CHALLENGES OF MARIJUANA USE AMONG TEENS
Part 2

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Quick Update

There is an increase in questions regarding Delta 8

* Delta 8 is a cannabinoid that can currently be purchased legally in Indiana.
* The word is that it is harmless helpful in treating anxiety and sleep.
* Delta 8 is a psychoactive naturally occurring cannabinoid.
* Theoretically it creates a less intense “high” than Delta 9 and 10.

Quick Update Cont.

* There are several concerns about Delta 8
  1. There is very little research on the use of this cannabinoid, its mechanism of action, and its interaction with other psycho active naturally occurring cannabinoids.
  2. The method of extraction is unclear and suspect.
  3. Most samples that have been collected are high in toxins, insecticides, solvents and fungicides
  4. Most states who have legalized marijuana have made Delta 8 illegal.

Potency:

1960's - 1 – 2%

1980's - 4 – 6%

Current – Average 10%

Colorado samples – 19 – 30% THC

New Challenges: High Potency Cannabis (HPC)

DABS: (Butane, Honey Oil, Wax)

Extracting and concentrating THC using butane, alcohol, water or another solvent contains 80-95% THC

Side Effects of High Potency THC:

* Long lasting psychological and traumatic effects
* Heart attacks
* Severe long term psychosis
* Deaths from cannabis hyperemesis
* Increased anxiety
* Increased mood swings and Bi-Polar symptomology

High Potency Cannabis

* Not only is it not your parents weed – It's not weed, it is high potency THC
* Cannabis of choice is High Potency THC known as Dabs, Wax, Vape cartridges and edibles
* High Potency Hash Oil Extracts 35 – 99% THC

Cannabis Resin and Hash Oils are extracted via 2 methods:

* Most frequent method uses high heat butane oil to extract the resin
* The less commonly used method uses ice and water to separate and filter the high potency part of the plant

Both methods result in an oil which is then inhaled through a Dab pen, vape cartridge or placed in edibles

Safety Concerns:

* Oils are toxic to the lungs
* We have no long term research to determine physical, cognitive, psychiatric consequences of HPC
* We do know that as tolerance develops the preoccupation with using more is very strong
* Using vapes, cartridges and dab pins makes it easy to use without being detected. There is an increase use at work, in class, in homes.
* THC is vaped at extremely high temperatures causing significant stress on the lungs and respiratory system

Psychosis and HPC Use

What does the research tell us about high potency use? Bear in mind that research considers HPC as 9-12%THC

* 30 years of research confirms that THC use at a young age(15-18) increase risk of developing psychosis.
* Risk is directly correlated to frequency, dose, potency
* Individuals who switched from regular marijuana to medical marijuana experienced higher levels of neuro toxins

Psychosis and HPC Use Cont'd.

* 2009 adults hospitalized for first episode of psychosis were more likely to use HPC
* Daily use of HPC associated with 12 fold increase in risk of psychosis
* HPC use associated with early onset of first episode (average of 6 years)
* Following first episode patients at greatest risk for relapse (defined by hospital re-admission) were self reported daily users of HPC
* Relapse risks were lowest among those who discontinued use after first episode of psychosis
* HPC has significantly lower levels of CBD. CBD reduces brains risk of psychosis.

What I see:

* Increased numbers of young adult males (18-23) who are diagnosed with Bipolar and first episodes of psychosis. All of them report recent, frequent use of "Dabs"
* Teens who are highly emotionally reactive, overwhelmed, and have no frustration tolerance and an inability to problem solve
* Increased car accidents
* Debilitating anxiety and avoidance behavior

Cognitive Impairment and HPC (looking at potency of 12%)

Research clearly supports presence of cognitive impairment related to frequency, duration, and age of onset

- Problems with motor control
- Executive functioning
- Brain structure changes
- Reduced Volume in the hippocampus memory
- Temporal cortex (sensory information from ears is processed into speech and words)
- Limbic related issues– produces emotionally relevant context for sensory experiences)
- Orbitofrontal cortex (emotion and memory)
- White matters and structural changes that create cognitive impairment

Cannabis Hyperemesis Syndrome (CHS)

Symptoms:

- Recurrent nausea
- Severe nausea (20 times a day)
- Abdominal pain
- Compulsive hot baths or showers for symptom relief (14 a day) Relief is rapid but transient
- Symptoms worse with food
- Results in weight loss and dehydration
- Daily cannabis users (16-51)
- Heavy use for at least three months

Cannabis Hyperemesis Syndrome (CHS) Cont'd.

* Has been considered rare but is on upswing as potency increases
* Largely unrecognized and under reported
* Often misdiagnosed as Cyclic Vomiting Syndrome. However, 50% of the people diagnosed with Cyclic Vomiting Syndrome report daily cannabis use
* Treatments with anti-nausea medication are ineffective

CHE Cycle

Prodromal:

* 1-2 weeks of morning nausea, food aversion, weight loss, occasional vomiting

* Acute

  -Severe nausea, frequent vomiting, abdominal pain

* Recovery – symptom improvement related to cessation of cannabis use

CHE Cycle

* Only treatment proven effective is cessation of use. Improvement might take 12 hours to 30 days
* Individuals typically increase use believing it will help
* THC has been helpful as an antiemetic with chemo therapy patients. However, accumulation of toxic levels of THC in fatty tissues results in paradoxical effects.
* Recent death of 16 year old reported

