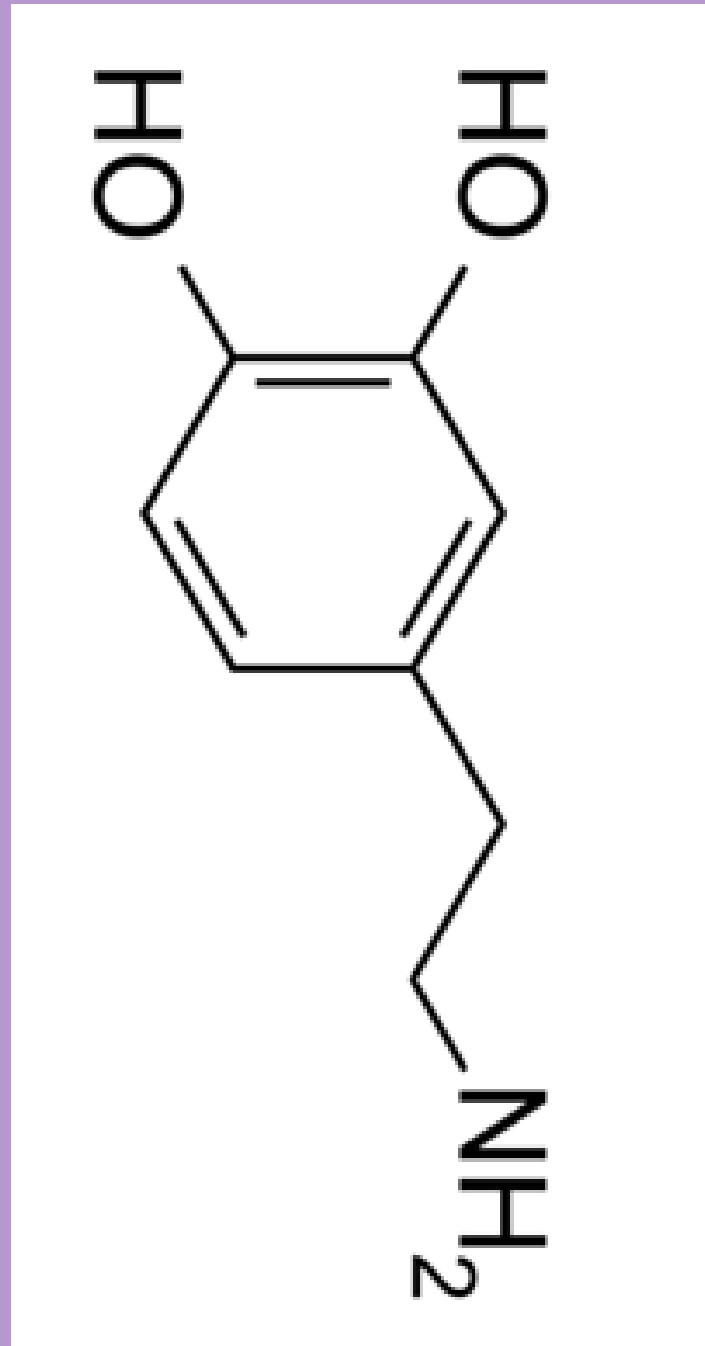


THE BRAIN



WHAT'S
GOING
ON IN
THERE?

**DOPAMINE
THE BRAIN
CHEMICAL
OF
PLEASURE**



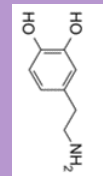
ALL DRUGS
AND
ALCOHOL
FORCE THE
BRAIN TO
MAKE
DOPAMINE

DOPAMINE
AFFECTS
THE
LIMBIC
SYSTEM



Limbic System:

- 1) Feelings**
- 2) Impulses**
- 3) Pleasure**
- 4) Memory**
- 5) Addictions**



BACK TO THE

SHOW

DSIT

A yellow spotlight beam is directed at the letter 'S' in the word 'DSIT'. The spotlight is a bright yellow cone that tapers towards the top, with a darker yellow shadow cast on the ground beneath it. The word 'DSIT' is written in a dark blue, serif font. The 'S' is the central focus of the spotlight.

If you start using drugs or alcohol
after
the age of 21,
one out of 25 people
can become addicted.

If you start using drugs or alcohol

before

the age of 18

that number goes from

one in 25 to.....

**GUESS
HERE!!!!**

ONE

IN

FOUR!

ONE IN FOUR!

Would you swim with
this shark?

Adult:

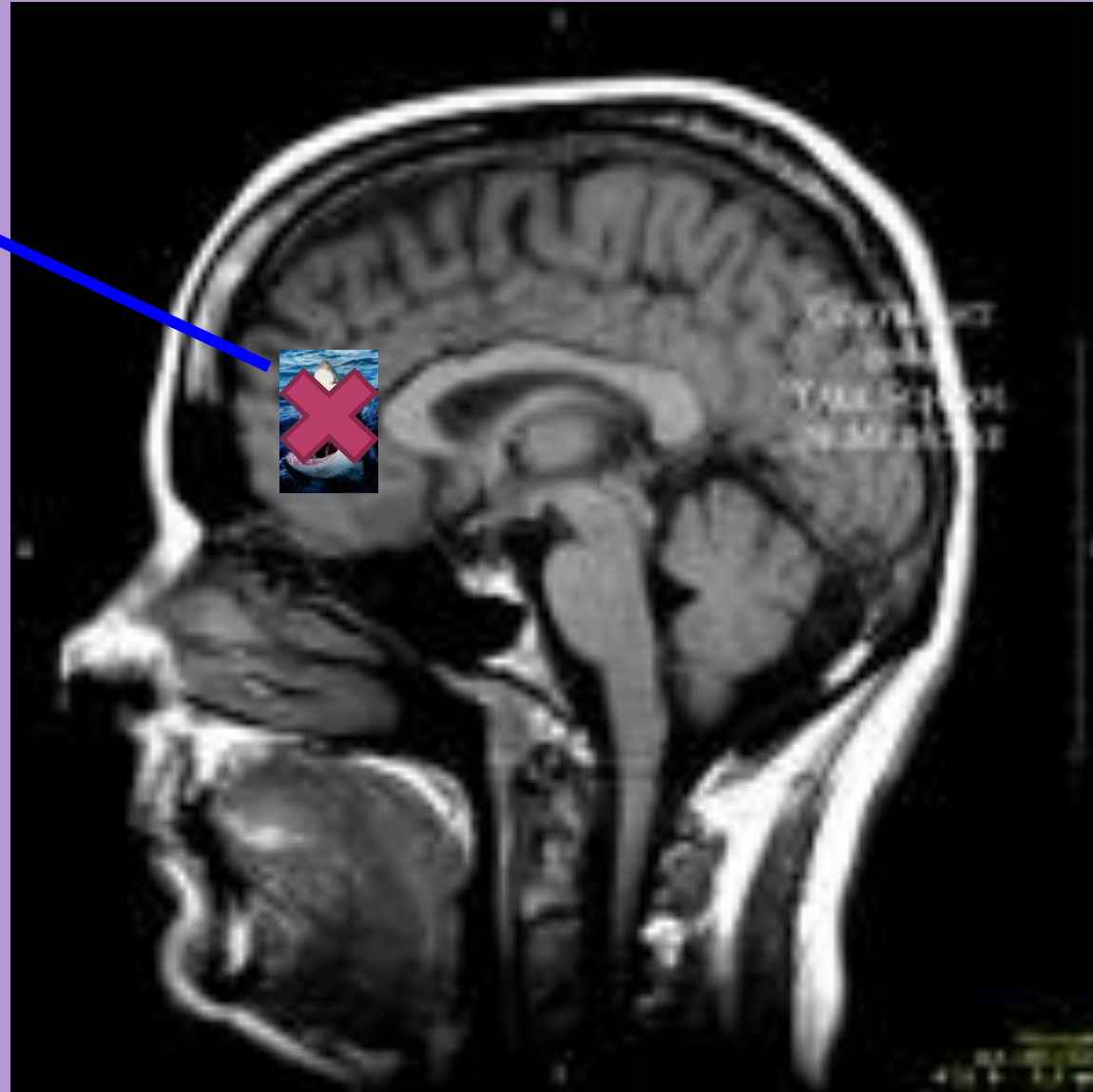
“No Way! Are you
crazy?”



Frontal

Lobe:

- 1) **Thinking**
- 2) **Solving problems**
- 3) **Taking action**
- 4) **Anticipating the consequence of those actions**



In the adult brain the frontal lobe was lighting up like crazy!!!!

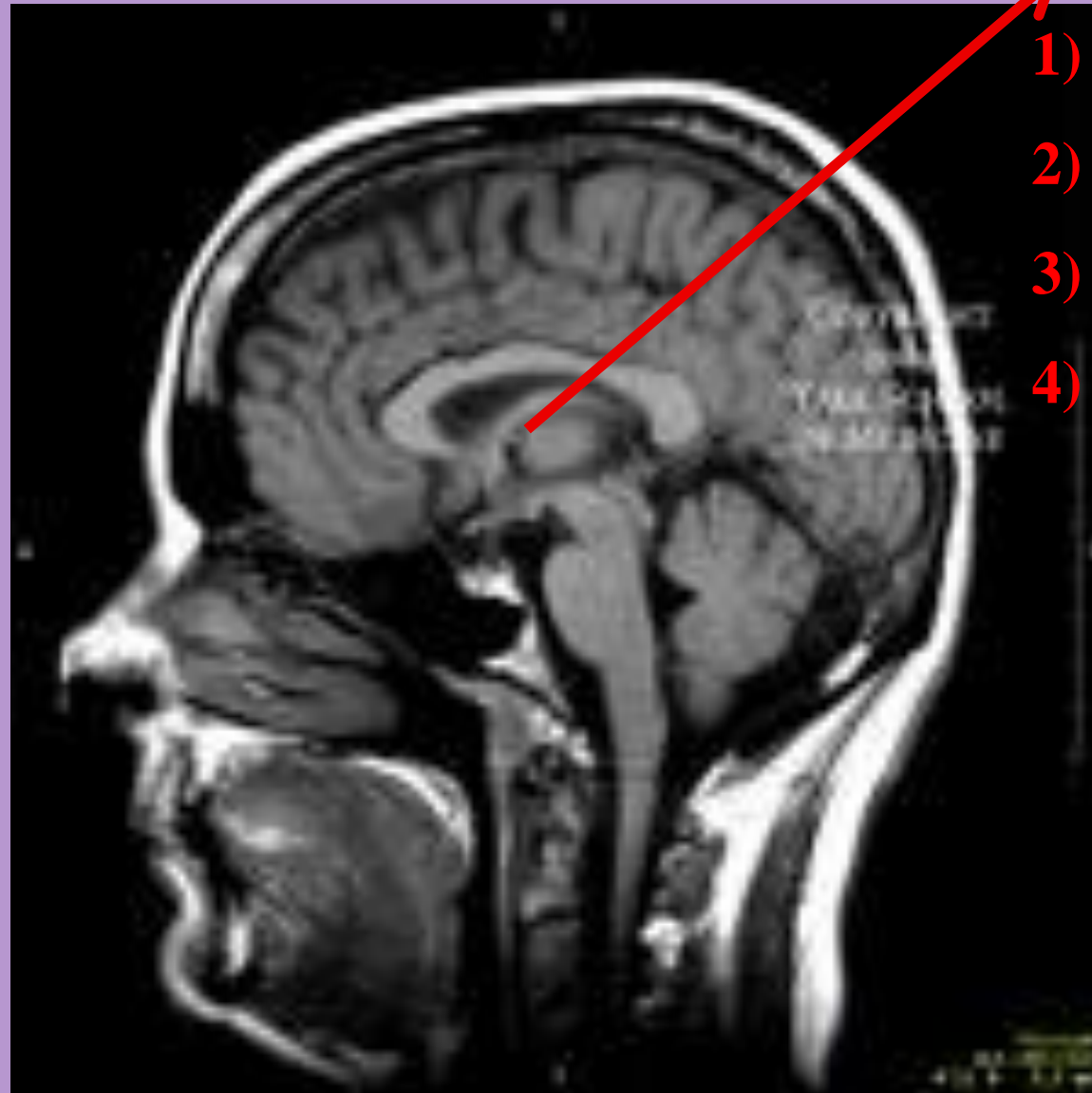
Would you swim with
this shark?

