

DUAL DIAGNOSIS OF YOUTH SUBSTANCE USE DISORDERS & DEPRESSION

THE NATURE OF THE ASSOCIATION AND TREATMENT IMPLICATIONS

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A DISCLAIMER

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- I have been receiving royalties for authored and edited books on the treatment of adolescent substance use disorders and on dual diagnosis by APPI and Hazelden

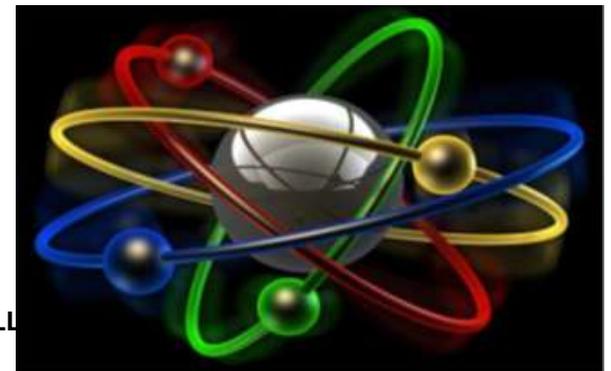
Struggling with sadness? Alcohol use getting in the way?

- ✓~ Are you 13-21 years of age?
- ✓~ Do you struggle with alcohol abuse (with or without other substance use) and depression?
- ✓~ Do you want to get help?

If you are a teenager who is struggling with alcohol use and depression and would like to learn more about the ATOM Programs

T-TAAD Study at UCONN HEALTH, please call

➤ Rebecca @ (860) 679-8478 burke@uchc.edu



*ALL

This research study is funded by the National Institute on Alcohol Abuse and Alcoholism (NIAAA) and directed by Dr. Yifrah Kaminer. IRB # 14-185-3

NSDUH USA 2016

- Major Depressive Episode (MDE):

In 12.8% of youth aged 12-17 and 10.9% of those aged 18-25

- Substance Use :

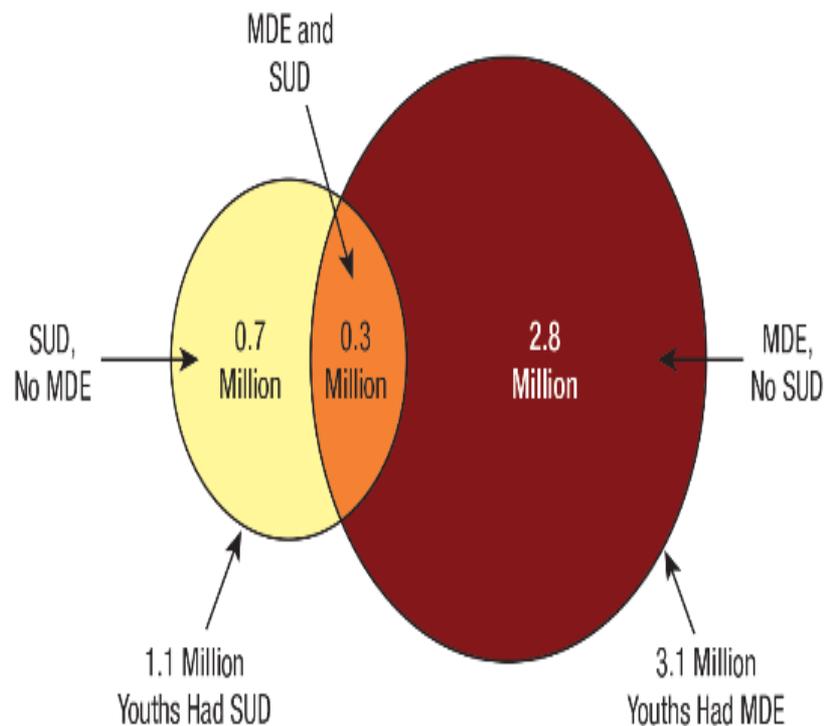
Among MDE 31.7% Vs. Non MDE 13.4%

*National Survey on Drug Use & Health. An annual household survey of the prevalence and epidemiology of drug use in the general population >12Y.O.
n>55,000

MDE AMONG ADOLESCENTS WITH A SUBSTANCE USE DISORDER

THE 333,000 ADOLESCENTS IN 2016 WHO HAD A CO-OCCURRING MDE AND AN SUD IN THE PAST YEAR REPRESENT ABOUT ONE THIRD (33.0 PERCENT) OF THE 1.1 MILLION ADOLESCENTS WHO HAD A PAST YEAR SUD (**FIGURE 66**). AMONG ADOLESCENTS WITHOUT A PAST YEAR SUD, 11.9 PERCENT (2.8 MILLION ADOLESCENTS) HAD AN MDE IN THE PAST YEAR.

Figure 66. Past Year Substance Use Disorder (SUD) and Major Depressive Episode (MDE) among Youths Aged 12 to 17: Numbers in Millions, 2016



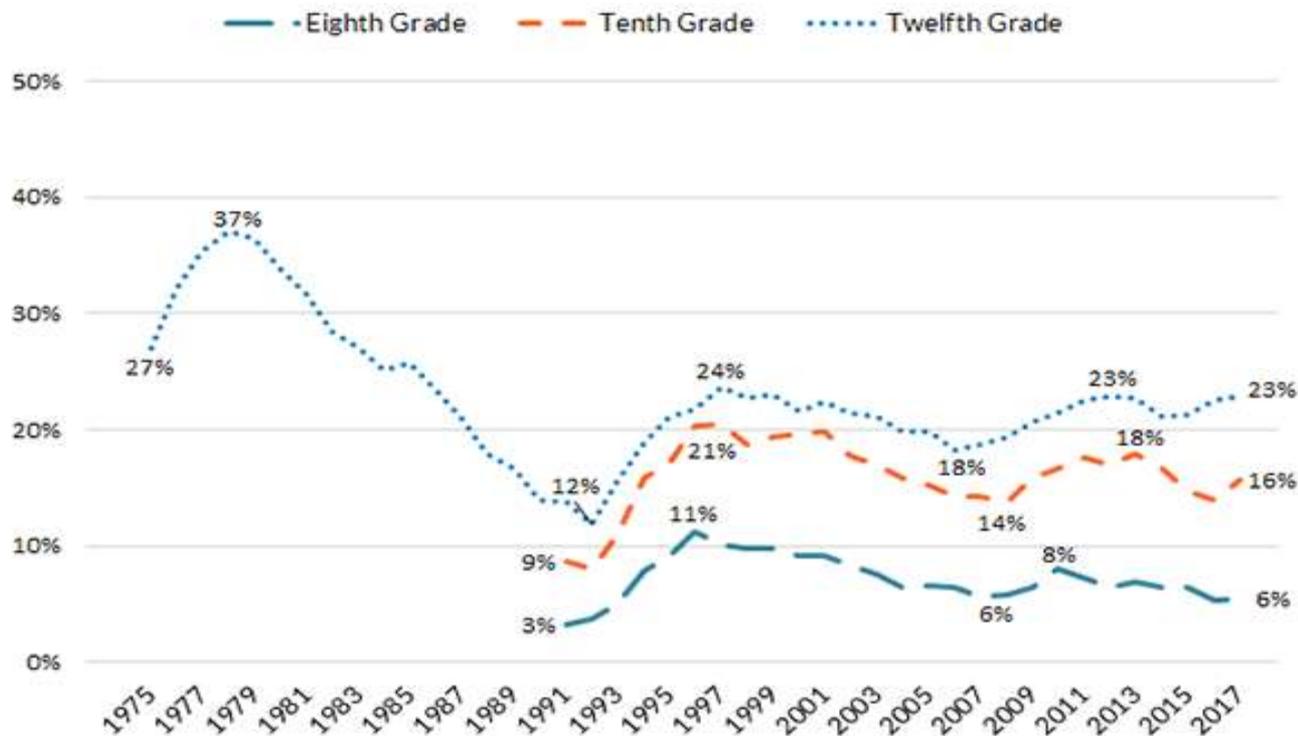
[D](#)

Note: Youth respondents with unknown MDE data were excluded.