MARIJUANA JEOPARDIZES

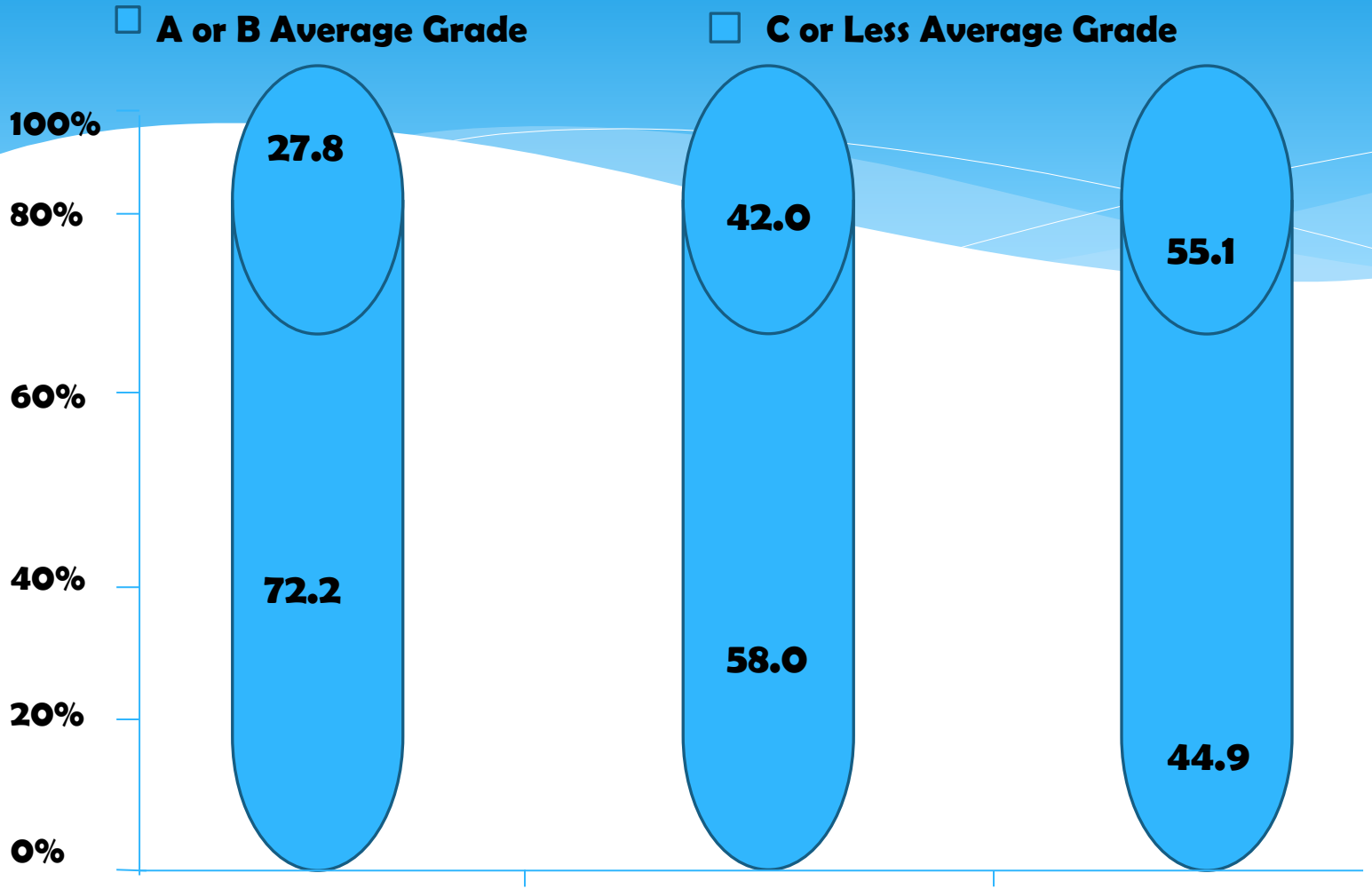
LEARNING

AND

SCHOOL SUCCESS

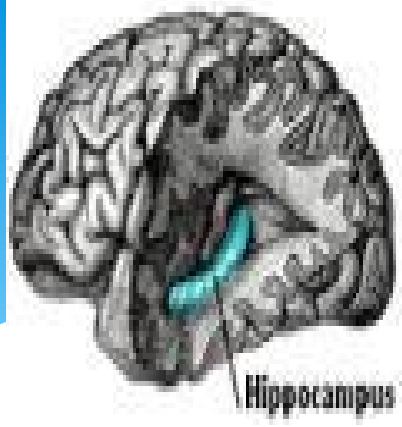
Marijuana Use On Academic Performance

Source: SAMHSA, 2002, 2003, and 2004 NSDUH Survey of Households



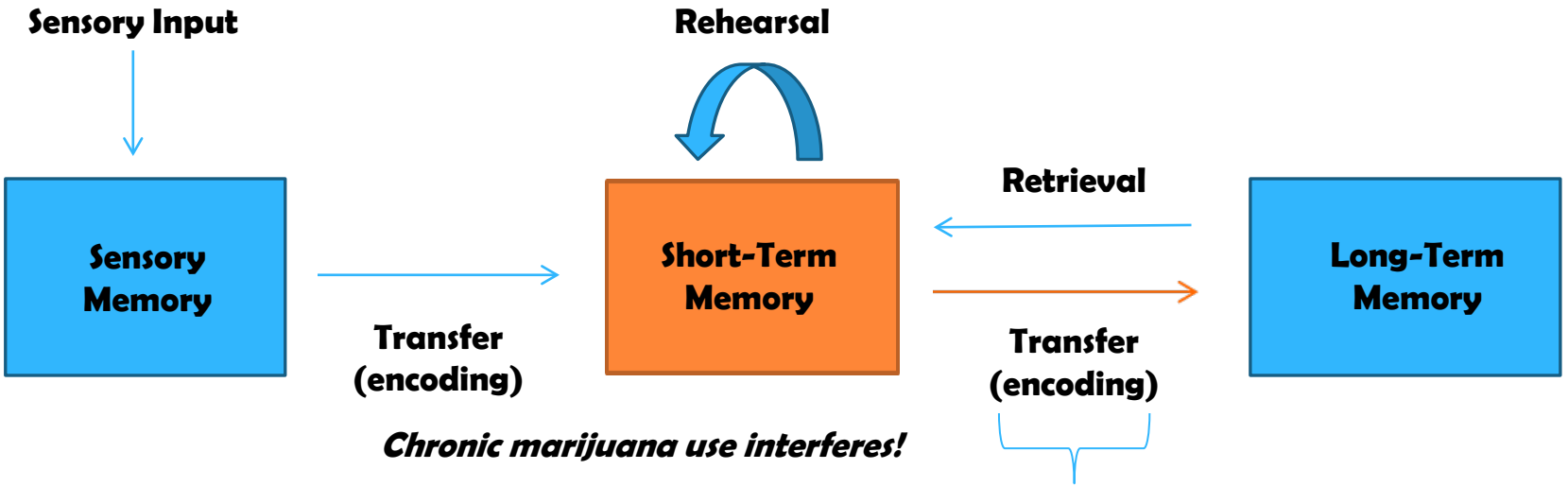
17,000 Students Nationally

This means that 10% of students with mostly A's used marijuana and 48% of the students with mostly D's and F's currently used marijuana