Teenager:

“Well.....”



In the teenager's brain the limbic system was lighting up like crazy!!



Limbic System:

- 1) Feelings**
- 2) Impulses**
- 3) Pleasure**
- 4) Addictions**

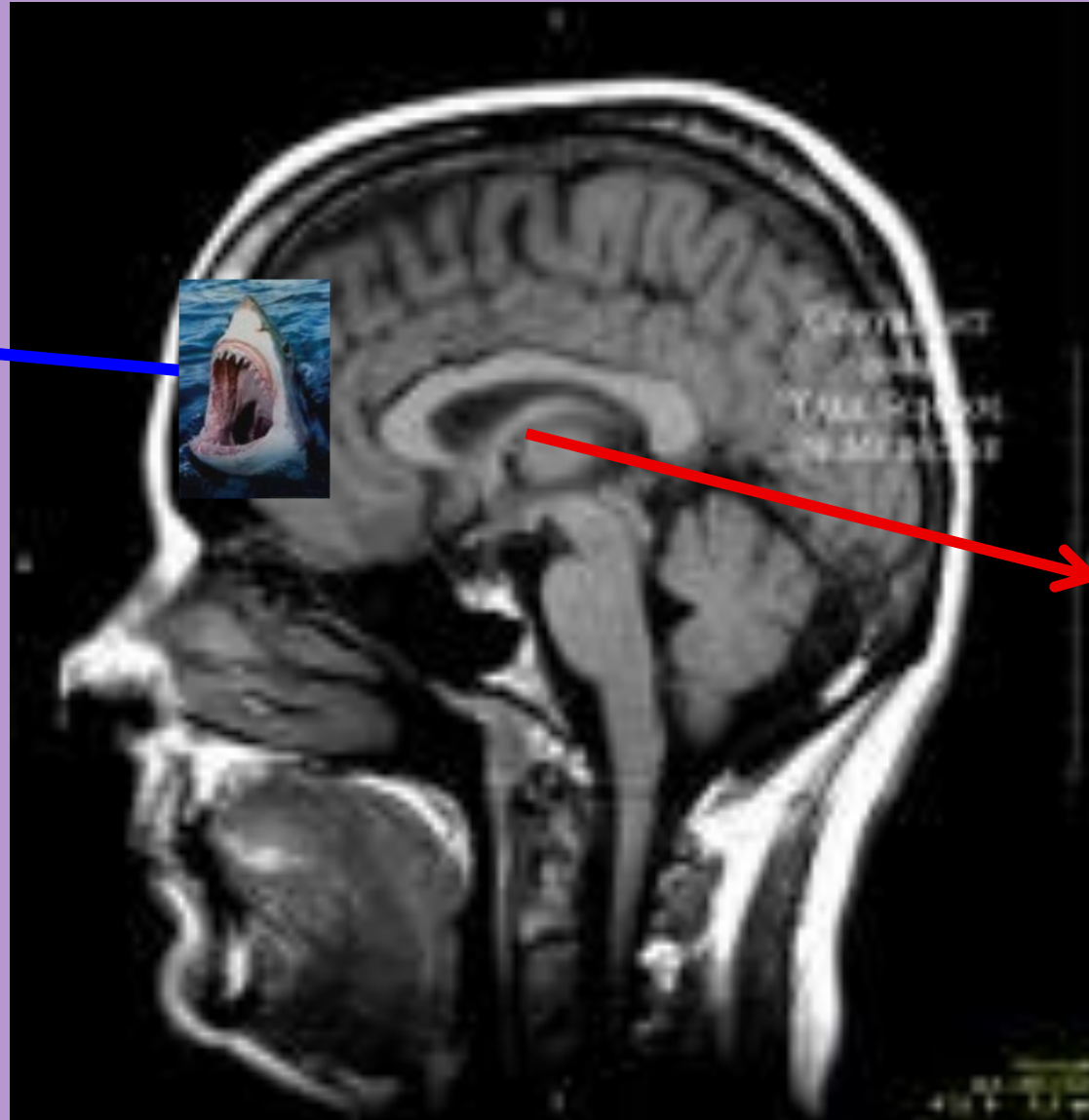
“Well....”