IMPAIRED BUT UNDIAGNOSED

- individuals with psychosocial impairment not meeting DSM criteria for any of 29 well-defined disorders, but who have symptoms associated with psychosocial impairment should be regarded as suffering from a psychiatric disorder. [Angold A et al. \(JAACAP, 1999\)](#)
- The prevalence of subthreshold MDD among youth in lit. review ranged between 5-29%. Elevated rates of psych comorbidity, suicidality, impaired function. [Carrellas NW et al. \(2017\)](#)
- The clinical significance of depressive symptoms does not depend on crossing the major depressive diagnostic threshold. [Lewinsohn et al. \(2000\)](#)
- A third of youth with a sub-threshold diagnosis developed MDD during a follow-up period. [Hill et al. \(2014\)](#)

Percentage of Students in Grades 8, 10, and 12 Who Report They Used Marijuana in the Past Thirty Days: Select Years, 1975-2017



Source: Data for 1975-2017: Johnston, L. D., Miech, R. A., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2018). Demographic subgroup trends among adolescents in the use of various licit and illicit drugs, 1975-2017 (Monitoring the Future Occasional Paper No. 90). Ann Arbor, MI: Institute for Social Research, The University of Michigan. Retrieved from <http://www.monitoringthefuture.org/pubs/occpapers/mtf-occ90.pdf>. (Tables 13, 14, and 15)

PREVALENCE OF DISORDERS IN ADOLESCENTS WHO USE OR ABUSE SUBSTANCES

	Percentage	OR
Conduct disorder	25 to 50%	4
Depression	20 to 30%	2-3*
Anxiety	8 to 18%	1.5

*Meaning that comorbidity of AUD/SUD is X2-3 higher for those who suffer from depression than for those from the general population.

Armstrong, TD & Costello, EJ. (*J Consul Clin Psychology, 2002*);

Bott et al. (*J Stud Alcohol, 2005*)

CANNABIS USE IN ADOLESCENCE AND RISK OF DEPRESSION ANXIETY & SUICIDALITY:

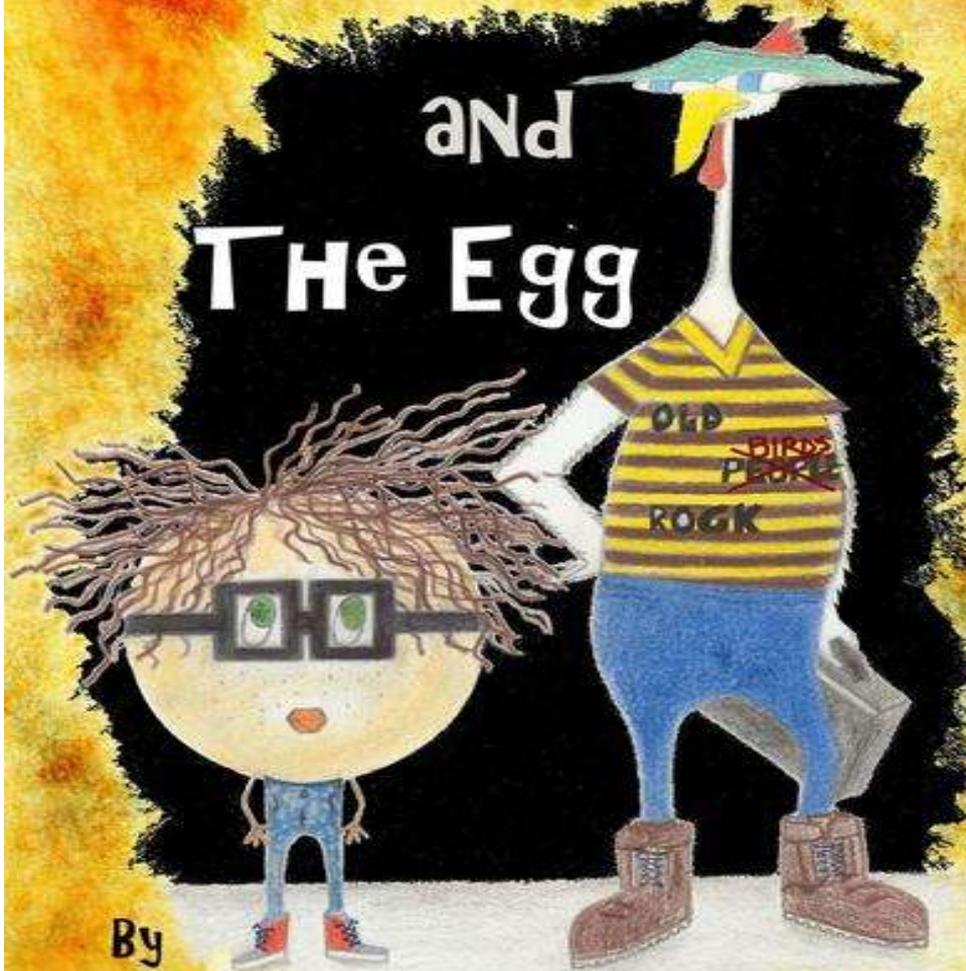
- **Systematic review & meta-analysis of 11 studies, n=23,317**
- **The OR of developing: anxiety NS; depression 1.37**
- **OR of Suicidal ideation 1.50; Suicide attempt 3.46**
- **The high prevalence of adolescents using cannabis generates a large # of young adults who could develop depression and suicidality attributed to cannabis**

Gobbi G. et al. (JAMA Psychiatry, Feb13, 2019)

THE CHICKEN

and

THE EGG



By
Beatrice ANN

EXPLAINING CO- OCCURRENCE: 5 MODELS

- 1) Secondary substance use model: **Self Medication?**
- 2) Secondary psychopathology mode: **Disease Model?**
- 3) Bidirectional model: multiple factors are involved in **triggering** and **maintaining** MH and SU Disorders;
The Rebound Effect: provoked by bio-behavioral processes where SU may produce/increase psych symptoms
- 4) Common-factor model: proposed to independently increase the risk for both (e.g., neurobiological, etc);
- 5) Un-relatedness model: A co-probability of otherwise un-related disorders **Kay-Lambkin et al. (2004); Tomlinson et al. (2006)**

MOTIVATIONAL ASPECTS OF ONGOING DRUG USE

Allostatic Hypothesis: Emphasizes the secondary psycho-pathology that emerge after prolonged SU, including the compensatory use of other drugs.
Koob et al. (2014)

The progression from occasional user to chronic user is a shift from SU as a positively reinforced reward-seeking behavior to a negatively reinforced compulsive behavior.

With respect to comorbid pathology, the model suggests that negative mood states related to SU cycles evolve into chronic conditions (i.e., Internalizing Disorders).

Progression to non cannabis SUD is anticipated/expanded effort for relief from reward deficiency & neg. mood states.

Olfson M. et al. (Cannabis use and risk for prescription opioid use disorder-Am J psychiatry, 2017); Kaminer Y. (editorial in Substance Abuse J. 2017)

PSYCH DISORDERS AS A RISK FACTOR FOR SUD

- Depression n=13, OR 2.03 [Groenman AP et al. \(JAACAP, 2017\)](#)
- MH disorders are a risk factor for SUD but this association works both ways. [Wilkinson AL, et al. \(Addict Behav, 2016\)](#)
- This would suggest shared liability (supported by shared genetic origin among common psychiatric disorders).
[Cross-Disorder Group: Psychiatric Genomics Consortium \(Lancet, 2013\)](#)
- Children of Alcoholics are at increased risk of developing other disorders showing cross-disorder transfer. [Hill SY et al. \(1999\)](#)

CO-OCCURRING DISORDERS

May:

Precede as a risk factor of,

Develop as a consequence of,

Moderate the severity of,

*In 3:4 participants of the ECA study a psychiatric disorder preceded the SUD **Christie KA, et al. (Am J psychiatry, 1988)**

OR

Originate from a common vulnerability as SUDs
(transmissible liability index)

Tarter RE & Horner MS (In: Youth SUD and Co-occurring Disorders)

Edited by Kaminer, Y: APPI, (2016)

PERCEIVED EFFECT OF CANNABIS ON NEGATIVE AFFECT

- Based on a naturalistic examination of data from a medical cannabis (MC) app Strainprint
 - n=1,399 MC users; App used n=18,392
 - Cannabis reduced perceived symptoms of depression (50%) and anxiety/stress (58%) short term
 - High CBD/low THC ratio was associated with > changes of depression ratings
 - Baseline symptoms of Depression only exacerbated across time
 - **Primary limitations:** are the self-selected nature of the sample and inability to control for expectancy effects
- Cuttler C et al. (J. Aff D. 2018)

“PROTECTIVE FACTOR” OF INTERNALIZING D.

Associated with behavioral inhibition (BI);

BI may counteract reward seeking associated with negative consequences;

Persons with Int’l D. are less likely to affiliate with deviant peers;

Individuals with negative moods and Int’l D. may experience cannabis to be less reinforcing;

Cannabis use may result with intensification of Int’l symptoms thus making continued use less likely

Arendt M, et al. (2007); Martz et al. (2018)

Why we can not further ignore SA in patients with mental illness

- Overlapping developmental, environmental and genetic vulnerabilities.
- Drugs can trigger mental disorders in those that are vulnerable and can exacerbate their course.
- Patients with mental illness are at greater risk for substance abuse.
- Drugs contribute significantly to the morbidity and mortality of patients with mental illness. [Compton W. \(2010\)](#)

NEGATIVE CONSEQUENCES: DEPRESSION COMORBIDITY IN YOUTH

Often experience increased severity of both disorders

Compared to a single diagnosis:

- **Elevated risk for suicide;**
- **Greater treatment attrition and poorer outcomes;**
- **Poorer overall quality of life including: social competence, mental and physical health (disability)**

Babowitch JD, & Antshel KM (J. Affect Disorders, 2016)

The Economist

Hard truths about a no-deal Brexit

The Trump and AMLO show

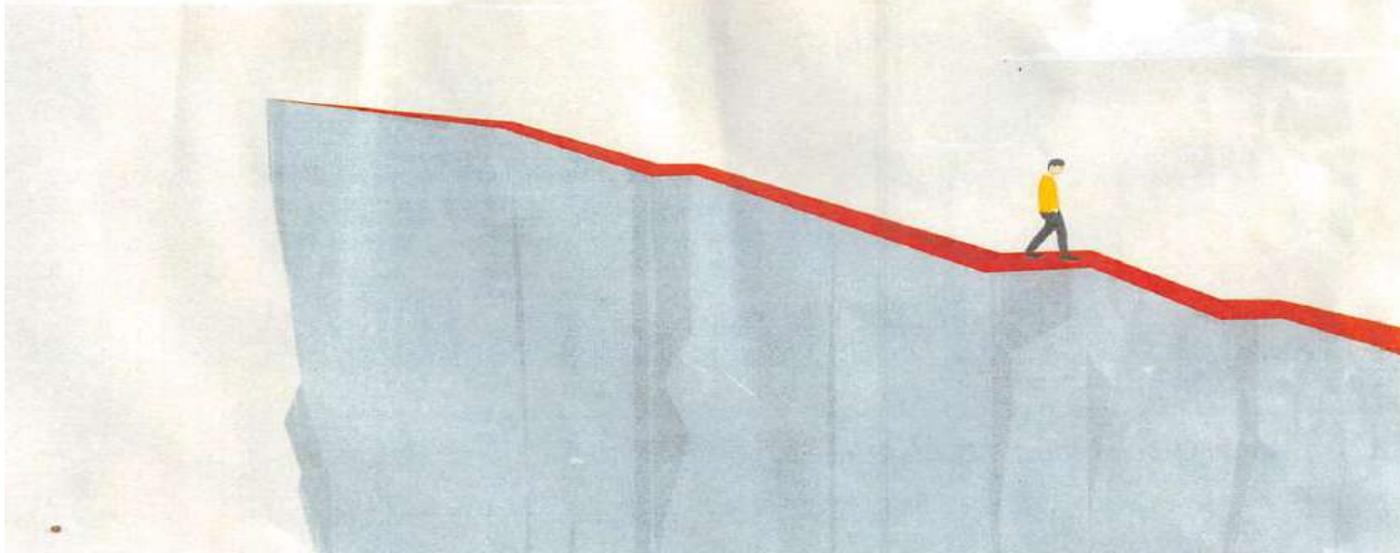
Going, going, Ghosn

Emerging-market currencies' comeback

NOVEMBER 24TH–30TH 2018

Staying alive

Why the global suicide rate is falling



IMPLICATIONS OF COMORBID MDD & SUD: SUICIDAL BEHAVIOR

The likelihood of suicide attempts increased by X2.5 with each additional psychiatric disorder. **Goldston et al. (2009)**

Increased risk for suicidal behaviors is common for MDD or SUD (X10-14) and is higher for the dually diagnosed.

A WHO funded review of studies on youth completed suicide from Australia(2), Finland, G.B., Israel, Norway, Sweden(2), U SA(5) (N=894 cases). It concluded that 42% had a mood disorder, 41% had SUD and 21% a disruptive disorder. **Fleischmann et al. (2005)**

39% of suicide cases were diagnosed with two or more disorders mostly mood, SUD, and disruptive disorders.

MENTAL HEALTH GAPS FOR YOUTH

10-20% of youths in the U.S. meet diagnostic criteria for MH disorder.

Up to 50% of youth in the child welfare system and 70% in the JJ system have a diagnosable MH disorder.

Only 20-30% receive specialized MH care.

Youth comprise 25% of the population, only 1/9 of health care funding is directed to them. [Kazak AE et al. \(Am Psychol 65:85-97, 2010\)](#)

A TALE OF TWO SYSTEMS

Most adolescents receive separate SUD treatment from medical and psychiatric services, typically in community-based programs. Differences across these systems have significant systemic barriers to access for youth with co-occurring problems reinforced by distinct funding mechanisms.

Hawkins EH: *Ann Rev Psychol* 60:197-227, (2009)

BARRIERS FOR INTEGRATED SERVICES FOR THE DD YOUTH

The historical separation of substance abuse and mental health services.

The tendency to exclude youth with SUD from clinics for psychiatric disorders.

A limited # of clinicians and researchers who focus on dually diagnosed youth.

Few (<30%) providers respond using formal assessment practices or Tx protocols (10%).

Issues with billing and funding treatment of the Dually Diagnosed. [Lichtenstein et al. \(2010\)](#)

CURRENT APPROACHES FOR DD INTERVENTION

- **Currently, clinicians have more info about the epidemiology than about approaches to DD Tx**
- **Traditional treatment of co-occurring MH and SUD have been designed around the first and second models**
- **Utilizing existing uni-diagnosis Tx strategies**
- **Generally with the primary condition targeted for Tx**
- **The secondary condition is usually treated sequentially**
- **Failing to formulate co-morbidity Tx regimen leads to suboptimal Tx, poor outcomes, negative (and more costly) consequences** [Brady s et al. \(1996\)](#); [Kay-Lambkin et al. \(2004\)](#)

CHANGES IN SPECIFIC PSYCHOPATHOLOGY OVER A PSYCHOSOCIAL INTERVENTION

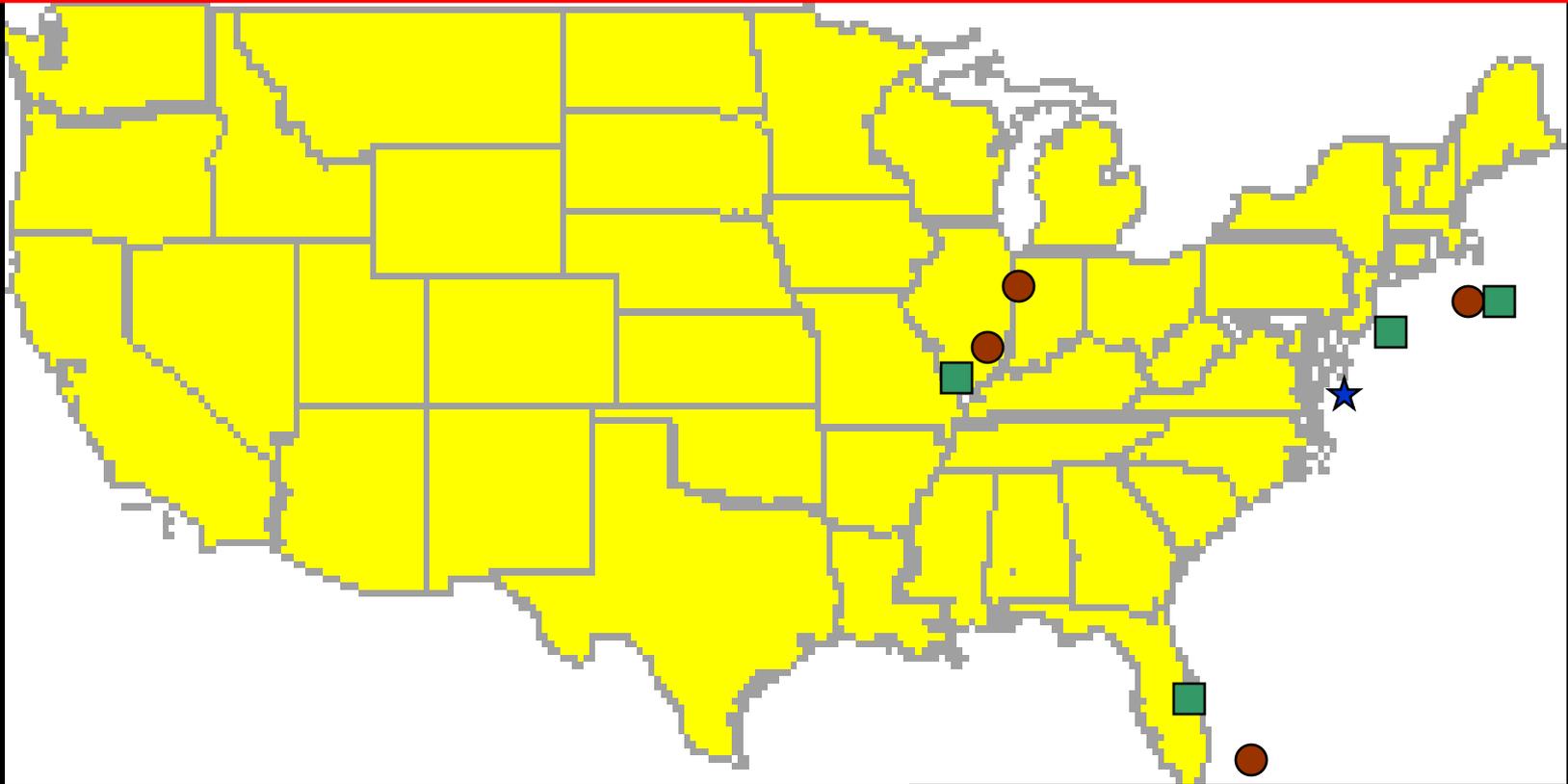
- Intervention is successful if symptoms decrease, typically below a clinical threshold
- This assumes that psych disorders are independent and can be reliably measured
- Yet symptoms from various disorders and disorders themselves co-occur (C-O) more strongly than expected by chance **Constantinou MP et al. (JAACAP, 2019)**
- A single “General Psychopathology” **P Factor** has been shown to summarize the C-O among many symptoms of differing types (in addition to Specific factors such as Internalizing and Externalizing)
Caspi A, et al. (2014); Lahey BB et al. (2012)

P FACTOR

- A growing number of studies support a bi-factor model that includes general & specific psychopathology factors as a candidate structure of psychopathology in youth
- The bi-factor model is useful for teasing apart general and therapeutic changes within-person compared to between-persons that are conflated (combined into one) in standard analyses of symptom scores [Constatinou MP, et a. \(2019\)](#)

CYT

Cannabis Youth Treatment Randomized Field Experiment



● **Coordinating Center:**
Chestnut Health Systems, Bloomington, IL, & Chicago, IL
University of Miami, Miami, FL
University of Conn. Health Center, Farmington, CT

■ **Sites:**
U Conn. Health Center, Farmington, CT
Operation PAR, St. Petersburg, FL
Chestnut Health Systems, IL
Children's Hosp. of Philadelphia, PA

★ **Sponsored by: Center for Substance Abuse Treatment (CSAT), Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services**

CYT DEPRESSION OUTCOMES -I

RESULTS:

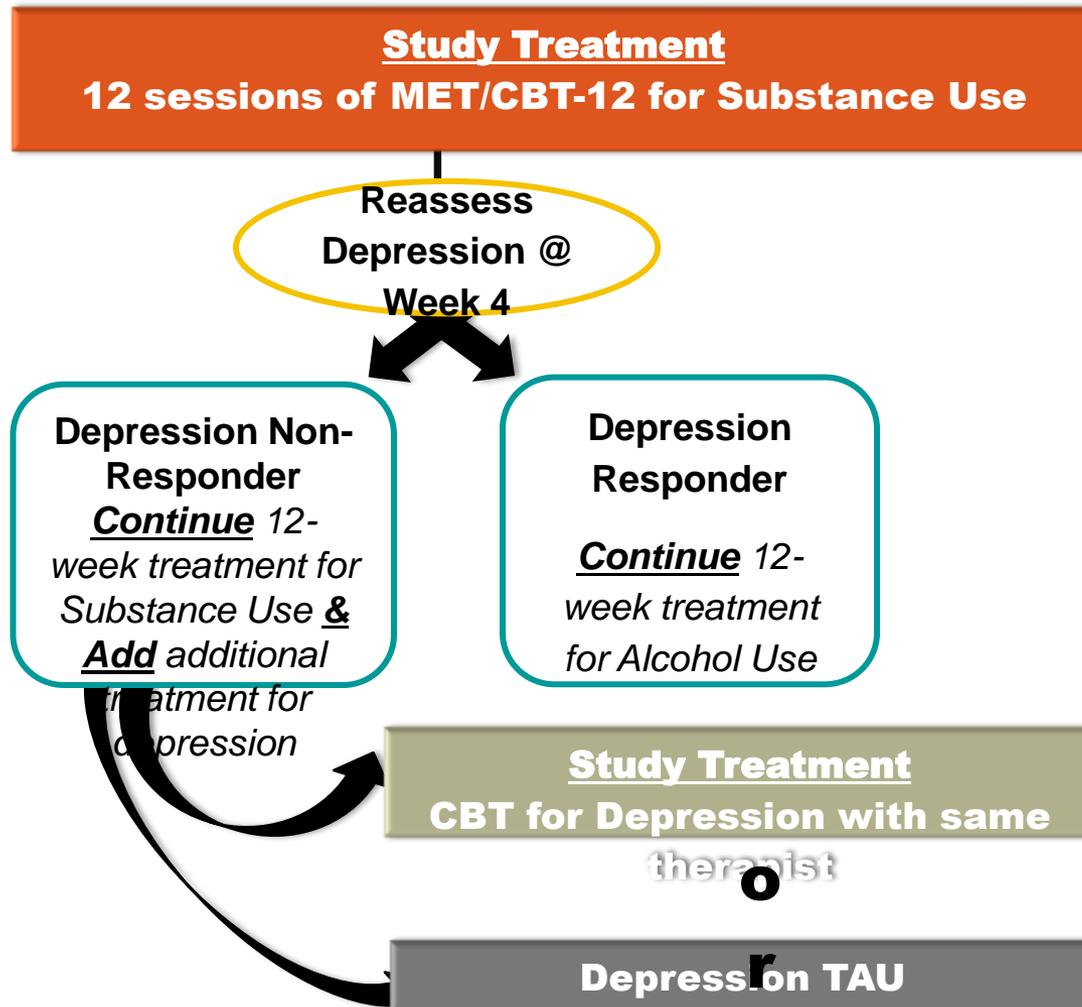
- **Baseline rates: DSM-IV-MDD and any depressive symptoms (18% and 70% respectively).**
- **A significant linear decrease in the depressive score, and cannabis use across 4 time points (up to 1 year FU)**
- **Improvement in both symptoms not correlated with type of Tx provided**
- **Improvement in cannabis use was not significantly influenced by depression severity at baseline and vice versa**

Arias, Burleson, Kaminer, et al. (Under review)

CYT DEPRESSION OUTCOMES-II

- Time lag-analysis from one time point compared to next
- Within-subjects the severity level of depressive symptoms was predicted by previous depressive symptoms ($p < 0.001$) but not cannabis use
- The frequency of cannabis use was predicted by previous cannabis use ($p < 0.001$) but not depressive symptoms respectively
- **Conclusion #1:** cannabis use and depressive symptoms decrease concurrently (as opposed to in a staggered fashion)
- **Conclusion #2:** Providers should integrate Tx protocols and increase intensity of Tx for no-early responders

Adaptive Treatment Design: Treatment for Teens with Alcohol or marijuana Abuse & Depression (T-TAAD)



ADAPTIVE TREATMENT DESIGN

Begin treatment of SUD-MDD adolescents with CBT for SUD alone

Rapid depression responders will not need specific depression treatment

Begin depression treatment after ~ 4 -5 weeks only for those who need it

This will allow for better comparisons between an active depression treatment and a comparison condition

DD RECRUITMENT “PAINS”

- Recruiting youth for treatment of SUD and CO-MDD has proven to be more difficult than for mono-diagnosis Tx

	<u>SUD Tx</u>	<u>DD Tx</u>
▪ Referrals/inquiries:	252	212
▪ Screened for eligibility:	<u>212</u>	<u>138</u>
▪ Met eligibility:	204	59
▪ Completed intake:	172	55
▪ Began Tx:	<u>161</u>	<u>51</u>
▪ Ratio: Screened/Tx initiation :	76%	37%

RAPID RESPONSE FOR DD TX

- **Approx. 40% of youth 13-21 Y.O. were Rapid Responders after 4 CBT sessions for SUD**
- **Response:** a 50% reduction in the CDRS raw score (**Poznanski & Mokros, 1996**) plus CGI rating of \geq much improved (**CGI-I; Guy 1976**)
- **Remission:** absence of significant depression symptoms by a score of ≤ 28 on the CDRS
- **Recovery:** remission lasting 2 months

PROPOSED MECHANISMS FOR SYMPTOMS CHANGE

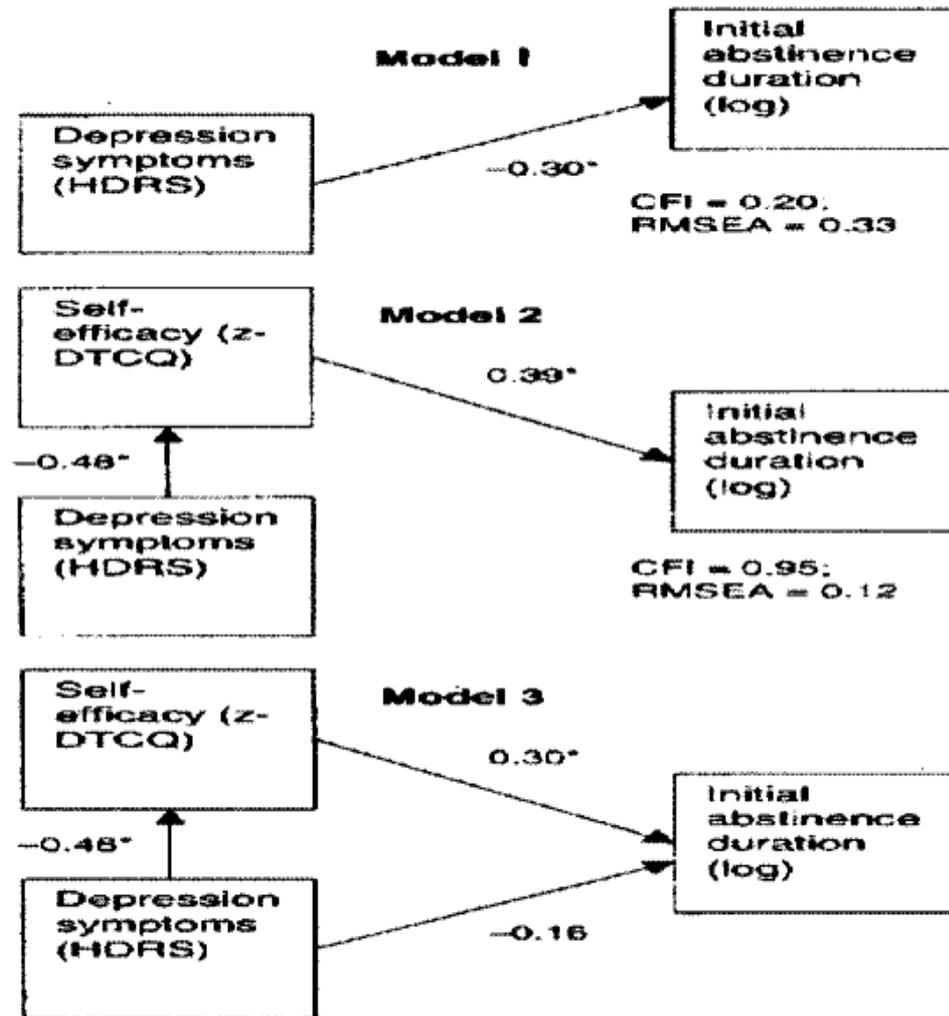
Dysfunctional reward processing might be a feature of comorbid depression and SUD that is responsive to Tx

Boger et al. (J. Psychother. Integ., 2014)

Self-efficacy as a possible mediator between depression and substance use relapse

Ramo DE et al. (Subst. Use Misuse 2010)

Depression, Self-Efficacy, and Relapse



* $p < .05$

Figure 1. Three path models of the relationships between depression symptoms, drug-taking self-efficacy, and length of abstinence in adolescents.

INTERVENTIONS FOR DD DEPRESSION IN YOUTH

Cognitive-behavioral Therapy (CBT)-singular or integrated such as the SHADEY protocol [Hides et al. \(J. Affect D., 2010\)](#)

Incorporating: Motivational interviewing and mindfulness skills delivered within a harm minimization framework.

SHADEY protocol includes: self-monitoring, activity scheduling, thought challenging, coping skills training and relapse prevention components.

Family-focused Therapy (FFT)

Medication (SSRI), other?

Integrative medical and psycho-therapies

SEQUENCED VS. COORDINATED TX OF YOUTH WITH COMORBID DEPRESSION & SUD

N=170 (ages 13-18); 22% females; 61% Caucasian with comorbid depression (54% MDD; 18% dysthymia)

CWD-Coping with depression;

FFT-Functional family therapy (for SUD)

Three Tx sequences: FFT/CWD; CWD/FFT; FFT-CWD

FFT/CWD more efficacious for SU reductions

Depression reductions occurred early in all 3 Tx sequences

No Tx sequence resulted in more rapid depression recovery

Medication usage did not moderate change during or post Tx

Addressing depression early in Tx may improve substance use outcomes in the presence of MDD. [Rhode et al. \(JCCP, 2014\)](#)

PHARMACOTHERAPY

N-Acetyl-Cysteine(NAC)was hypothesized to reduce instatement of drug seeking behavior in animal models.

A placebo controlled study with adolescent CUD resulted in X2 rates of neg urine specimens and end of Tx abstinence by the NAC group [Gray et al. \(2012\)](#)

Oxidative stress and glutamate transmission are disrupted in both depression and CUD.

A secondary analysis: NAC did not reduce severity of depressive symptoms, therefore not supporting a mediating effect on cannabis use [Tomko et al \(2018\)](#)

NAC was more effective promoting abstinence among those with higher baseline depression

THE END

Contact Info:

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**ADDITIONAL SLIDES
AS TIME PERMITS**

IMPLICATIONS OF COMORBID SUD & MDD ON TREATMENT

- **Improved AOSUD outcomes during aftercare phase for treatment completers were associated with reduced suicidal ideation.**

Kaminer et al. (AJA 2006)

TADS OUTCOMES

Treatment for Adolescents with Depression study

n=439 ; Age 12-17 years; assessments at 12 and 36 weeks

- Evaluate effectiveness of 4 Txs: FLX; CBT; FLX+CBT; PBO
- CBT+FLX superior in reducing depression in DSM-IV=MDD
- Suicidality improved across all TXs
 However, X2 with CBT or FLX+CBT
- Perhaps CBT protects against suicidality

March J et al. (JAACAP, 2006)

ONSET OF SUD FOLLOWING TX FOR YOUTH DEPRESSION

- **TADS study: N=192 adolescents treated for MDD without prior diagnosis of SUD were followed for 5 years**
- **Achieving a positive response to MDD was unrelated to AUD but predicted a lower rate of subsequent SUD**
- **More comorbid Disorders predicted SUD**
- **Type of MDD Tx was unrelated to either outcome.**
Curry JF, et al. (JCCP, 2012)
- **TORDIA: 25% reported substance use during the study.**
Goldstein et al. (2009)

TX OF COMORBID AUD & MDD WITH MI/CBT: A META-ANALYSIS

Based on 12 studies in adults; n=1721

Overall small effect size for depression response compared with controls $P < 0.001$; $g = 0.27$ confidence interval = 0.13-0.41 (maintained after 12M)

Digital interventions showed a higher effect size for depression than face-to-face interventions $p = 0.030$.

For alcohol: $g = 0.17$ confidence interval 0.07-0.28. After 12M increased to $g = 0.32$ (a “sleeper effect”):

Carroll KM, et al. (Arch Gen Psych, 1994)

Conclusion: combined MI/CBT has a small but clinically significant effect in Tx outcome compared with TAU

Riper et al. (Addiction, 109, 394-406: 2013)

COMORBID DEPRESSION AND THE OUTCOMES OF ADOLESCENT SUBSTANCE ABUSE TREATMENT

One might expect that the presence of any comorbid disorder would complicate SUD retention and treatment leading to poorer outcome

However, comorbid depression at treatment baseline has been associated with all **three** possible influences on outcome: **worse** outcomes, **better** outcomes, and **equivalent** outcomes

Hersh J, Curry JF, & Kaminer Y. (2014) The impact of comorbid depression on adolescent subst abuse treatment .SAj, 35, 364-75.

POSITIVE IMPACT

N=106, ages 13-21 Y.O.

(M: age 17.2) with alcohol or marijuana abuse or dependence

76% male, 24% female; 79% Caucasian

50% had Conduct Disorder; 38% had Major Depression; 27% had Traumatic Stress Disorder

Assessed at baseline and 3, 6, and 12 months post-baseline

Becker, S.J., Curry, JF, & Yang, C. (2011). Factors that influence trajectories of change in frequency of substance use and quality of life among adolescents receiving a brief intervention. *JSAT*, 41, 294-304.

TREATMENT AND OUTCOME VARIABLES

MET/CBT-5, consisting of two sessions of motivation enhancement therapy and three sessions of cognitive behavior therapy

Outcomes: Frequency of substance use; and Quality of Life

Outcome assessed based on trajectories of these outcomes over the 12 month period

RESULTS

Frequency of use declined significantly from baseline to month 3, then stabilized to month 12.

Quality of life (QOL) increased modestly and significantly over the 12 months

Decreased frequency of use was associated with increased quality of life (with a time lag)

Severity of depression was associated with lower QOL at baseline but predicted greater improvement in QOL over the year

RAPID DEPRESSION RESPONSE-I

% Responders at Week 4

CBT+FLX	27.49
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CBT+PBO	28.04
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Over a quarter already responded even though their only active treatment was CBT for SUD. [Riggs et al. \(2007\)](#)

WHY ARE THESE DIFFERENCES IMPORTANT?

- **Depression can be a reactive adjustment problem or a diagnosed disorder**
- **Depression is episodic**
- **Episodes vary greatly in severity and duration**
- **When treated with psychotherapy, some proportion of patients with MDD (and not necessarily the SUD) respond quickly, suggesting a response to non-specific factors**
- **To date no studies have investigated varying aspects of “depression” as they affect SUD treatment**

TX FOR YOUTH WITH CO- OCCURRING DEPRESSION (T- TAAD)

Hypotheses

- 1.** About 25% will have rapid depression response
- 2.** Rapid depression responders will retain depression response through the end of treatment
- 3.** Integrated SUD-Depression treatment will surpass SUD treatment + Depression TAU.

Adaptive design allows for better comparisons between an active depression treatment and a comparison condition

PRO'S OF THIS ADAPTIVE TREATMENT DESIGN

Allows for a more powerful comparison between any two interventions for depression, because it has removed from the comparison those likely to respond to non-specific factors

Provides a more robust test of any depression treatment because the “easy cases” are gone

Can lead to more personalized intervention

Analogous to a “placebo washout” lead-in to medication studies

CON'S OF THIS ADAPTIVE TREATMENT

**Participants cannot be in obvious need of depression –
specific treatment at baseline**

**Participants cannot be in need of treatment for serious
suicidal risk at baseline**

**It may be challenging to add more sessions per week after
week 4**

**It may be discouraging for those who do not achieve early
depression response**

COMPUTERIZED INTERVENTIONS

- A pilot study, computerized MET/CBT intervention for n=26 adults with CUD/MDD
- Tx completion=85%, mean percentage of cannabis using days from baseline=69% ($p<0.05$; effect size=0.79)
- Reduction of depressive symptoms ($p<0.001$; effect size= 1.52)
- Addressing comorbid CUD and MDD using computer-assisted, EBP is feasible in a psychiatric setting
- It may improve symptoms of both disorders
Glasner et al. (2018)

CONCLUSIONS

The impact of comorbid depression on adolescent SUD treatment is currently not clear or consistent

There is a need to more carefully define and to some extent standardize the definition of measurement of depression in studies of comorbid depression and SUD in adolescents

An adaptive treatment design may lead to a clearer picture of how depression affects adolescent SUD treatment

WHAT TREATMENT?

MET/CBT-12 for substance abuse (12 sessions)

MI (2 sessions)

CBT (10 sessions)

An evidence-based treatment supported by the Cannabis Youth Treatment Study and by J. Cornelius' studies

CBT for depression (7 sessions)

Core depression-related skills

COMPONENTS OF MET/CBT-12

MI1: rapport, review of problems, reasons for quitting

MI2: functional analysis, goal-setting

CBT sessions: problem-solving, refusal skills, social support, *depression management*; coping with triggers, communication, anger management, relapse prevention

Depression Management session is an existing module in MET-CBT-12. It introduces the “triangle” of thoughts, behaviors, and emotions in relation to depression, as well as behavioral activation and cognitive restructuring

COMPONENTS OF CBT FOR DEPRESSION

Link with Depression Management Session, and Mood Monitoring (1 session)

Behavioral Activation (2 sessions)

Problem-solving (2 sessions)

Cognitive Restructuring (2 sessions)

ADVANTAGES OF THIS DESIGN

Everyone is guaranteed an evidence-based substance abuse treatment

Those who do not seem to need additional depression treatment have a relatively reduced burden

For those who do need depression treatment, half receive that within the study: no need to change or add therapists or to coordinate care across systems

Allows for a more powerful comparison between any two interventions for depression, because it has removed from the comparison those likely to respond to non-specific factors

DISADVANTAGES OF THIS DESIGN

Participants cannot be in need of treatment for serious suicidal risk at baseline

For non-early depression responders, half must obtain TAU at cost

Psychologically, it may be a burden to add an extra session each week after week 4

It remains to be seen whether non-early responders will become responders after another treatment is added

CHALLENGES OF ADAPTIVE TREATMENT

Gunlicks-Stoessel et al. (2016)

**What should the adapted treatment be? More of the same?
Different psychosocial modality? Psychopharmacology?**

When should the adaptive treatment decision be made?

What should be the criterion for response/non-response?

**How will adolescent patients, their parents, and their
therapists react to the adaptation?**

INCREASING PLEASANT ACTIVITIES

Generate list of activities the adolescent likes or would like to do

Obtain a baseline

Select 2-3 target activities to increase

Rate mood daily

Note connection between activities and mood

BEHAVIORAL ACTIVATION

Increasing pleasant, non-harmful activities

Rekindling hedonic capacity

Challenging the belief that activities cannot be enjoyable

Pleasant Activity Scheduling

COGNITIVE RESTRUCTURING

Guided discovery and Socratic questioning

Use of “behavioral experiments,’ homework assignments, and Daily Thought Record to discover the cognitions associated with substance abuse

Questionnaires can also be used to ask patients which of the common cognitions are true for them

IDENTIFICATION OF COGNITIVE DISTORTIONS

All-or-None Thinking

Catastrophizing

Emotional Reasoning

Overgeneralization

Discounting the Positive

Should's & Must's

My Fault

QUESTIONS TO UNCOVER THOUGHTS

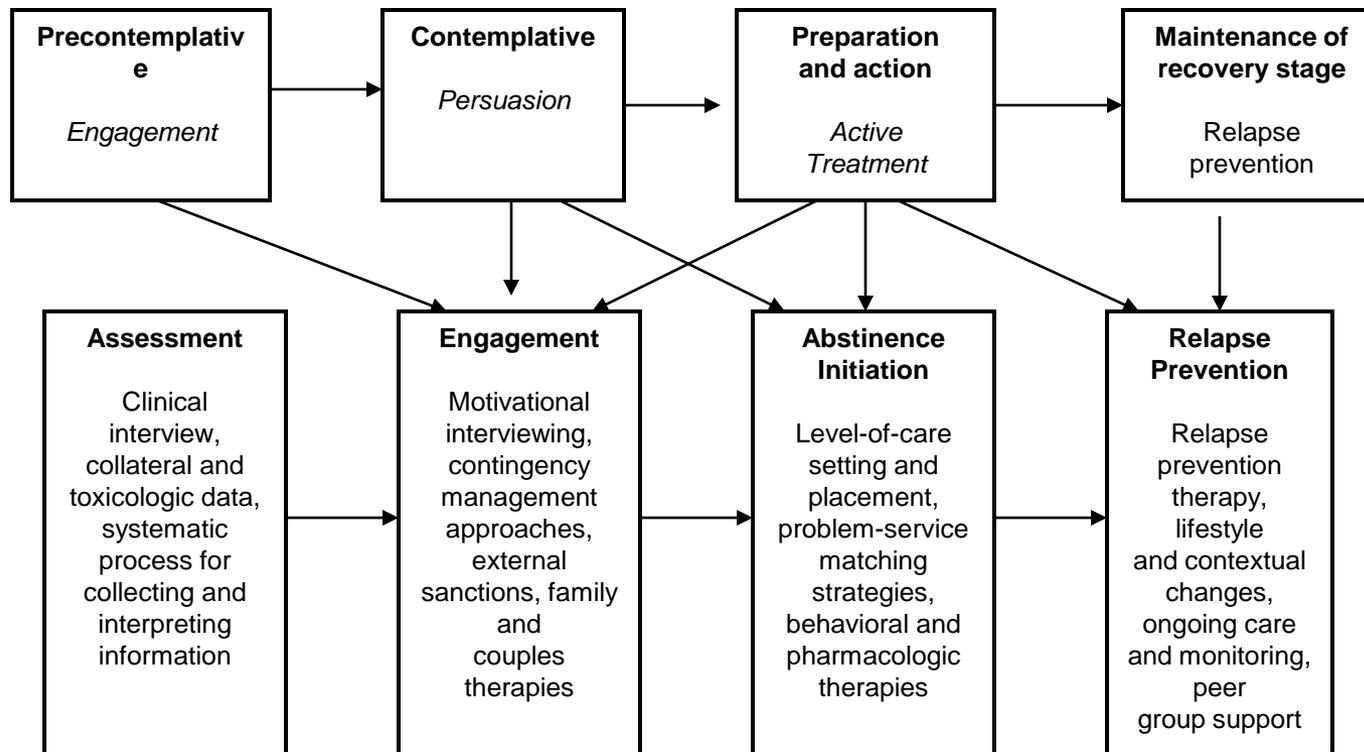
What was going through your mind when that happened?

What are your thoughts about that?

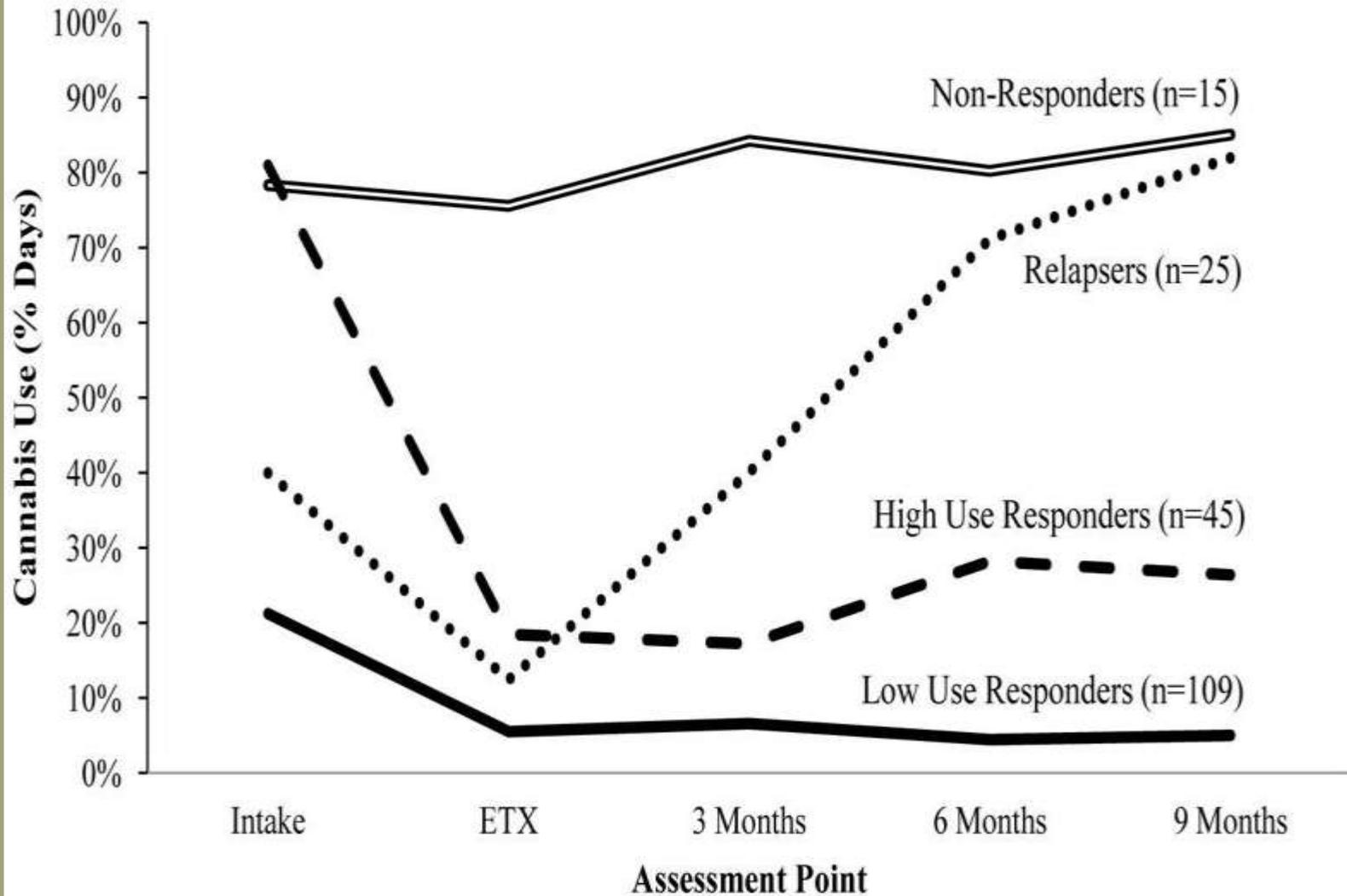
I noticed your mood just seemed to shift. Can you tell me what was going through your mind?

What does that mean to you?

STAGEWISE MODEL OF READINESS FOR CHANGE AND TREATMENT APPROACHES TO READINESS AMONG PERSONS WITH CO-OCCURRING SUBSTANCE USE AND SEVERE MENTAL DISORDERS, MATCHED TO INTERVENTION GOALS AND STRATEGIES.



Treatment Response Subgroups for Cannabis Use



Four treatment response subgroups for percent days cannabis use across five assessment points