Let's Make a Memory
Introducing the Hippocampus

Aaron M. White Ph.D. 2004



MAHMOOD, JACOBUS, BAVA, SCARLETT, and TAPERT (2010)

THC and Memory

* THC reduces hippocampal neuron activation, below the level needed to trigger memory formation
* With chronic THC exposure, neuron connections involved in memory are gradually lost due to continual suppression
* Brain imaging studies show regular THC users have a smaller hippocampus, and have poorer memory

Source: Iversen L. How cannabis works in the brain. In Marijuana and Madness. Ed. Castle & Murray, 2004. Oxford University Press

THC and Memory Cont'd.

* Significantly impacts the ability to process and learn new information, especially higher level concepts.

* Research with college students whose brains were scanned while asked to complete a "location tasks" research subjects were not under influence while completing the task. Simple tasks took a disproportionate amount of frontal lobe energy to complete. As task becomes more complex, subjects just "give up."

* Pre-frontal lobe alterations were noted in females which increases emotional reactivity and impairs planning, focus, and decision making.

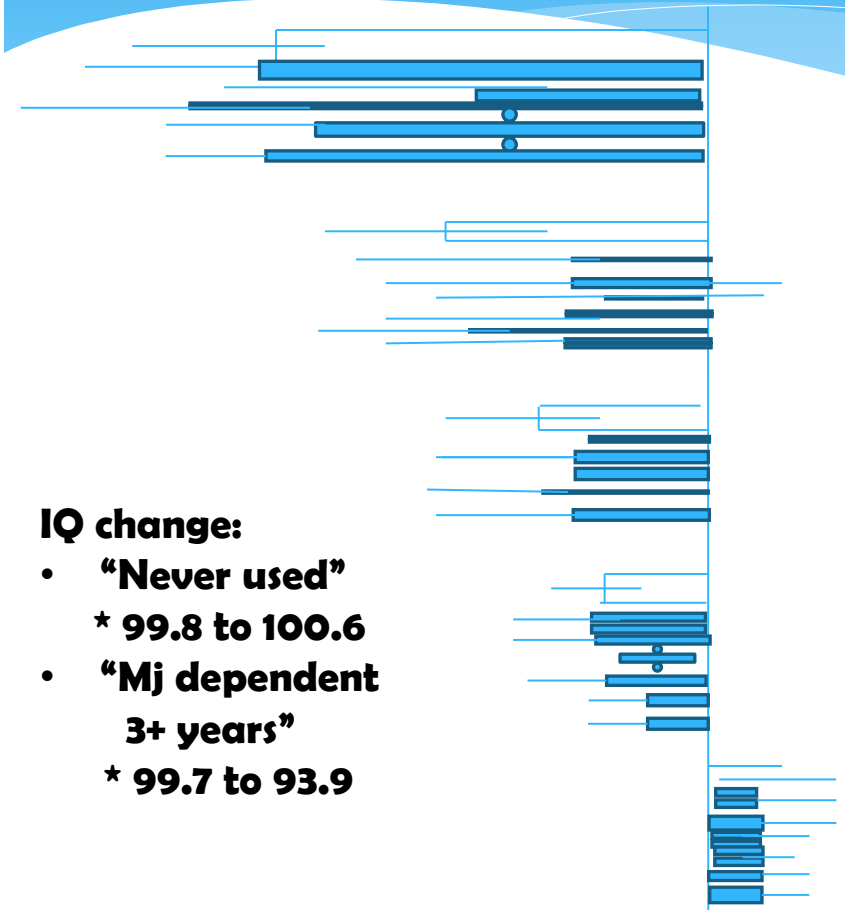
THC and Memory Cont'd.

Research indicates that the younger teens are when they begin using the more negative impact they experience in frontal lobe development

IQ

Change in IQ from 13-38 yrs old

Persistent cannabis users show neuropsychological decline from adolescents to midlife.



MJ dependent 3+ years

MJ dependent 2 years

MJ dependent 1 year

Used, never diagnosed

Never used

IQ change:

- "Never used"
  * 99.8 to 100.6
- "Mj dependent 3+ years"
  * 99.7 to 93.9

Negative Impact

Table I. Adverse Effects of Long-Term or Heavy Use of Marijuana.

Volkow, N.D., Baler, R.D., Compton, W.N., and Weiss, S.R.B. (2014). Adverse health effects of marijuana use. *New England Journal of Medicine,* (370) (23), 2219-2227.

Effects of long-term or heavy use

1. **Addiction (in about 9% of users overall, 17% of those who begin use in adolescence, and 25 to 50% of those who are daily users)*** (Addiction rate increases with HPC)
2. **Altered brain development***
3. **Poor educational outcome, with increased likelihood of dropping out of school***

Negative Impact Cont'd.

4. Cognitive impairment, with lower IQ among those who were frequent users during adolescence*

5. Diminished life satisfaction and achievement (determined on the basis of subjective and objective measures as compared with such ratings in the general population)*

6. 2012 research indicates an increase in conduct disorder symptoms, specifically linked to teens using medication marijuana (i.e., HPC)

Negative Impact Cont'd.

7. Symptoms of chronic bronchitis

8. Increased risk of chronic psychosis disorders (including schizophrenia) in persons with a predisposition to such disorders

* This effect is strongly associated with initial marijuana use early in adolescence

Negative Impact Cont'd.