TEENAGER

FRONTAL
LOBE

LESS

IN CONTROL



TEENAGER

LIMBIC
SYSTEM

MORE

IN CONTROL

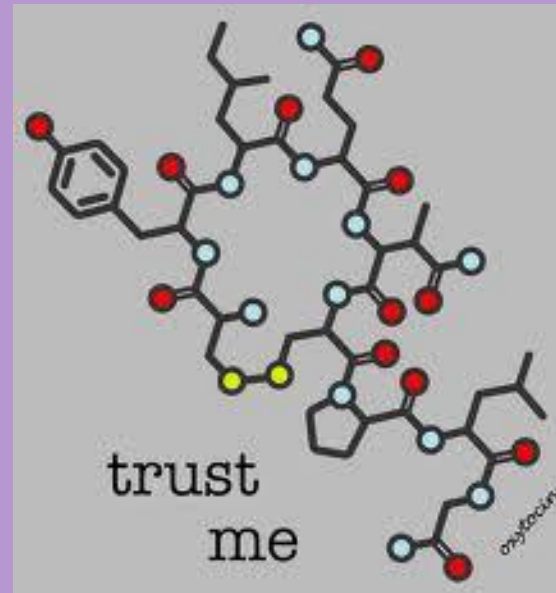
BACK TO THE

SHOW

DSIT

A yellow spotlight beam is directed at the letter 'S' in the word 'DSIT'. The spotlight is a bright yellow cone that tapers towards the top, casting a soft yellow glow on the letter and a darker yellow shadow on the surface below it. The letters 'D', 'I', and 'T' are in a dark blue color, while the 'S' is highlighted in a lighter blue color.

