

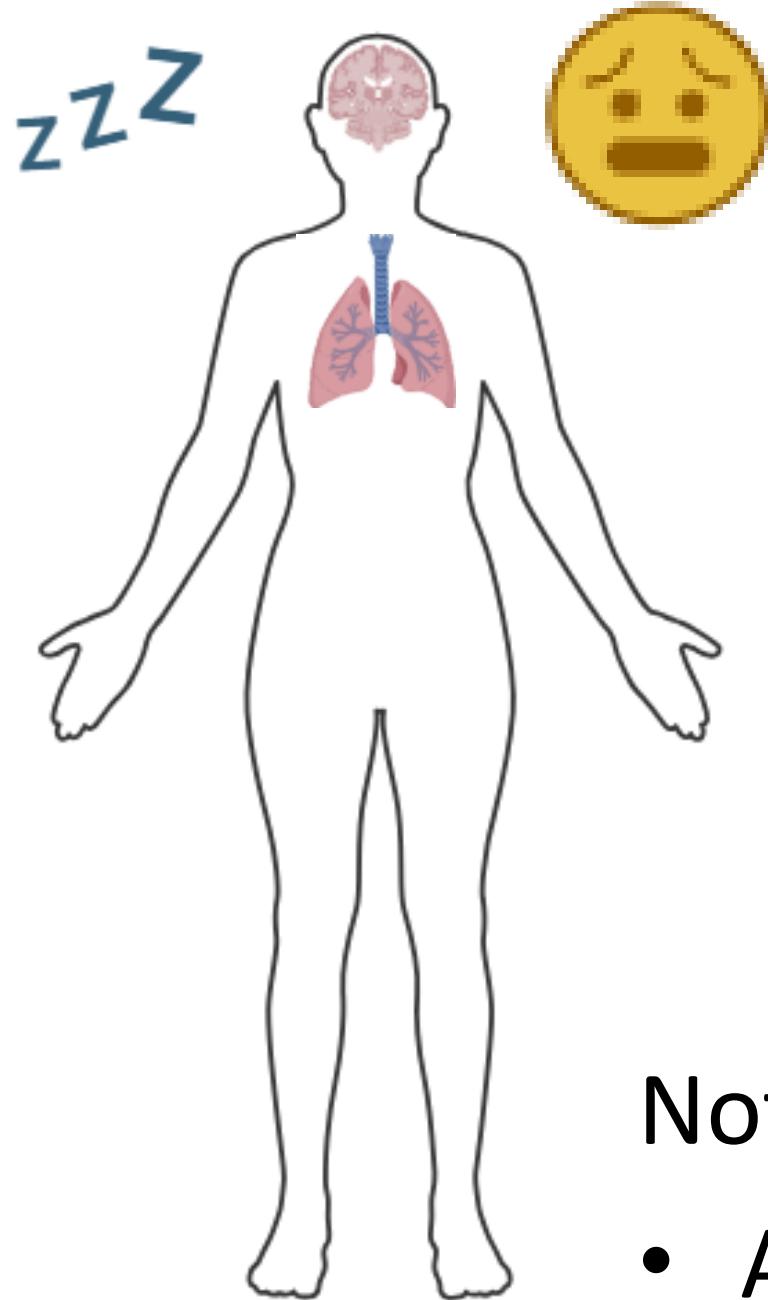


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Substance Use Consequences in Adolescence

Natasha Wade, Ph.D., UC San Diego



Substance use can impact most areas of life:

- Mood
- Thinking abilities
- Brain health
- Sleep
- Relationships
- Grades
- Heart
- Lungs
- STI risk
- Legal issues
- Overdose
- Victim of violence

Not everyone is impacted the same

- At this point, we can't predict who will be or how



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ABCD – Cannabis and Mental Health

- Cannabis ↔ Psychosis
 - Do early psychosis symptoms lead to cannabis use to “self-medicate”?
 - Does cannabis use *cause* psychosis?
 - Is there a common factor which leads to both psychosis and cannabis symptoms?