Table 1. Adverse Effects of the Short-Term Use of Marijuana

Volokow, N. D., Baler, R. D., Compton, W. N., and Weiss, S. R. B. (2014) Adverse health effects of marijuana use. ***New England Journal of Medicine,*** **(370) (23), 2219-2227.**

Effects of short-term use

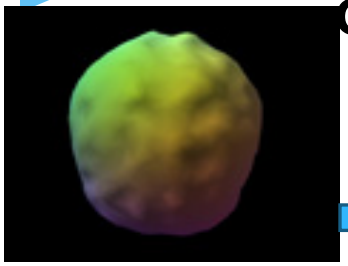
1. **Impaired short-term memory, making it difficult to learn and to retain information;**
2. **Impaired motor coordination, interfering with driving skills and increasing the risk of injuries;**
3. **Altered judgment, increasing the risk of (doing stupid things) sexual behaviors that facilitate the transmission of diseases;**
4. **In high doses, paranoia and psychosis;**

(Review of over 100 studies)

Impact of Marijuana Use on Orbitofrontal Brain Functioning: Executive of Social-Emotional Processing

Amen (1998) High Resolution Brain SPECT Imaging in Marijuana Smokers. Journal of Psychoactive Drugs. (30(2), 1-13.

SPECT imaging uses an injected gamma-emitting tracer to be taken up by brain tissue in a manner proportional to brain blood flow.



Orbitofrontal cortex (OFC) seems to be involved in:

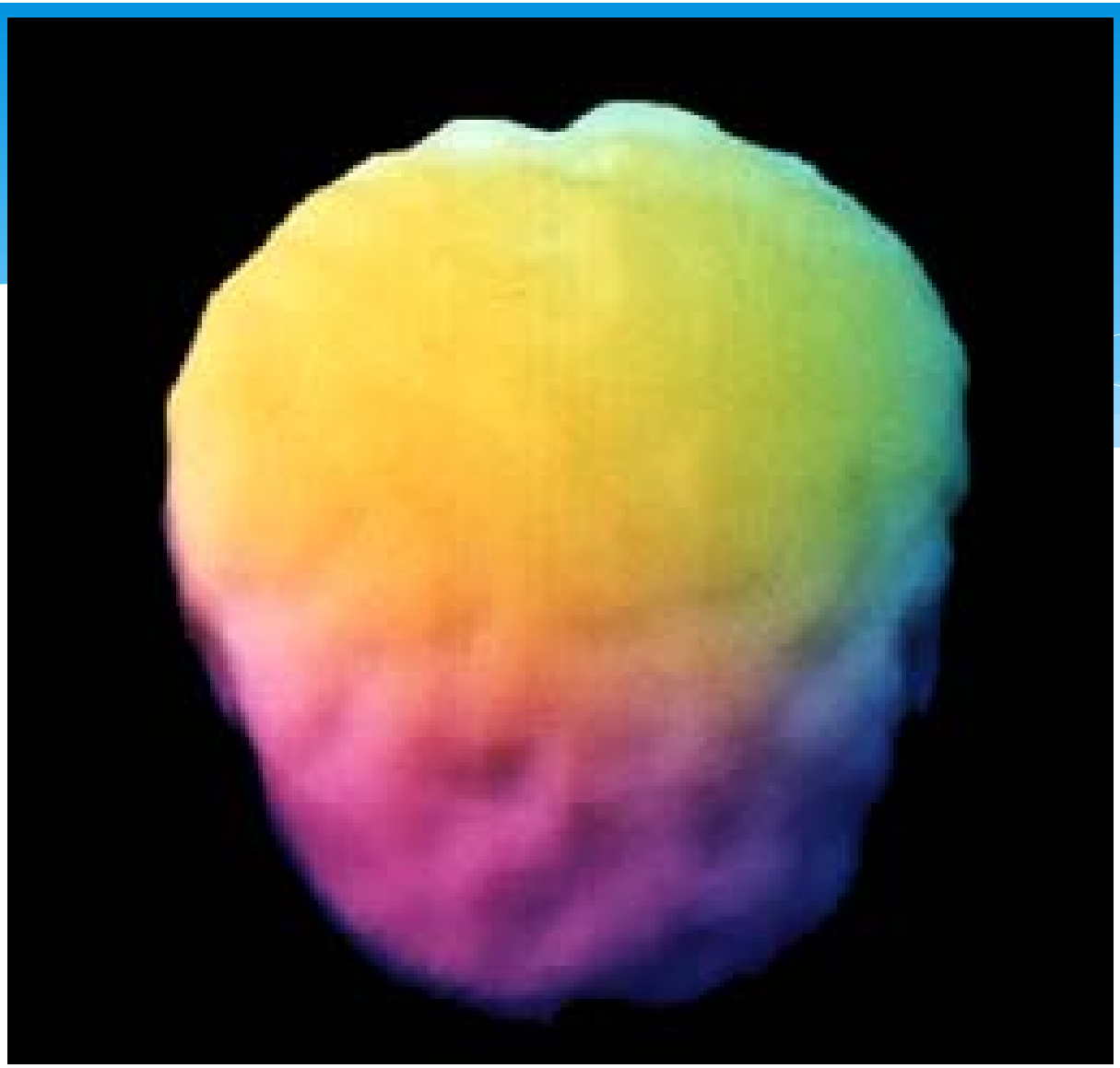
* reward value
* Expectation i.e., expected reward (medial) or punishment (lateral)
* organizing, monitoring, learning i.e., rule making
* decision making in regard to reward or punishment
* regulates planning sensitive to reward & punishment