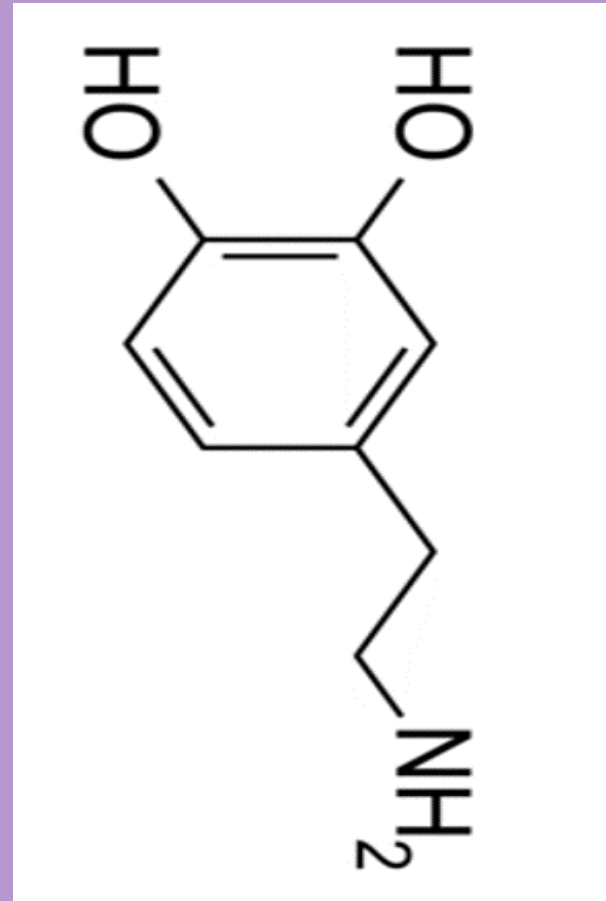
OXYTOCIN



THE BRAIN CHEMICAL OF
TRUST

DOPAMINE

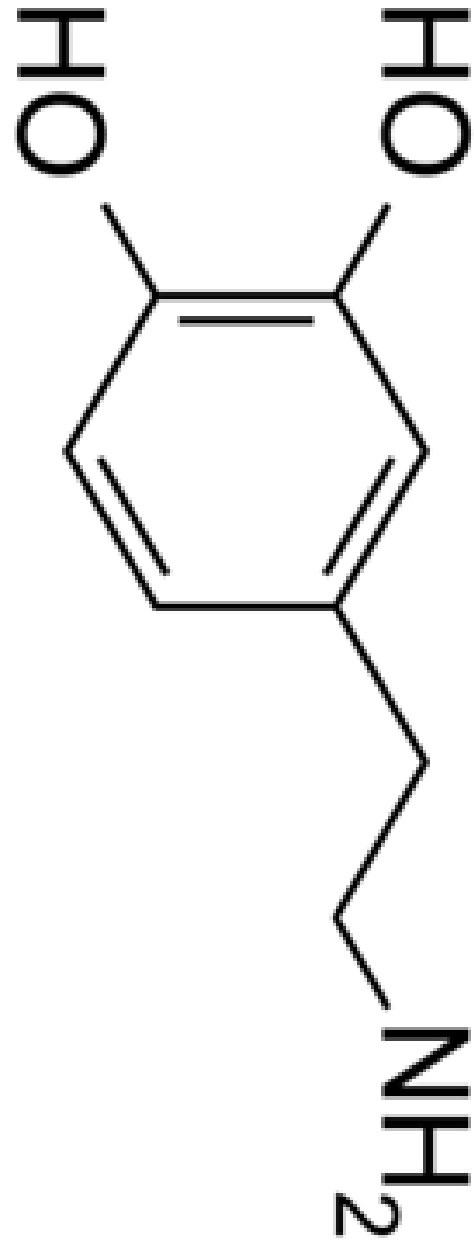
interferes



with

OXYTOCIN!

**DOPAMINE
THE BRAIN
CHEMICAL
OF
PLEASURE**



ALL DRUGS
AND
ALCOHOL
FORCE THE
BRAIN TO
MAKE
DOPAMINE

**WHEN
YOU USE
DRUGS OR
ALCOHOL**



**YOU HAVE
AN
EFFECT
ON
SOMEONE
ELSE'S
BRAIN!**

BACK TO THE

SHOW

DSIT

A yellow spotlight beam is directed at the letter 'S' in the word 'DSIT'. The spotlight is a bright yellow cone that tapers towards the top, with a darker yellow shadow cast on the ground beneath it. The word 'DSIT' is written in a dark blue, serif font. The 'S' is the central focus of the spotlight.



**DRUG STORY THEATER:
WHERE THE TREATMENT OF ONE BECOMES THE PREVENTION OF
MANY**

Joseph Shrand, MD

Improving Quality and Integration of Substance Use Disorder (SUD)

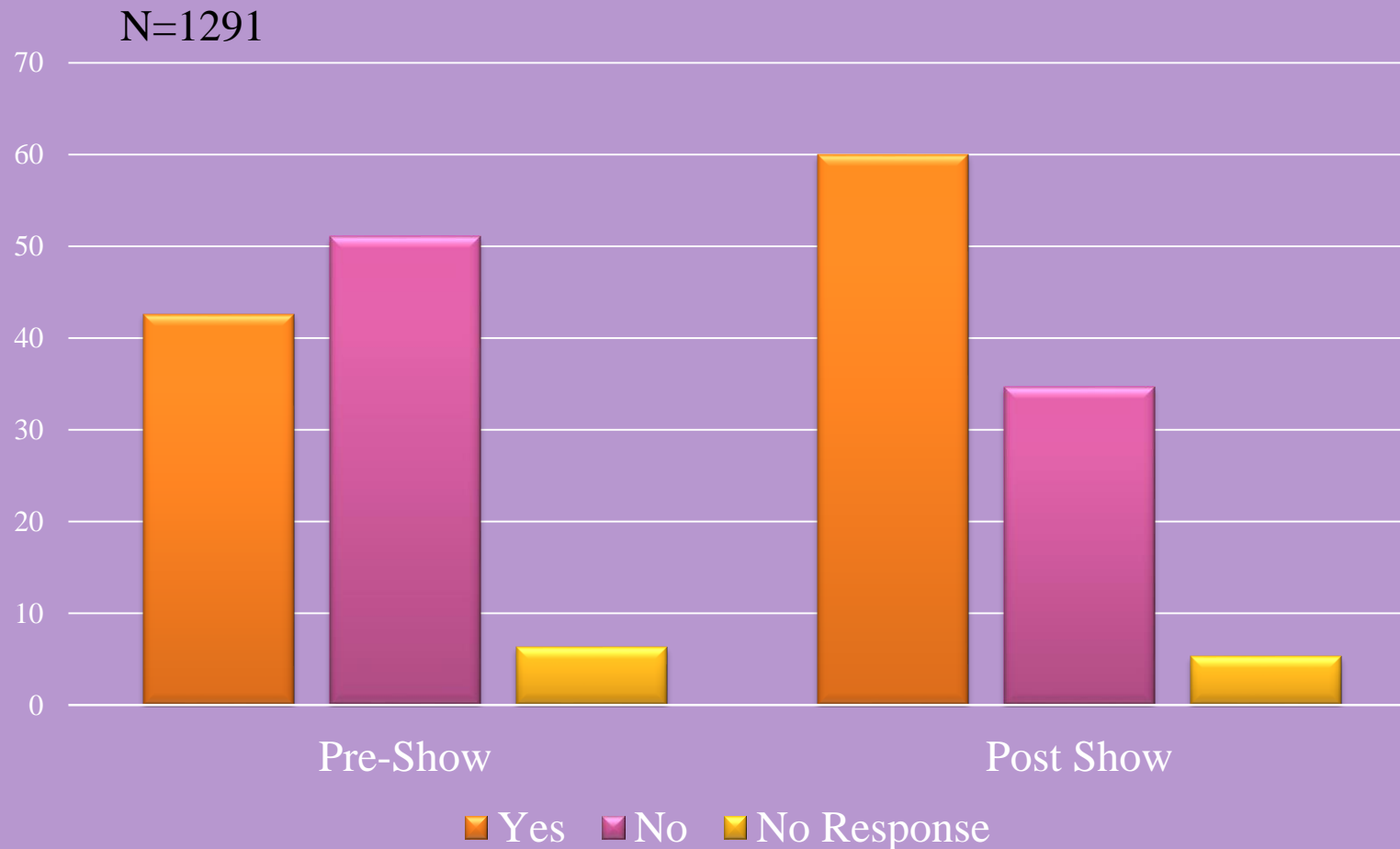
Treatment in the Era of Accountable Care

Tuesday, November 7, 2017 – Westborough, MA

DRUG STORY THEATER DATA RESULTS



“Do you think that marijuana is addictive?”



