

# Research Question

**How has substance use shown a correlation between adolescence and mental health outcomes that may develop?**

# Meet the Ambassador

- My name is Nyla Bickham, I go to Wando High School in Mount Pleasant and am a junior
- My mentor is Dr. Kirkland



# Potency

higher potency=higher risk

using higher potent substances is associated with more frequent cannabis use

increased likelihood of tobacco dependence, psychotic experiences

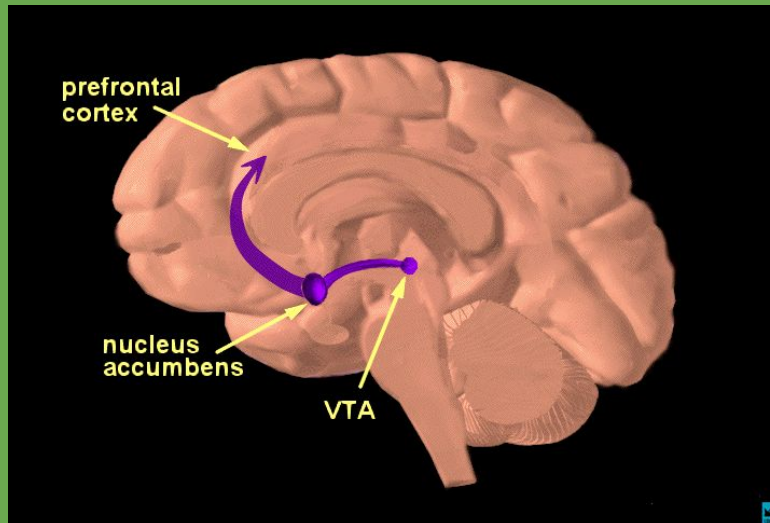
**Table 1. Association Between Type of Cannabis and Demographic, Substance Abuse, and Mental Health Outcomes in 1087 Participants Who Reported Recent Cannabis Use**

Characteristic	Cannabis use, % <sup>a</sup>		P value <sup>b</sup>
	High potency (n = 141)	Lower potency (n = 946)	
Regular cannabis use	56.8	17.6	≤.001
Cannabis use problems	10.1	0.8	≤.001
Use of other illicit drugs	82.9	66.5	≤.001
Tobacco dependence	37.0	15.1	≤.001
Alcohol use disorder	15.1	10.0	≤.001
Major depression (moderate or severe symptoms)	11.7	9.7	≤.001
Generalized anxiety disorder	19.1	11.6	≤.001
Psychotic-like experiences	12.4	7.1	≤.001
Male sex	71.6	43.4	≤.001
Low maternal educational level	19.2	13.1	≤.001
Lower parental occupational class	32.2	29.2	≤.001
Black or minority ethnic group	5.3	5.3	.94
Age at onset of cannabis use, mean (95% CI), y	14.7 (14.3-15.1)	16.9 (16.8-17.2)	NA
MFQ score at 13 y, mean (95% CI)	5.6 (4.65-6.49)	5.6 (5.26-5.95)	NA

# Breaking down that brain

- substances used at earlier developmental stages linked to altering the behavioral control hardware
- substances trigger area in the brain responsible for BBS (behavioral brake system)

decision making  
self monitoring  
impulse control



Since unable to perform these functions, they are associated with a higher risk of developing an alcohol abuse disorder



# Final Thoughts

Overall, the program is a great opportunity for those seeking an insight into the psychological and medical world of science!

I am so grateful for the knowledge, guidance, and support I have gotten from my mentor, those who were included on the panels, and everyone included in the TSAP program!

I look forward to coming back in the summer as an intern and in the fall as a near-peer mentor!