

delusions. In this study, we examined the association between subclinical persecutory delusions (PD) and social inference, testing the prediction that proneness to PD is related to altered social inference and beliefs.

Methods: We included 148 participants who scored on opposite ends of Freeman's Paranoia Checklist (PCL). High scorers and low scorers were thus assigned to two respective participant groups, which were matched according to age, education in years, and gender. Participants performed a probabilistic advice-taking task with a dynamically changing social context (volatility) under one of two experimental frames. Our design was thus 2x2 factorial (high vs. low delusional tendencies, dispositional vs. situational frame). In the task, participants had to integrate two types of cues simultaneously in order to make informed predictions, namely a social cue (advice provided by an adviser) and a non-social cue (probabilities given via pie-chart). In addition, the experimental frames differentially emphasized possible reasons behind unhelpful advice and either highlighted (i) the adviser's possible intentions (dispositional frame) or (ii) the rules of the game (situational frame). Task structure was identical across frames. When integrating the framing information, participants were expected to take advice into account more in the situational frame than in the dispositional frame, since the latter induces some mistrust due to highlighting the adviser's intentions.

Results: The behavioral data showed significant group-by-frame interactions ($F=5.7381$, $p<0.05$), indicating that in the situational frame high PCL scorers took advice less into account than low scorers. This reduced adaptation to the frame was particularly visible after the experience of volatility. Additionally, high PCL scorers believed significantly more frequently that incorrect advice was delivered intentionally ($F=16.369$, $p<0.001$) and that such malevolent behavior was directed towards them personally ($p<0.05$). High scorers also reported attributing unhelpful advice more to the adviser ($F=8.047$, $p<0.01$) instead of the rules of the game, compared to low scorers. The high scorers in the PCL reported higher negative, positive, and depressive symptoms on the CAPE compared to low scorers ($p<0.001$) but did not differ regarding cognitive performance in the Brief Neurocognitive Assessment (BNA).

Discussion: Overall, our results suggest that social inference in individuals with subclinical PD tendencies is less sensitive to differences in social context and shaped by negative beliefs about the intentions of others. These findings may help future attempts of identifying at risk mental state individuals and understanding maladaptive behavior in schizophrenia.

F91. ASSOCIATION BETWEEN SYMPTOM DIMENSIONS AND EXECUTIVE FUNCTION IN SCHIZOPHRENIA

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Background: Impaired executive function is a core cognitive deficit in schizophrenia and strongly associated with functional outcomes. Understand the relationship between clinical symptoms and executive function may help the clinician to better manage the cognitive impairment and inform prognosis. The main objective of the present study was to investigate the association between symptom dimensions and executive function in schizophrenia.

Methods: One-hundred and two patients with schizophrenia were recruited from the schizophrenia outpatient clinic from Universidade Federal de São Paulo (PROESQ/UNIFESP). Diagnosis was confirmed through the Structured Clinical Interview for DSM-IV (SCID-I) and dimensional psychopathology was assessed by the Positive and Negative Syndrome Scale (PANSS). The PANSS items were grouped in five factors: positive, negative, disorganized/cognitive, mood/depression and excitement/hostility factors. The cognitive battery included the following tests: Plus-Minus Task, Number-Letter Task, Trail Making Test - Part B, Keep Track Task, Letter Memory Task, Visual Working Memory Test - MTV, Stroop Test,

Semantic Generation Task and The Tower of London Test - TOL. All tasks were computerized and assessed by the software Cronos. A single latent variable for executive function was derived through Confirmatory factor analysis and yield good model fits (CFI: 0.997; TLI: 0.996; RMSEA: 0.017; SRMR: 0.041).

Results: When the factors were entered individually, negative ($df=121$, $r=0.35$, $p<0.001$) and disorganized ($df=121$; $r=-0.48$, $p<0.001$) factors were significant predictors of EF. In a multivariate regression analysis, including all the factors and correcting for age, gender and duration of illness, only the disorganized factor remained significant ($r^2=0.21$, $p<0.001$).

Discussion: The disorganized factor was the symptomatic dimension more strongly associated with EF. The potential use of disorganized dimension as indicator of poor executive function and related outcomes, i.e., treatment resistant schizophrenia, should be further investigated.

F92. COMPARISONS BETWEEN CANNABIS USERS AND NON-USERS PATIENTS WITH FIRST-EPIISODE PSYCHOSIS IN NEUROCOGNITIVE FUNCTIONING: A META-ANALYSIS

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Background: Patients with first episode psychosis (FEP) frequently report cannabis use although its effects on cognitive functioning are still unclear. Several studies suggest a decrease in the executive function, verbal memory and working memory of FEP cannabis users (González-Pinto et al., 2016; Mata et al. 2008) while other studies show improvements in the neurocognitive function of this group (Setién-Suero et al., 2017, Cuhna et al., 2013, Leeson et al., 2012, Yücel et al., 2012; Rodríguez-Sánchez et al., 2010) or even absence of neurocognitive differences between FEP cannabis users and non-users (Burgra et al., 2013). This meta-analysis aims to explore the magnitude of effect of cannabis use on neurocognition in patients with FEP.