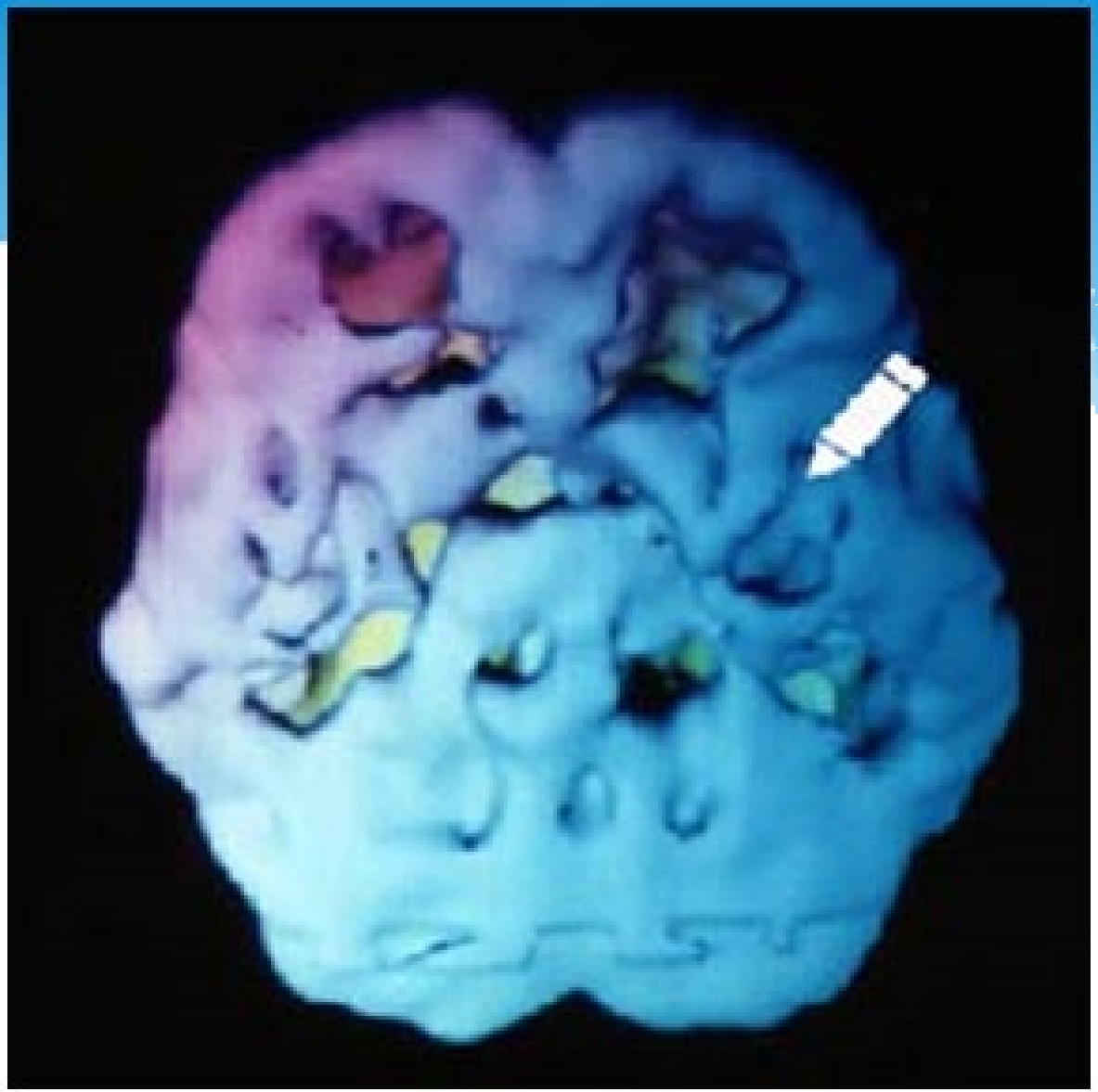
NORMAL PRESENTATION SUPERIOR (Top Down) Surface View
full, symmetrical activity

Poor OFC Functioning and Everyday Activities

* higher tendency toward disinhibited behavior
* swearing excessively
* Hyper-sexuality
* Poor social interaction
* Poorer empathizing
* Excessive smoking and risk taking behavior

18 y/o – 3 year history of X 4 week use – *Inferior (sunder-side) surface view - DECREASED PFC & TEMPORAL LOBE ACTIVITY*





Negative Impact Cont'd.

Driving Impairment

- Cannabis Impairs driving ability
  * Reaction times
    - Motor performance
    - Attention
    - Visual processing
    - Increases driving errors

After weeks of abstinence

previous daily users have cognitive processing and driving related impairments

Following legalization

several states report an increase in number of fatally injured drivers testing positive for THC

Negative Impact Cont'd.

Blood THC

Concentration levels of 7.5 Nano gram increase crashes

Courts

have found prescribing physician negligent especially if driving risk WERE NOT EXPLAINED TO PATIENTS

VITAMINS AND NEURO-PROTECTANTS

IMPROVE BRAIN

RECOVERY

(Decrease psychiatric symptoms)

B-1 At risk:–Effects the Brain's ability to oxidize glucose to energy

B-2 Marginal levels more prevalent in depressed patients. Insufficient amounts found in 95% adolescent females; heavy alcohol users

B-6 Higher levels associated with lower prevalence of depression in adolescents

<u>BIG B's:</u> B6, B12, Folic Acid

B-9 (Folic Acid) Requisite in synthesis of serotonin, norepinephrine, dopamine, and DNA. Common among patients with mood disorders. Low levels in patients experiencing first episode of psychosis.

- Folate can enhance antidepressant treatment
- Found in 50% of depressed patients
- Deficiency found in heavy alcohol use, 19% adolescent females

B-12 Needed to produce monoamine neurotransmitters and maintain myelin. Deficiency found in up to a third of depressed patients, and compromises response to antidepressants. Higher levels of B-12 are associated to better treatment out comes. Deficiency can cause depression, irritability, agitation, psychosis, obsessiveness, increase risk of cognitive decline, and 5-fold increase in brain atrophy, increase risk of psychiatric disorders.

