Substance Use & Mental Health Pre-Meeting
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Participants

External Experts
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ABCD Experts
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Planning Team
Elizabeth Powell – National Institute on Alcohol Abuse and Alcoholism
Joe Ciccolo – National Cancer Institute
Kim LeBlanc – National Institute on Drug Abuse (NIDA)
Laura Thomas – National Institute of Mental Health
Michael Charness – US Department of Veterans Affairs
Traci Murray – NIDA
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Summary

The group discussed strategies for advancing substance use (SU) and mental health (MH) assessment in young adults, focusing on theoretical frameworks, measurement priorities, participant burden, and ethical protocols.

Key Theoretical Frameworks

The diathesis-stress model was highlighted as a primary framework, emphasizing the interaction of individual vulnerabilities and environmental stressors and resiliency factors (e.g., social media, academic/work stress, intimate partners) and their relationships to mental health and substance use. A developmental perspective is essential, considering the unique transitions, instability, and cultural context of emerging adulthood (ages 18–29). Living conditions over the next ten years are likely to be highly variable from person to person as well as for a given individual. Motivational and contextual models should inform assessments, recognizing that substance use is not always perceived as problematic by young adults.

Measures to Prioritize
Mental Health can be measured using dimensional and categorical measures, with special attention to personality, family history, and contextual factors, utilizing measures such as*:* Achenbach Scales (CBCL, BPM, YSR, ASR); Big Five Inventory; KSADS (computerized); MINI (computerized); FIG; Mitch Prinstein Scale (peer relationships); Cyberbullying measure.

Substance Use Measures: The group also suggested the need for detailed, continuous measurement of substance use patterns and consequences of use, highlighting Substance Use Patterns Interview, as well as the social context for substance use (e.g., solitary vs group use). Objective biospecimen collection (hair, nails, patches) is critical for accurate assessment, especially given under-reporting.

Further Minimizing Participant Burden
To reduce overall burden on participants, the group recommended using EMA/daily diaries selectively, employing remote or hybrid data collection. Simplified, automated data collection (e.g., text-based EMA, upload-based screen time) and targeted sampling for intensive measures were also suggested, particularly in relation to key transition points in their lives.

Qualitative Research
There was concern that some validated measures may not be capturing the experiences of young adults today and that qualitative research (such as the focus groups currently being used) could ensure ABCD asks the most relevant questions.

Resilience
The group emphasized the value of measuring positive activities and protective factors, not just risk and pathology. (e.g., grit, agency, positive social interactions) and their impact on substance use and mental health outcomes.

Cross-Cutting Themes
Continuous funding is essential to avoid missing critical developmental periods. Data management and technology limitations are ongoing challenges. New technologies such as Screenomics, a systematic study of digital devices, to include capturing, analyzing, and understanding the digital traces of human behavior, may be helpful. The group also discussed the importance of maintaining ethical sensitivity to diverse participant backgrounds and preparing for emerging ethical issues such as substance use during pregnancy.