Methods: Articles for consideration were identified through extensive literature searches using online databases, which included PubMed, Medline and PsychInfo. The search was limited to English language articles. The used keywords were: "first episode psychosis" OR, "neurocognition and cannabis", in combination with a number of neuropsychology-related terms including "neurocog*" and "neuropsycholog*". Given that other substances including alcohol, cocaine, and stimulants are associated with altered cognitive performance, studies in which participants met for polysubstance use disorders, even if there was preferential use towards cannabis, were excluded. Eight studies from 2008 to 2017 met inclusion criteria from a total sample of 16 initial studies. Five hundred and eighteen of these participants were cannabis users with FEP, and 639 were patients with no cannabis use. A total of 58 effect sizes of neuropsychological test variables were categorized into 4 cognitive domains (premorbid IQ, executive functioning, working memory and verbal memory and learning). Age of first cannabis use, duration of cannabis use, percentage of males and age were abstracted and assembled as moderator variables. Standardized mean differences were computed for each cognitive domain between cannabis-using patients and patients with no history of cannabis use. Negative effect sizes would display better cognitive functioning of non-cannabis users. We employed a meta-analytic three level model to combine effect sizes across studies.

Results: Effect sizes were not significantly different from zero in any of the neurocognitive domains when FEP cannabis users and non-users patients were compared [working memory ($d= -0.03$, $SE=0.15$, $CI = -0.33-0.26$, $p=0.83$), executive function ($d= 0.14$, $SE=0.16$, $CI = -0.17-0.45$, $p=0.37$), verbal memory and learning ($d= 0.04$, $SE=0.15$, $CI = -0.25-0.33$, $p=0.27$) and premorbid IQ ($d= 0.06$, $SE=0.09$, $CI = -0.24-0.12$, $p=0.50$)]. Only one moderator variable resulted significant in the executive function denoting superior performance in FEP cannabis-using patients as they were older.

Discussion: Cannabis use is not related to an ameliorated or improved neurocognitive functioning in patients with a first episode psychosis. This is consistent with previous studies which showed absence of differences in the neurocognitive functioning between FEP cannabis users and non-users (Burgra et al., 2013). However, it has been demonstrated that continued cannabis intake worsens cognitive performance although some of the FEP patients had better premorbid capacities (González-Pinto, 2016). Moreover, the doses and the different types of cannabis preparations may interfere the present results. Meta-analysis on longitudinal studies which include these potential moderator variables may be performed in the future.

F93. SUBCLINICAL PSYCHOSIS COMPONENTS MAKE DIRECT AND INDIRECT CONTRIBUTIONS TO ACTIVE SUICIDE IDEATION IN ADOLESCENTS

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Background: Subclinical psychosis predicts concurrent and future suicidal ideation and attempts. A key account of this relationship is that it is spurious—that suicidality and subclinical psychosis are both products of a common confounding factor such as environmental risk exposures (e.g., neglect or abuse) or the burden of general psychopathology. This account is unsatisfactory for several reasons, including that subclinical psychosis may be especially predictive of more lethal forms of suicidal behaviour. Moreover, few have considered the relationship in light of contemporary accounts of suicide. Therefore, we sought to better understand the link between subclinical psychosis and suicidality using a contemporary ideation–action framework in which perceived burden and thwarted belonging are distinguished as proximal pathways to suicidal ideation. We tested whether this framework fully mediates the relationship of subclinical psychosis with suicidal ideation, consistent with a common confounding factor account.

Methods: Randomly sampled 15- to 18-year-olds from a socio-economically representative high school were invited to participate anonymously. Of those invited ($n = 300$), 59% provided informed consent and completed self-report measures of positive, negative, and disorganised components of subclinical psychosis (Schizotypal Personality Questionnaire [SPQ]), thwarted belonging and perceived burden (Interpersonal Needs Questionnaire), and passive and active suicidal ideation (Beck Scale for Suicide Ideation [BSS]). Participants were classified using BSS responses as non-ideators, passive ideators, or active ideators. In regression modelling (maximum likelihood estimation with bias-corrected bootstrapping), direct and indirect effects of SPQ components on ideator classifications were obtained. Mediators were perceived burden, thwarted belonging, and their interaction term. Sex and migrant status were entered as covariates.

Results: Of those with complete data ($n = 156$), 69.9% were non-ideators, 12.8% were passive ideators, and 17.3% were active ideators. In bivariate analyses, SPQ positive scores predicted passive ideation ($r = .24$, $p < .001$) but negative ($r = .13$, $p > .05$) and disorganised scores ($r = .14$, $p > .05$) did not. In contrast, active ideation was strongly predicted by negative ($r = .39$, $p < .001$) and disorganised scores ($r = .34$, $p < .001$) and less strongly predicted by positive scores ($r = .19$, $p < .05$). Mediation models predicted passive ($R^2 = .29$, $p < .05$) and active ideation ($R^2 = .65$, $p < .001$). Passive ideation was sensitive only to indirect effects of SPQ scores: negative ($\beta = .14$, $p < .01$) and disorganised SPQ scores ($\beta = .11$, $p < .05$) were mediated by perceived burden. For active ideation, negative ($\beta = .17$, $p < .05$) and disorganised scores ($\beta = .14$, $p < .05$) had similar indirect effects mediated by perceived burden but there were also direct effects of positive ($\beta = -.44$, $p < .01$) and negative SPQ scores ($\beta = .37$, $p < .05$). Thwarted belonging did not mediate the effects of SPQ scores on ideator status.

Discussion: A contemporary ideation–action model of suicide did not fully account for the relationship between subclinical psychosis and suicidal ideation. Instead, some components of subclinical psychosis directly influenced suicidal ideation status: Positive subclinical psychosis components

protected against active suicidal ideation whereas negative components increased the risk of active ideation. Negative and disorganised components of subclinical psychosis also increased the risk of ideation by increasing the perception of self-hate and liability on others. Subclinical psychosis makes a unique contribution to the prediction of suicidal ideation.

F94. A PREVALENCE PILOT STUDY FOR OBSTRUCTIVE SLEEP APNEA SYNDROME IN CLOZAPINE USERS

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Background: Obstructive Sleep Apnea Syndrome (OSAS) is a frequent and common disorder. Estimated 50.000 persons in the Netherlands suffer from this disorder. Clozapine is known for its efficacy in treatment resistant schizophrenia. Frequent side effects of clozapine are weight gain, fatigue, sleepiness and metabolic syndrome. Similar symptoms occur in the course a OSAS. The Dutch pharmacovigilance centre LAREB (LAREB 2012) proposed an association between OSAS and clozapine usage, independent of confounding factors as obesity, smoking and glucose intolerance. Although clozapine is much used in the treatment of schizophrenia, OSAS prevalence studies in the clozapine treatment group are scarce. Research is needed to elucidate the relationship between clozapine use and OSAS. Identifying OSAS and treatment with continuous positive airway pressure (CPAP) could possibly (Galletly et al, 2016), through reduction in cardiovascular risk factors, have a favorable effect on mortality and possibly have a positive effect on daytime sleepiness, fatigue and daytime functioning.

Primary goal of this study is discovering the prevalence of OSAS in clozapine using schizophrenic spectrum disorder patients. The secondary goal is discovering how willing schizophrenic spectrum disorder patient are in undergoing a polysomnography.

Hypothesis: Many patients with schizophrenia spectrum disorder have multiple OSAS risk factors: obesity, presence of metabolic syndrome, frequent usage of benzodiazepines, male sex, older age. OSAS prevalence is estimated to be much higher than in the general population because of these risk factors. Atypical antipsychotics are an independent risk factor for the development of OSAS. Polysomnographically diagnosed OSAS will even be higher in the clozapine treatment group estimated to be present in 30% percent of the patients.

Methods: Research design: prospective observational and cross-sectional study in a group of stable adult patients with DSM IV schizophrenia spectrum disorder treated with clozapine in an outpatient community mental health service. Estimated study group consists of 30–50 patients. Exclusion criteria: unwillingness to undergo a polysomnography, inability to give informed consent, insufficient understanding of the Dutch language, severe cardiac failure, a history a cerebrovascular accidents and alcohol abuse.

Method: screening on the presence of OSAS symptoms and risk factors associated with OSAS through: Epworth Sleepiness Scale for daytime sleepiness (Johns, 1991), STOP-BANG Questionnaire ((SBQ: Chung 2012) when there is a high risk for OSAS followed by an ambulatory polysomnography including heart rate/ECG, respiratory measures with nasal flow canule and thermistor flow inductive respiratory movements, oximetry, and snoring noises through sensory measurements (AASAM, 2009). OSAS is considered to be present in the presence of daytime sleepiness and if the Apnea Hypopnea Index (AHI) is larger than 5.0 obstructive or mixed type respiratory events per hour (AASM, 2009; Berry et. al, 2015: NVALT & CBO, 2009).

Statistical analysis: polysomnography: descriptive and univariate analysis. Presence of OSAS will be dichotomized (1 = OSAS present; 0 = OSAS absent) Summation of the amount of positive results will be presented as percentage of the total study population. Chi-squared test for considering of the height of the results on the ESS test and the STOP-Bang test and the prevalence of OSAS. Statistical significance: $p < 0.05$.