N-Acetyl-L-Cystein (NAC) in treating Marijuana Use Disorder (Dose 1200-2400 mg/daily)

NAC is a supplement form of cysteine

- Semi-essential amino acid (the body produces it from other forms of amino acids)
- Potent antioxidant: increases glutathione
- Assists kidneys and liver in detox process
- Repeated use of substances results in excessive glutamate in nucleus accumbus (motivation and learning)
- Excessive glutamate paired with glutathione depletion can damage brain possibly contributing to Bipolar, Schizophrenia, OCD and addictive behavior
- Is neuro-protective and helps heal brain related adaptations of substance use
- Correcting glutamate dsy-regulation promotes abstinence and prevents relapse (stimulants, alcohol, nicotine, cannabis)
- Self report reductions in marijuana use and cravings by teens

Niacin: AB vitamin that is a powerful anti-oxidant. It cleans THC out of the brain.

Deficiency found in smokers

<u>Vitamin C:</u> Vital for synthesis of serotonin and norepinephrine. It is antioxidant in the brain. Patients with poor diets as a result of drug and alcohol use and eating disorders are at risk.

Vitamin D: Important role in brain function and development. Neuronal cells have vitamin D receptors in hippocampus, prefrontal cortex, hypothalamus, thalamus. These areas are linked to pathophysiology of depression. Important in biosynthesis of dopamine, norepinephrine, epinephrine provides resistance to neurotoxins.

Low vitamin D levels linked to schizophrenia, psychotic symptoms, impairment in memory, orientation, executive functions. Is a neuro-protectant.

Magnesium – converts glutamates into GABA which is precursor to seratonin

Preservision Multi Vitamin

(Source: Vitamin D deficiency and Psychiatric Issues, Current Psychiatry Vol. 12 No. 4)

Diet

Your brain needs every amino acid, every vitamin, and every mineral to create every neurotransmitter

Your brains health and recovery is completely dependent on what nutrients you put in your body

Neuro Protection and Recovery

Supplements

OMEGA – 3 Fatty Acids:

Anti-oxidant, anti-inflammatory, anti-apoptotic activates cell signaling pathways, prevents and restores synaptic loss as well as neuronal glial death.

Melatonin:

Improves sleep which is neuro-protective in itself. Prevents triggers of neuron-inflammation and oxidation stress. Protect mitochondrial integrity, modulates immune system, assists with metabolic syndrome, antioxidant

Caffeine:

Prevents stress related mood and memory dysfunction, reverses synaptic dysfunction

Henry A. Nasrallah, M.D.,

Current Psychiatry, Dec. 2016

Are You Neuro-protecting Your Patients?

Cognitive Building Activities –

To improve visual problem solving and visual spatial problems

- Jigsaw puzzles
- Tana grams
- Lego's
- Kinects
- Building Models
- Reading
- Painting
- Drawing
- Dance
- Word searches

Working Memory:

Working memory deficits play a significant role in decision making with addicts

Improving working memory reduces relapse rates, reduces urges, encourages frontal lobe activation, improves functional balance between cognitive systems

Many things improve working memory – Chess, Checkers, Backgammon, Sudoku, Crossword Puzzles, table top board games, word searches

The following is a partial list of free memory apps and sites with free worksheets:

Sharpbrains.com

Education.com/worksheets/memory

Icebreakers.com

Neurodevelopment.com

Exercise is Critical in Neuro Protection and Neuro Healing

- Positively effects executive functioning
- Improves inhibitory control
- Positive impact on neuro biological mechanisms
- Improves cerebral blood flow
- Neural plasticity
- Levels of synaptic protein
- Improved dopamine and norepinephrine
- Improve task related activities
- Most significant benefits occurring in the frontal lobe
- Enhances cognitive performance
- Improves brain structure

- Greater response accuracy on tasks
- Information processing
- Improve cooperation
- Reduced anxiety and depression
- Improved response time
- Sustained attention
- Grows new brain cells
- Grows new neurons

My Marijuana Story

Format:

* This is a discussion with client
* Develop its own flow with element of spontaneity
* Facilitator needs to be flexible
* Follow client's pace
* Although, there is certain questions to ask and info to gather the process in conversational vs. structured interview

Goal:

* To provide client with an opportunity to assess and self-evaluate their relationship with Marijuana, its' meaning to them, and its' impact on their lives

Time:

* It is important to have adequate time

* Most cases take most of an hour

Structure:

* **Part One:**
    * **Focus on:**
        1. **First Use**
        2. **Progression of use**
        3. **Life at time of first use and 6 to 12 months previous to**
    * **Explore the following questions:**
        - **When did you first use?**
        - **Who was with you?**
        - **What's going on with those people now?**
        - **How were you introduced to it?**
        - **Where did you get it?**

* **Explore the following questions (cont):**
  - **How long had you been thinking about it?**
  - **What did you think about marijuana before that point?**
  - **What changed your opinion?**
  - **What did you think of the experience?**
  - **How did you envision yourself using in the future?**

* **What was going on in the rest of your life?**
  - **In the 6 months before in your life, what was going on?**
  - **<u>Family:</u> changes, stresses, relationships, conflicts, crisis?**
  - **<u>Friends:</u> conflicts, alienation, isolations, changes in peer groups, reason for changes?**
  - **<u>School:</u> grades, motivations, relationship with teachers, attitude about school?**

* Activities:
  - Were there any changes in sports you played, teams you were on, activities in which you participated?

* Mental Health:
  - Did you experience any trauma or abuse, problems with mood, anxiety, temper?

* Part Two:
  - At this point the discussion focuses on the progression of use and changes occurring as a result
  * Focus On:
    - Yearly use changes
    - How did relationship to marijuana change
    - What changed in how and why they used

* What else in their life changed?
  - Grades
  - Academic goals
  - Friendships
  - Family
  - School
  - Health
  - Mood and anxiety
  - Legal issues
  - Have there been periods when you quit or cut back
  - What motivated those
  - How did you accomplish that
  - How were things going for you during that period
  - If there were periods where you quit, why did you start again

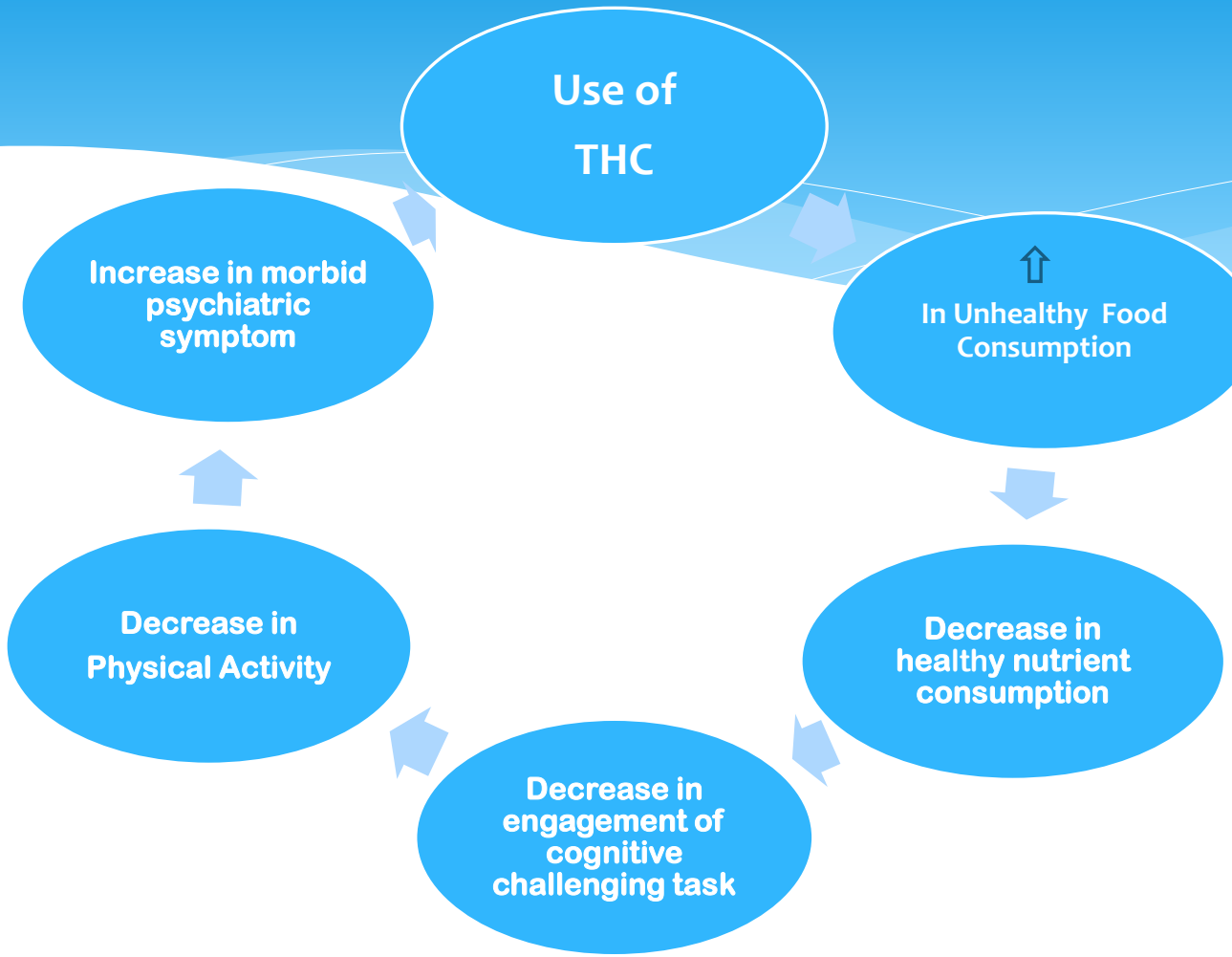
Part Three:

Future story

* Reflect on the information that has been shared
* Most clients haven't talked about their personal story in such detail
* Encourage the client to reflect by addressing:
* What's that like for you to think back on all this?
* What's your reaction to everything we have talked about today?
* What do think about your marijuana use?
* What do you think needs to happen with your use?
* This is also a good time for therapist to summarize the story, offer observations, reflections, patterns and feedback

Harm Reduction

Use of THC prompts lifestyle behaviors that cause and contribute to additional cognitive, physical and emotional damage----



Harm reduction involves intervening at all points within this cycle

Harm Reduction

- The goal for adolescents using THC is abstinence
- The road to abstinence starts with individuals assessing the need for change
- Assessment often results in changing patterns of use
- Changing patterns of use allows us to encourage less risky and harmful behavior

Discontinue use of HPC

* Use less frequently
* Use smaller amounts

- Changing patterns provide opportunity to encourage teens to participate in activities that help protect their brain from damaging impact of THC
    * Exercise
    * Cognitive activity
    * Vitamins/Diet/Nutrients
    * Cognitive re-engagement
- Success in harm reduction can promote further assessment and further movement towards abstinence
- Unsuccessful attempts at harm reduction often encourage re-assessment and motivates teens toward goal of abstinence

Decision Making and The Adolescent Brain

1. Adolescents have many more active dopamine receptor sites than adults.
2. The baseline dopamine levels for teens is significantly lower than for adults, however, they have a higher number of dopamine receptor sites.
3. When teens participate in dopamine reward based activities, their dopamine levels are significantly more heightened than adults.
4. Contemplating risky behavior and peer responses heighten dopamine activation and fuels reward anticipation.
5. Teens think about the consequences of behavior but actively choose behavior with most potential for rewards.
6. Rewards lose value the further away they are in time. Value decreases rapidly in short term.
7. The higher the reward the less control teens have in inhibiting behavior.
8. 14-16 year olds experience the greatest degree of development in the Delay Discounting.
9. Teens respond to contingency management. They have better control and greater prefrontal lobe activation when rewards are offered.

(Neuro-economics and Adolescent Substance Abuse: Individual Differences in Neural Networks and Delay Discounting, Catherine Stanger, PH.D. Amanda Elton, PH.D G. Andrew James, PH.D. Alan J. Budney, PH.D. Clinton D. Kilts, PH.D.