Pre-Show:

Yes: 42.6%

No: 51.1%

No Response: 6.3%

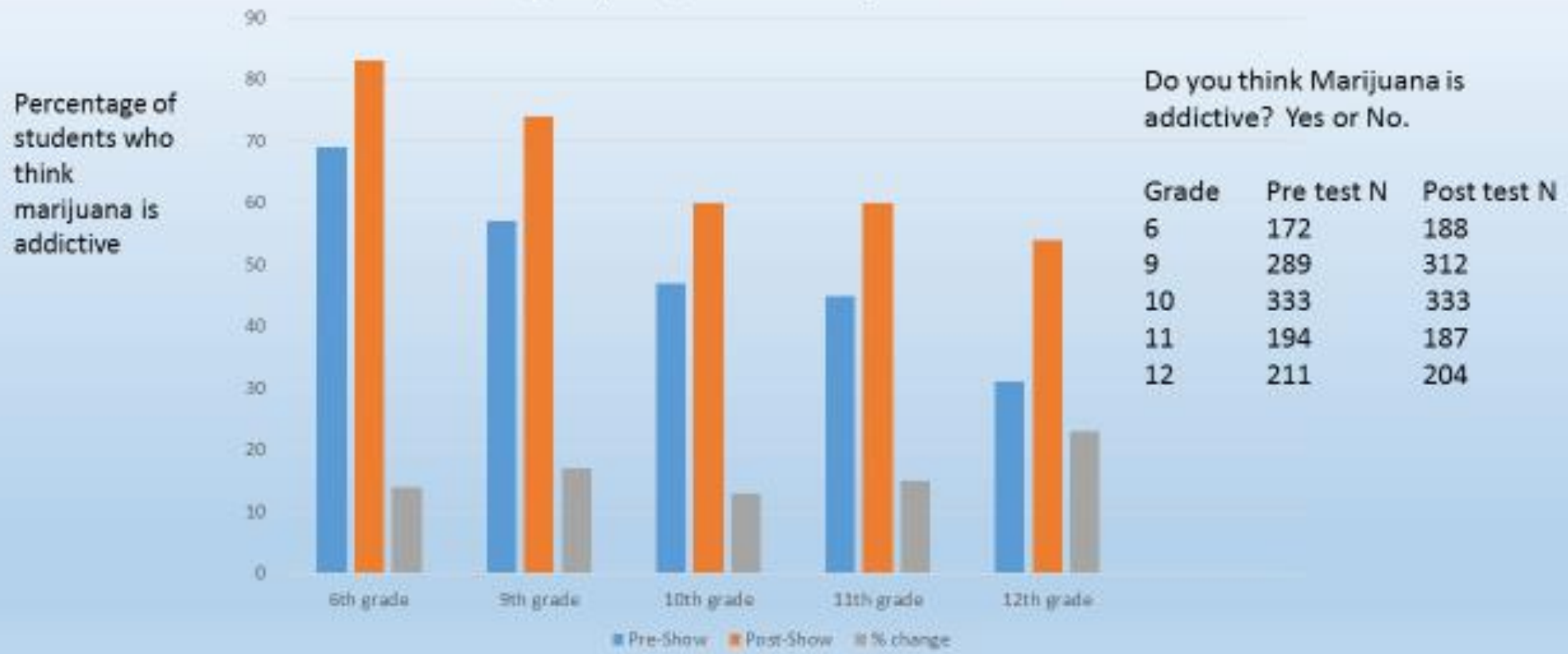
Post-Show:

Yes: 60.0%

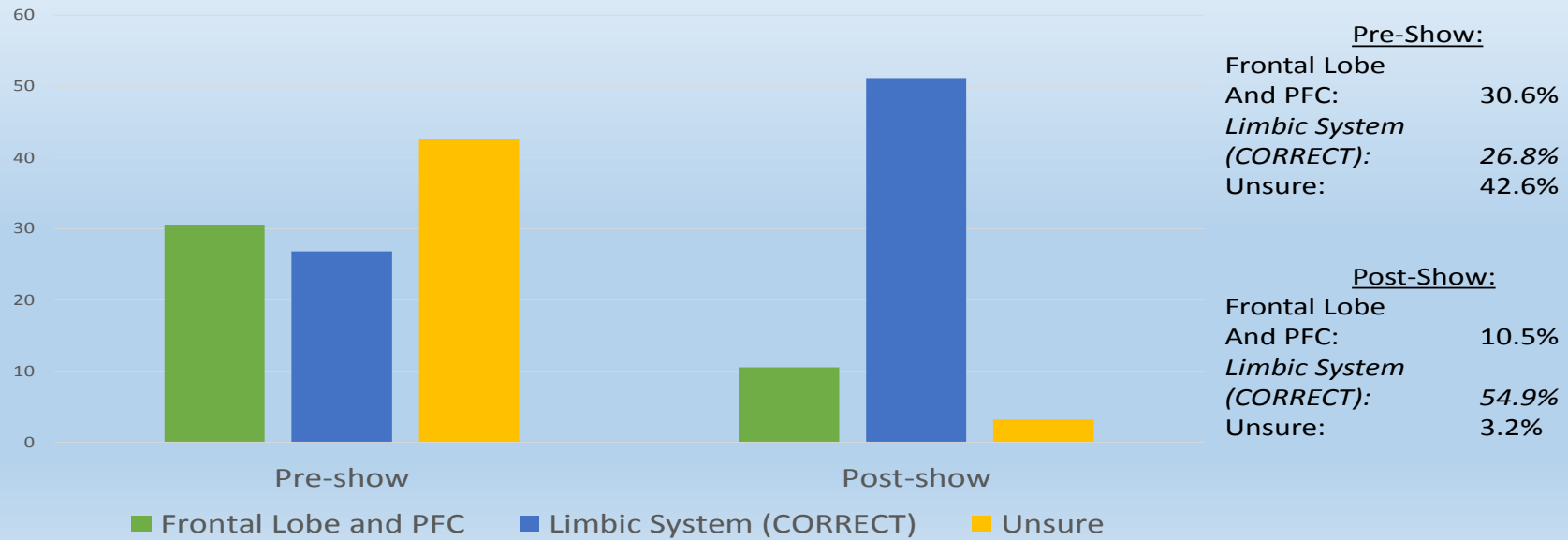
No: 34.7%

No Response: 5.3%

Change in perception that Marijuana is Addictive

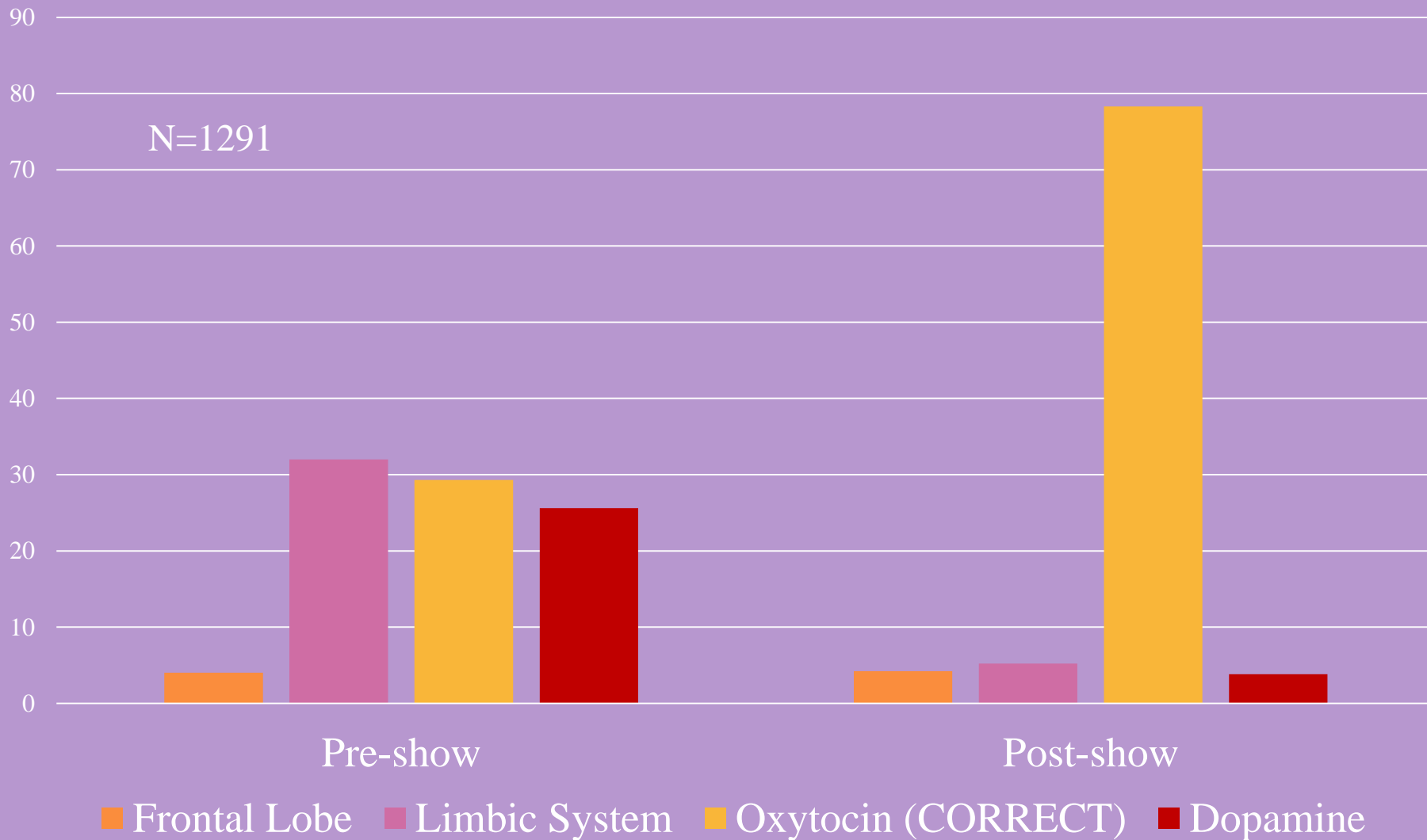


“Which [of these] is in charge of feelings, impulses, and pleasure?”





