between May and November 2020. Measures included screen time, mental health difficulties (depression, anxiety, anger), lifestyle factors, COVID-19 disruption, and parental screen time. The longitudinal, directional associations between screen use and emotional problems were assessed with multilevel cross-lagged panel models, in which siblings (Level 1) were nested within families (Level 2). Three-level growth curve models were fit to examine child-specific and family-wide predictors of screen time throughout COVID-19.

Results: Directional associations between mental health problems and screen time were generally inconsistent. However, between families (Level 2), sibling pairs with higher depressive and anxiety symptoms in July showed more screen use 2 months later ($\beta = .14$, $p = .022$; and $\beta = .17$, $p = .008$, respectively). Higher screen time in July also predicted more anxiety in September ($\beta = .12$; $p = .025$). Growth models revealed that mental health challenges had little predictive effect on screen time in the context of other lifestyle factors, but parental screen use was a salient predictor ($\beta = .23$; $p < .001$).

Conclusions: Family-wide contextual effects cast important influences on screen use, emotional well-being, and their associations. Children may rely on some media use to cope with mental health symptoms during the COVID-19 pandemic, but this may perpetuate anxiety. Further, mental health symptoms do not increase media use in the context of other lifestyle and family factors. Thus, findings emphasize a need for a whole-family approach to managing children's screen use during the COVID-19 pandemic to mitigate potential psychological harm.

MED, DEV, FAM

3.74 VALIDATION OF THE CHILD BEHAVIOR CHECKLIST AND ACHENBACH TEST OBSERVATION FORM FOR USE WITH AMERICAN INDIAN CHILDREN IN THE NAVAJO NATION

Jaehwa Choi, MD, Bennett L. Leventhal, MD, University of California, bennett.leventhal@outlook.com;
Somer Bishop, PhD, Brandon Rennie, PhD,
Amber Leckie, PhD, Ellen Geib, PhD, Joseph Davis, BS,
Ashley Wegele, MPH, Carolyn Roman, PhD,
Johnney Lewis, PhD, Debra MacKenzie, PhD, Young-Shin Kim, MD, MPH, MS, PhD

Objectives: There are virtually no psychiatric screening or diagnostic instruments validated for use with American Indian Children in the Navajo Nation, the largest American Indian reservation in the United Sates. In order to begin to remedy this problem, we completed a preliminary study examining the validity and reliability of the Child Behavior Checklist (CBCL) and the Achenbach System of Empirically Based Assessment (ASEBA) Test Observation Form (TOF) for American Indian children in the Navajo Nation. The CBCL is a parent report to screen for developmental psychopathology, whereas the TOF is a companion form, completed by trained assessors, to rate observed behaviors in 2- to 18-year-old children. Furthermore, we can understand the distribution of neurodevelopmental disorders in American Indian children.

Methods: One-hundred forty-three 3- to 8-year-old children participating in the Navajo Birth Cohort study completed neurodevelopmental assessments between 2013 and 2018. Best-estimate clinical diagnoses were made by at least 2 experienced doctoral-level clinicians, using *DSM-5* criteria. Pearson correlation analysis, descriptive statistics, independent *t* test, and the Mann-Whitney U test were used to examine the relative effect between the matched syndrome CBCL and TOF subscales, and to compare raw and T scores of 8 matched syndrome subscales, across diagnoses.

Results: The mean age of children was 90 ± 8.6 months; 48.3% were male, and 65.7% met the criteria for *DSM-5* diagnoses: anxiety disorder 2.1%, ADHD 3%, ASD 3%, intellectual disability 6%, behavioral disorder 6%, speech sound disorder 28%, and language disorder 32%. CBCL and TOF mean T scores ranged from 42 to 65, with males receiving higher scores on most CBCL and TOF scales, except the TOF anxiety and oppositionality scales on which female scores were higher. The matched CBCL and TOF syndrome subscales

showed a modest but significantly positive correlation ($0.268 \le r \le 0.426$; $p < .01$). Mean scores on the CBCL and TOF syndrome subscales also differed significantly by *DSM-5* diagnoses.

Conclusions: Our results suggest that the CBCL and TOF are valid and reliable tools for use in screening for developmental psychopathology for Navajo children. Replication with larger samples, and in other American Indian communities, will be important next steps to confirm the findings.

ND, PSP, RI

3.75 THE ASSOCIATION OF CHILDHOOD TRAUMA AND PSYCHO-CARDIOMETABOLIC MULTIMORBIDITY: AN INDIVIDUAL PARTICIPANT DATA (IPD) META-ANALYSIS

Camille Souama, Femke Lamers, PhD, Amsterdam University Medical Centers, f.lamers@amsterdamumc.nl;
Yuri Milaneschi, PhD, Christiaan Vinkers, MD, PhD,
Brenda Penninx, PhD, on behalf of the EarlyCause Consortium

Objectives: Persons who suffered from childhood trauma seem to be at increased risk of leading unhealthy lifestyles and developing cardiometabolic disease (CMD) and depression. In addition, CMD and depression have been shown to often co-occur. Potentially, early-life stress triggers underlying mechanisms (eg, biological pathways) common to depression and CMD, thus increasing their probability of co-occurrence later in life. This study aims to investigate whether childhood trauma (CM) predicts MDD, CMD, and their co-occurrence (eg, psycho-cardio-metabolic [PCM] multimorbidity) in adulthood.

Methods: This work is part of the EarlyCause consortium, housing several large observational cohort studies. EarlyCause cohorts plus suitable external studies assessing at least physical and emotional/psychological CM, MDD, cardiovascular disease, and diabetes were included ($N_{cohorts} = 8$; $N_{observations} = 98,629$). Local analyses from a standardized R script were run, and summary statistics were then centrally meta-analyzed using random-effect models. We first estimated the association of CM with MDD and CMD (regardless of co-occurrence); a second meta-analysis modeled MDD alone, CMD alone, and PCM multimorbidity in a multinomial logistic regression. All models were corrected for sociodemographics and additionally corrected lifestyle and health behaviors (smoking, alcohol use, physical activity).

Results: The first meta-analysis showed CM to be significantly associated with MDD (OR_{pooled} [95% CI] = 2.82 [2.41-3.30]) and CMD (OR_{pooled} [95% CI] = 1.32 [1.20-1.45]). The second meta-analysis showed that CM was significantly associated with MDD alone (OR_{pooled} [95% CI] = 2.61 [2.31-2.95]), CMD alone (OR_{pooled} [95%CI] = 1.27 [1.17-1.37]), and PCM multimorbidity (OR_{pooled} [95% CI] = 3.04 [2.49-3.71]). Additional correction for lifestyle and health variables did not change the results.

Conclusions: The pattern of results observed show that childhood trauma is associated with MDD, CMD, and PCM multimorbidity. These findings highlight the importance of early preventive approaches, targeting both mental and somatic health in persons who suffered from childhood trauma.

CAN, PYI, DDD

3.76 INTOLERANCE OF UNCERTAINTY AND DEPRESSION DURING THE COVID-19 PANDEMIC IN NEW YORK

Keely Cheslack-Postava, MSPH, PhD, Mojdeh Rafieian, MS, Norwegian University of Science and Technology, mojdehr@stud.ntnu.no; Norbert Skokauskas, MD, PhD, Norwegian University of Science and Technology, norbert.skokauskas@ntnu.no; Christina W. Hoven

Objectives: The COVID-19 pandemic has created considerable uncertainty due to its unpredictable outcomes, leading to the development of psychological symptoms and disorders such as depression. Therefore, the goal of this study is to investigate the relationship between intolerance of uncertainty and depression during COVID-19, including the effects of demographic characteristics as confounders.
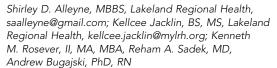
Methods: The study sample is a combination of participants from 3 ongoing in-person assessed cohort studies. Participants are community members from the metropolitan area of New York City (United States), recruited into 1 of those studies. Originally, these studies focused on children and adolescents exposed to traumatic events either indirectly through involvement of their parents in the criminal justice system or because of direct or indirect exposure to the event of 9/11. Through a telephone interview for this study, participants completed the Personal Health Questionnaire Depression Scale (PHQ-8), the Intolerance of Uncertainty Scale (IUS), and the demographic questionnaire in March to August 2020, and the PHQ was collected again in March to August 2021. In the case of missing data on the exposures and outcomes, the participants were excluded.

Results: The number of participants at waves 1 and 2 was 1213 and 920, respectively. Participants were considered positive for depression based on scores in the moderate to severe range in each wave (prevalence of 24.3% and 18.1% for waves 1 and 2, respectively, for an IUS score more than the median). The IUS score was normally distributed (mean [SD] = 34.4 [9.9]). There was a positive and strong association between the IUS at wave 1 and depression in both waves. After adjustment for covariates (gender, age, race/ethnicity, religion, marital status, household income, and original cohort), the OR for association of 1 SD increase in IUS score with depression in wave 1 was 1.76 (95% CI, 1.50-2.08; $p < .001$). For depression in wave 2, the adjusted OR was 1.90 (95% CI, 1.52-2.36; $p < .001$). A 1 SD increase in IUS score at wave 1 remained associated with depression at wave 2 after adjusting for baseline depression as well as covariates (OR = 1.58; 95% CI, 1.24-2.01; $p < .001$).

Conclusions: This study found a high level of intolerance of uncertainty to be positively associated with depression.
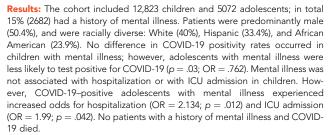
TRA, EPI, DDD

3.77 COVID-19 POSITIVITY RATES AND COVID-19 MORBIDITY IN CHILDREN AND ADOLESCENTS WITH MENTAL ILLNESS

Shirley D. Alleyne, MBBS, Lakeland Regional Health, saalleyne@gmail.com; Kellcee Jacklin, BS, MS, Lakeland Regional Health, kellcee.jacklin@mylrh.org; Kenneth M. Rosever, II, MA, MBA, Reham A. Sadek, MD, Andrew Bugajski, PhD, RN

Objectives: COVID-19 positivity rates and COVID-19 morbidity in adults with mental illness (mental health disorders and substance-related disorders) have been mixed, with more severe morbidity being associated with bipolar disorder, psychotic disorders, and substance-related disorders. In children and adolescents with pre-existing mental illness, COVID-19 positivity and morbidity have been understudied. Thus, this study addresses this dearth and examined factors associated with COVID-19 positivity and morbidity (measured by hospital admission status and discharge status) in children and adolescents with mental illness.

Methods: Our sample and data were derived from health records of children (aged 3-12 years) and adolescents (aged 13-17 years) who received COVID-19 tests in the emergency room of a large, tertiary-level hospital in Central Florida between September 2020 and March 2022. Records were additionally screened for *ICD-10* codes associated with mental illness (ie, substance use, anxiety, depression, ADHD, schizophrenia). Outcomes data included COVID-19 positivity, hospital admission status (none, inpatient, intensive care unit [ICU]) and death. χ^2 analyses were conducted to examine the association between pediatric mental illness and COVID-19 positivity rates, and between pediatric mental illness and COVID-19 morbidity.

Results: The cohort included 12,823 children and 5072 adolescents; in total 15% (2682) had a history of mental illness. Patients were predominantly male (50.4%), and were racially diverse: White (40%), Hispanic (33.4%), and African American (23.9%). No difference in COVID-19 positivity rates occurred in children with mental illness; however, adolescents with mental illness were less likely to test positive for COVID-19 ($p = .03$; OR = .762). Mental illness was not associated with hospitalization or with ICU admission in children. However, COVID-19–positive adolescents with mental illness experienced increased odds for hospitalization (OR = 2.134; $p = .012$) and ICU admission (OR = 1.99; $p = .042$). No patients with a history of mental illness and COVID-19 died.

Conclusions: Pediatric mental illness is associated with lower COVID-19 positivity rates in adolescents, but COVID-19 positivity in adolescents with mental illness conferred a higher risk of hospitalization with a severe course. Further research in warranted in this area.

EPI, RCR, RF

3.78 MENTAL HEALTH PROBLEMS DURING THE COVID-19 PANDEMIC IN DUTCH CHILDREN AND ADOLESCENTS WITH AND WITHOUT PRE-EXISTING MENTAL HEALTH PROBLEMS

Josjan Zijlmans, PhD, Amsterdam University Medical Centers, Amsterdam University Medical Centers/American Academy Center of Child and Adolescent Psychiatry, j.zijlmans@amsterdamumc.nl; Michiel Luijten, MSC, Hedy van Oers, PhD, Jacintha Tieskens, PhD, Hekmat Alrouh, MSC, Dreams Consortium, Lotte Haverman, PhD, Meike Bartels, PhD, Arne Popma, MD, PhD, Tinca J.C. Polderman, PhD

Objectives: Research has shown that mental health problems in children and adolescents have increased due to the COVID-19 pandemic. We aimed to investigate changes in mental health throughout the pandemic and whether changes in children with pre-existing mental health problems differ from those in children from the general population.

Methods: We included children and adolescents (8-18 years old) who receive psychiatric care ($N_{T1} = 270$; $N_{T2} = 413$; $N_{T3} = 243$; $N_{T4} = 226$; $N_{T5} = 228$) and children from the general population ($N_{T1} = 486$; $N_{T2} = 440$; $N_{T3} = 413$; $N_{T4} = 414$; $N_{T5} = 529$) for whom we assessed self-reported mental health problems at 5 time points: April 2020, November 2020, March 2021, November 2021, and March 2022. For the general population, prepandemic data were also available ($N_{T0} = 527$-1319). The main outcome measures were Patient-Reported Outcomes Measurement Information System (PROMIS®) domains: Anxiety, Depressive Symptoms, Anger, Sleep-Related Impairment, Global Health, and Peer Relations. We performed ANOVAs to test whether mental health problems changed per moment in time. We included age and gender as covariates.

Results: In the psychiatric sample, all outcome measures except Peer Relations differed significantly across moments (all $p < .01$), with the highest problems being reported in March 2022. In the general population sample, problems on each outcome measure were significantly higher than prepandemic (all $p < .01$), with the highest problems being reported in March 2021 but they seemed to start normalizing thereafter.

Conclusions: Our results show that throughout the COVID-19 pandemic, the mental health of children in psychiatric care is deteriorating. The mental health of children from the general population is still worse than before the pandemic but seems to have started to normalize. Our findings indicate that the pandemic may have long-term effects on child mental health and that children with pre-existing mental health problems are more vulnerable to these effects. This is an important message for child and adolescent psychiatry because these children may require comparatively more care in the long term.

EPI, SAC, MCS