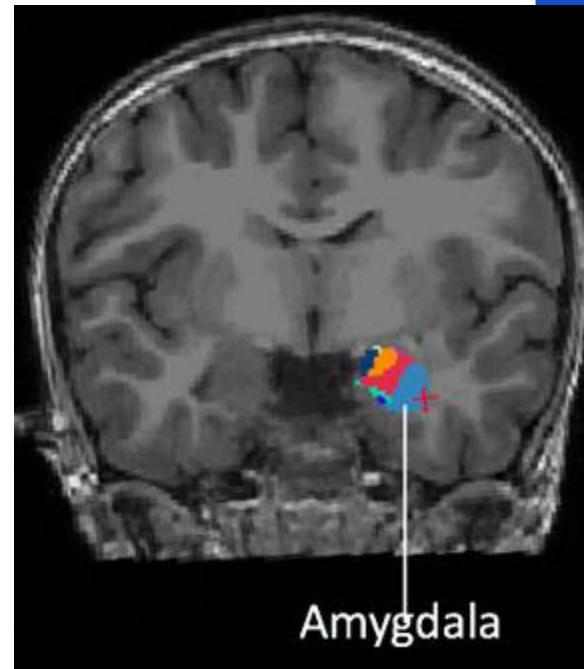
ABCD – Cannabis and Mental Health

- Cannabis ↔ Psychosis
 - Longitudinal analysis across ages 9-15 in ABCD before use and symptoms
→ look at timing and symptoms
 - Support shared vulnerability and self-medication; mixed evidence for cannabis-related causes



ABCD – Cannabis and Mental Health

- Identify cannabis use through self-report + hair toxicology
- In 224 ABCD youth ages 13-14:
 - Cannabis use → ↑ depression symptoms
 - Amygdala* Cannabis → smaller volume = ↑ depression sx
- Across ~1,000 ABCD Youth:
 - ↑ THC predicted ↑ externalizing 1 year later

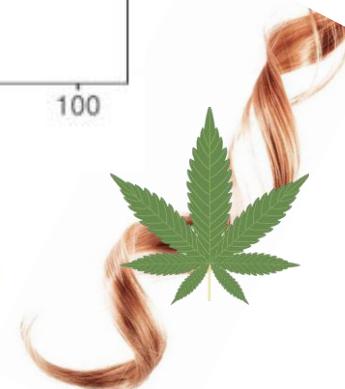
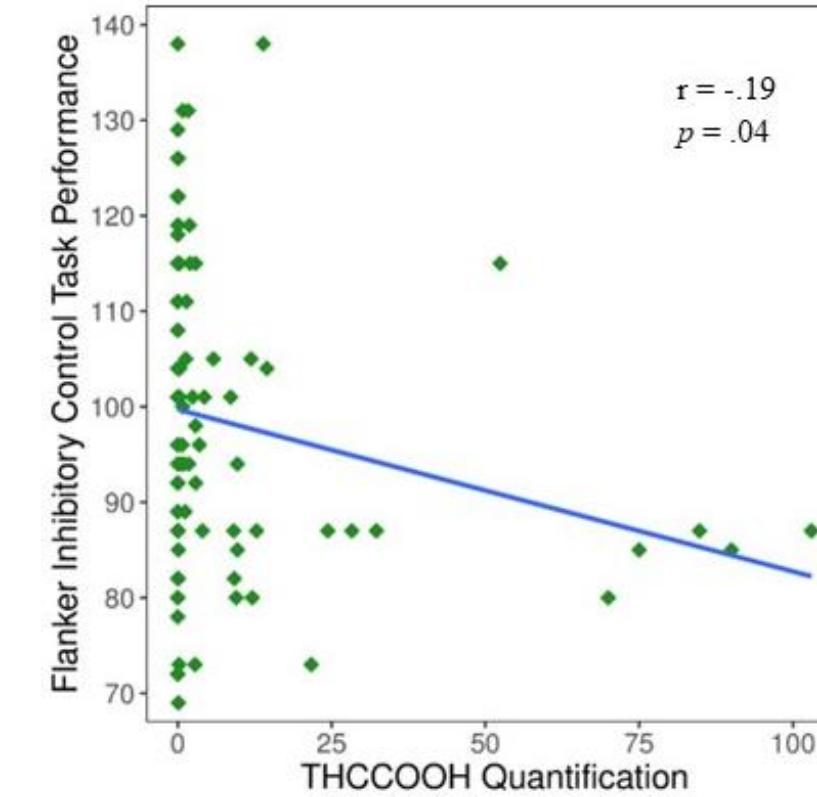
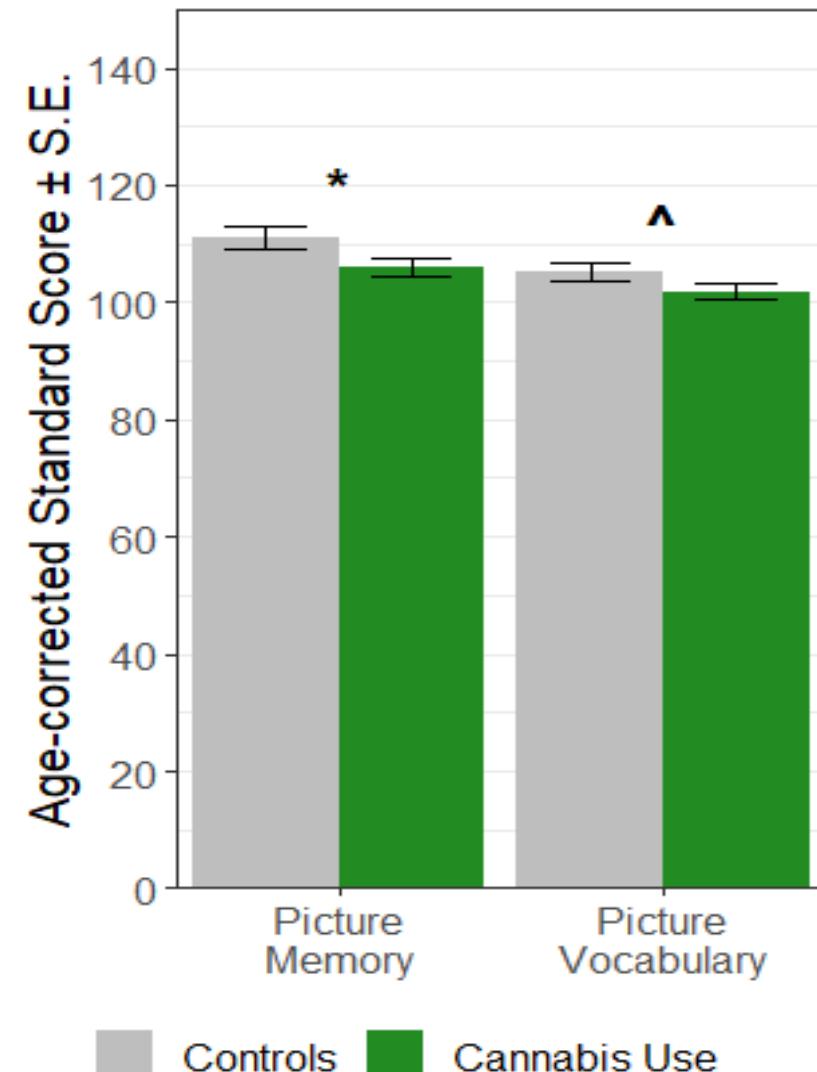


ABCD – Cannabis and Cognition

123 youth with cannabis use matched to confirmed controls (ages 13-14)

- Worse picture memory; vocabulary
- \uparrow THC \rightarrow \downarrow inhibition

Wade et al.,
2024, *Addictive
Beh.*



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ABCD Data – More to Come

- Future goal of ABCD studies as cohort ages
- Assess directionality
 - Use advanced statistical modeling to estimate causality
 - Whereas here we are largely discussing correlations
 - Identify who is at greatest risk
 - Identify how to mitigate or prevent consequences



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Overdose Risks



- It is difficult to know what exactly is in a drug when purchased from potentially questionable sources
 - Fentanyl and xylazine (tranqs)
- Highly potent + mixed into other drugs → ↑ risk of overdose
- OD rates are going down → not low enough



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THANK YOU!

- ABCD Participants & Families
- Our ABCD staff across the country
- NIDA and our funders

The Wade Lab



UCSD ABCD Site



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