“Which of [these] is the brain chemical of trust?”



Pre-Show:

Frontal Lobe: 4.0

Limbic System: 32%

Oxytocin
(CORRECT): 29.3%

Dopamine: 25.6%

Post-Show:

Frontal Lobe: 4.2%

Limbic System: 5.2%

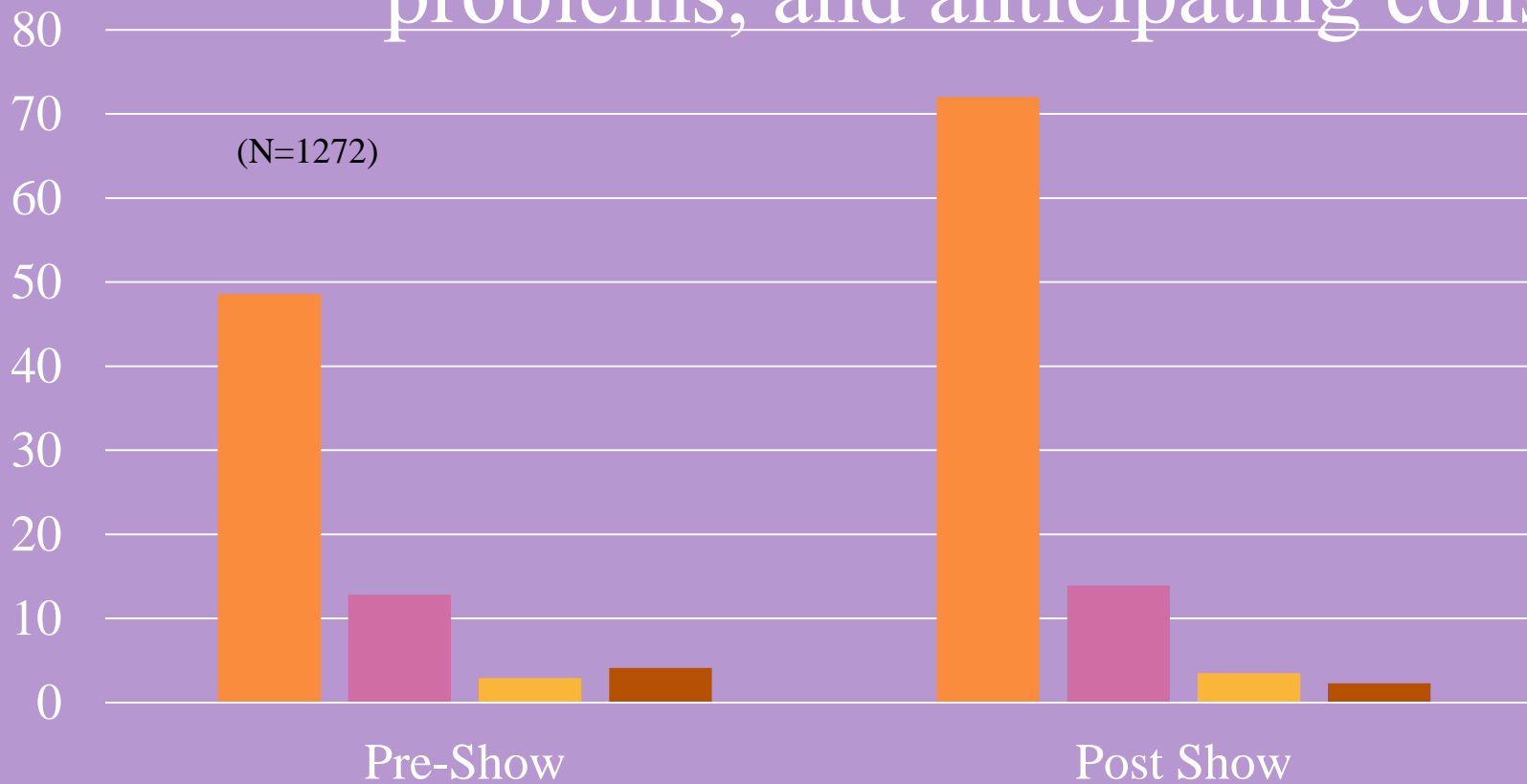
Oxytocin
(CORRECT): 78.7%

Dopamine: 4.0%



“Which of these is in charge of thinking, solving problems, and anticipating consequences?”

(N=1272)



■ Frontal Lobe (CORRECT) ■ Limbic System
■ Oxytocin ■ Dopamine

Pre-Show:
Frontal Lobe
48.6%
Limbic System: 12.8%
Oxytocin:
2.9%
Dopamine: 4.1%

Post Show:
Frontal Lobe
(CORRECT): 72.0%
Limbic System: 13.9%
Oxytocin:
3.5%
Dopamine: 2.2%



Students who changed from incorrect to correct science answers had the greatest change in their perception of the impact of drugs and alcohol:

