personalized treatment.

T99. HARNESSING DIGITAL TECHNOLOGIES TO ASSESS AND TREAT COGNITIVE SYMPTOMS IN SCHIZOPHRENIA

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Background: Cognitive impairments are a core feature of schizophrenia. Although cognitive impairments have consistently shown to have negative impacts on functional outcomes among individuals with schizophrenia, assessing and treating these symptoms in clinical settings remains a difficult challenge. Interestingly, the growing potential of new digital technologies, such as smartphone applications and virtual reality, hold great promise in alleviating these impairments.

Methods: This presentation will introduce results from two recent studies using digital technologies to assess and treat cognitive symptoms in schizophrenia. In the first study, smartphone versions of the pen-and-paper Trail Making Tests A and B were developed. These cognitive tests measure speed of processing and cognitive flexibility. We assessed the validity of the smartphone versions of both Trail Making Tests in measuring these cognitive domains in 37 healthy controls and 26 individuals with schizophrenia.

Results: Results showed no significant effect of practice over time on the smartphone cognitive tests. Additionally, significant differences were observed between controls and individuals with schizophrenia on both smartphone tests (Part A: t = -3.88, p = .004; Part B: t = -3.29, p = .002). Moreover, longitudinal results showed no significant effect of practice over time on the smartphone cognitive tests.

Discussion: Digital technologies have the potential to optimize cognitive assessments, monitoring, and care in schizophrenia. Our findings support the feasibility and efficacy of using digital technologies to measure and treat cognitive impairments in schizophrenia. Our research also highlights the importance of including scientists, clinicians, and content experts with schizophrenia in the development of these tools to ensure their validity and facilitate clinical implementation.

T100. BELIEFS ABOUT THE SELF AND OTHERS IN PARANOIA

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Background: Compassionate imagery may be one method of targeting the negative beliefs about the self and others that paranoid thoughts build upon. This talk presents two interventionist-causal studies testing this hypothesis, one targeting compassion for the self and one targeting compassion for others. These studies form part of the programme of work testing the manipulation of putative causal factors in paranoia, in individuals from the general population scoring highly for current paranoid ideation.

Methods: Two hundred such individuals were recruited. The studies used a randomised controlled experimental design, with embedded tests for mediation. Study one targeted self-compassion via creation of a compassionate coach image. Study two targeted compassion for others via loving kindness meditation. Individuals repeatedly entered neutral virtual reality social environments and changes in compassion and paranoia were assessed.

Results: Study one showed that, in comparison to the control group, those who practised compassionate coach imagery significantly increased in self-compassion (group difference=2.12, C.I.=1.57;2.67, p=<0.0001, d=1.4) and decreased in paranoia (group difference=-1.73, C.I.=-2.48;-0.98, p=<0.0001, d=0.8). Mediation analysis indicated that change in self-compassion explained 57% of the change in paranoia. Study two showed that in comparison to the control group, those who practised loving kindness meditation significantly increased their compassion for others (group difference=3.26, 95% C.I.: 2.72;3.80, p=<0.0001, d=1.7), and decreased their paranoia (group difference=-1.70, C.I.=-2.51;-0.89, p=<0.0001, d=0.8). Change in compassion for others explained 63% of the change in paranoia.

Discussion: Together, the studies suggest that targeting negative beliefs about the self and others using compassionate imagery causes reductions in paranoia, which may have benefits in clinical populations.

T101. ABERRANT SALIENCE PREDICTS PSYCHOTIC-LIKE AND DISORGANIZED SYMPTOMS IN DAILY LIFE: AN EXPERIENCE SAMPLING STUDY

Abstract not included.

T102. TELEPROM-Y: IMPROVING ACCESS AND EXPERIENCE OF MENTAL HEALTHCARE FOR YOUTH THROUGH VIRTUAL MODELS OF CARE

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Background: About 1 in 5 youth have a mental illness, with 75 percent of all mental illnesses having their onset in childhood or adolescence (Kim-Cohen et al., 2003). In Ontario, 157,900 youth rated their mental health as fair or poor, a significant increase from 2007 (Boak et al., 2014). Not only do mental health concerns cause difficulties at onset, they can also disrupt important life transitions and developmental milestones, as well as being
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T103. THE EFFECT OF VIRTUAL REALITY COGNITIVE BEHAVIORAL THERAPY ON PARANOIA AND MOOD STATES

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Background: Recently, the efficacy of a novel virtual reality based cognitive behavior therapy (VR-CBT) for paranoia was demonstrated. Evidence is growing that the maintenance of psychosis may be influenced by affective processes. This study examined how treatment with VR-CBT influenced positive and negative affect states, and whether the interplay between mental states was affected.

Methods: The sample consisted of 91 patients with a psychotic disorder randomized either to 16-session individual VR-CBT or treatment as usual. The experience sampling method (ESM; a structured diary technique) was used to assess mental states at baseline, post-intervention and 6-month follow-up. Mixed model analyses were conducted to study treatment effects. Lagged associations between mental states were estimated at baseline and post-intervention, and were visualized with networks.

Results: VR-CBT, but not treatment as usual, resulted in reduced levels of paranoia and negative affect. At pre-intervention networks depicting the dynamic interplay between mental states over time had limited significant connections, with most stable connections being auto-relations. I.e., paranoia was best predicted by paranoia at the previous moment. The dynamic interplay between affective states did not change over time after VR-CBT.

Discussion: We found that VR-CBT specifically targets paranoia and there are indications that VR-CBT had an enduring effect on negative emotions. Unexpectedly, we did not find evidence that negative mental states such as feeling down or lonely triggered paranoia in the next moment even at pre-intervention, and these temporal relations between mental states did not change over time in response to treatment.

T104. PSYCHOTIC-LIKE EXPERIENCES AND PROBLEMATIC GAMING BEHAVIOR IN ONLINE GAME FORUMS

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Background: Psychotic-like experiences (PLE) are reported in the general population, characterizing a non-clinical psychosis phenotype. Although those who report PLE have a higher probability of transitioning to psychosis, PLE are usually a transitory state, and most individuals will not transition to psychosis. However, PLE samples may experience symptoms such as social withdrawal, social anxiety, or social anhedonia. These symptoms may lead individuals with PLE to choose online gaming as a preferred means of social interaction.

Objective: This study aims to examine the relation between PLE and problematic online gaming.

Methods: An online questionnaire was posted in online game forums, on online fan-pages with German-speaking domains and in social media groups. Data from adolescents and young adults (14 to 30 years old; 55.4% males) from Austria and Germany (N=280) was analyzed. Measures: PLE were assessed with the Early Recognition Inventory based on the Interview for the Retrospective Assessment of the Onset of Schizophrenia (ERIraos); problematic gaming behavior was assessed with the Compulsive Internet Use Scale (CIUS) adapted for online gaming; social anxiety was assessed with the Mini-Social Phobia Inventory (Mini-SPIN); preference for online social interactions was assessed with the Preference for Online Social Interaction scale (POSI). Analyses: Problematic gaming behavior was divided into two groups based on the suggested cut-off point of ≥28 on the CIUS (i.e., ≥28 no gaming disorder). Multivariable logistic regression analyses were performed and adjusted for sex, age, gaming hours, POSI, and social anxiety.

Results: A total of 63 individuals reached the cutoff for a gaming disorder, while 217 did not reach the cutoff. The majority of subjects in the gaming disorder group were males, young adults (19–24 years old, M=23.1, SD=3.7), single, or had less than high school diploma. Individuals who experienced an increased amount of PLE had a higher probability of reaching the cut-off for a gaming disorder (AOR=1.35 [95% CI 1.19–1.53]). Males were three times as likely as females to have a gaming disorder.

Discussion: Results implicate a close relation between the phenomena of PLE and continued problematic online gaming.

T105. VERBAL MEMORY MEASUREMENT TOWARDS DIGITAL PERSPECTIVES IN FIRST-EPISTEME PSYCHOSIS: A SYSTEMATIC REVIEW STUDY

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Background: Psychosis is a clinical syndrome which can have detrimental effects on patients in different aspects of functioning such as thought, behavior, and cognition. Even in early phases psychotic spectrum illnesses like schizophrenia, patients can experience cognitive decline prior to overt affective states. Unexpectedly, we did not find evidence that negative mental states such as feeling down or lonely triggered paranoia in the next moment even at pre-intervention, and these temporal relations between mental states did not change over time in response to treatment.