Journal of American Academy of Child and Adolescent Psychiatry V. 52, Nov 7, July 2013)

Positive Self Compassionate Recovery

Compassion vs. Criticism

Promote and Teach:

* Self kindness vs. self judgment
* Kindness to others vs. judgment
* Offer self warmth and acceptance vs. beating up (trash talking, in head, towards others)

Humanity vs. Isolation:

* Recognizing human imperfection, mistakes, failure, challenges, results in fewer feeling of isolation
* Difficult things happen to everyone
* Difficult things are difficult for everyone

Mindfulness:

* A balanced awareness of one's painful experiences in a way that does not ignore, avoid, or exaggerate
* Being kind and understanding (it's okay not to be perfect...I am not defective, this is hard, it's normal to mess up, it's not just me)
* Being kind and understanding to others (it's okay if others aren't perfect)

Research Shows:

Self Criticism results in-	Self Compassion results in-
* Predicts depression * Poorer outcomes with CBT, interpersonal psychotherapy and poorer response to medication * Common across all psychiatric disorders including substance abuse * Decreases activation towards goals * Promotes motivation to avoid failure, disappointment * Encourages rumination, procrastination, fear	* Successful goal pursuit * Less fear of failure * Less focus on past mistakes, weaknesses, failure * More motivated to change, try harder to learn, avoid repeating past mistakes * Is powerful way to cope with negative emotions * Connected to positive emotions and better mental health

Teaching Compassion –

* Introduce self criticism vs self compassion
* Explore what it "sounds like"
* Discuss "myths" of self criticism
* How has past and present self criticism impacted lives
* How has past and present criticism impacted lives
* Self criticism as relapse trigger and role in substance use and mental health
* Self compassion as a recovery tool
    * Part of their value system
    * Promotes healthy self trust
    * Allows them to honestly face truth
    * Promotes self care

Teaching Self Compassion (Continued)

* Write a series of compassionate letters to self – write a compassionate letter to someone else
* Discuss fear of letting go of self criticism
* Review a recent situation and discuss
    * What was outcome
    * What would be a self compassion response
    * How might that impact outcome
* Encourage clients to check out www.self-compassion.org

* Counter self trash talking (I am not defective)
* Counter trash talking with others
* Acceptance of pain (This is hard)
* Acceptance of others pain (if this is hard for me, it may be hard for others)
* Decrease self blame (Blaming myself is causing more pain)
* Decrease others blame (blaming others is causing more distress)
* Humans fail (It's normal to mess up sometimes)
* Lessen isolation (It's not just me)
* Decrease self criticism (Maybe this is not happening because I am a bad person)
* Decrease criticism of others (maybe this is not happening because they are a bad person)

Name It:	Claim It:	Shame It:
Call it	This is what	I am stupid
This is what	I think about it	Crazy
It Is	This is what I feel This is what I need to do	bad defective

WHY SHAME DOES NOT WORK:

When you make a mistake, your mood drops

When you are self critical, it drops your mood into the dirt!

When your mood drops, your anxiety goes up

When your mood is rock bottom and your anxiety is sky high, you want to avoid

The way you avoid it is to "avoid" things that you don't know how to do, you don't understand, you might not do perfectly, you might fail, people who might make you uncomfortable

- Practice name it and claim it
- Be mindful of shame it
- Bring mind back to name it and claim it
- Claim it is how you take responsibility
- Staying out of shame helps you learn from mistakes, gives you courage to try again, gives you emotional strength and resiliency

Self Compassion Results in –

* Successful goal pursuit
* Less fear of failure
* Less focus on past mistakes, weaknesses, failures
* More motivated to change, try harder to learn, avoid repeating past mistakes
* Is powerful way to cope with negative emotions
* Connected to positive emotions, and better mental health

Pharish Festival

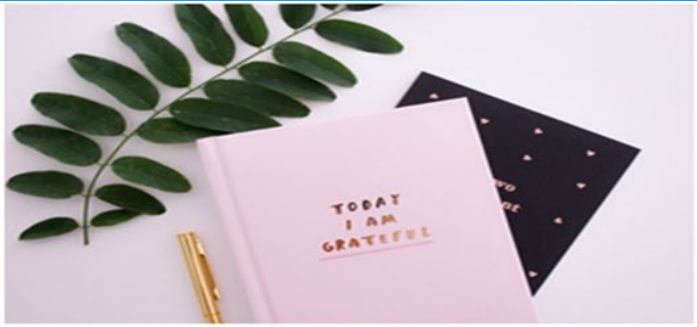
"Human"

You've got to put it all behind
It is the only way to find whatever it is
you've been trying so desperately to see inside
You've got to get up cause you fell
Quit feeling sorry for yourself
Made some mistakes so f_____ well
You're human if you couldn't tell

Positive Personal Inventory

This Week I Realized That I Am:

Artistic	Daring	Honorable
Happy	Content	Fearless
Insightful	Intuitive	Calm
Observant	Confident	Assertive
Serene	Focused	Independent
Wise	Adaptable	Adventurous
Attentive	Authentic	Capable
Courageous	Dedicated	Empathetic
Honest	Responsible	Self Reliant
Productive	Loyal	Knowledgeable



Positive Daily Journal

Monday: Positive Anticipations

Tuesday: My Gratitude's

Wednesday: Difficult things I have done

Thursday: Favorite positive memories

Friday: Decisions I made that I am proud of

Saturday: Something or someone who inspired me

Sunday: Something helpful I did for someone else

Additional Positive Topics:

- **Things I have done that were trusting or trustworthy**
- **Motivational things I have learned this week**
- **This week I realized that…..**

Assets vs. Deficit Thinking

- What I don't have
- What I don't get
- What I can't get
- What I can't do
- What I have not done
- What I am not good at

Deficit Thinker

- What do I have that adds value to my life
- Quest to add things to their lives to improve its value

Asset Thinker

Scenarios

I don't have a girlfriend. All my friends are in relationships. My life sucks because I don't have a girlfriend.

Deficit Thinker

I have a great family and great friends and I would like a girlfriend, too.

Asset Thinker

Recovery is a developmental process and goals need to be established accordingly.

1. For the First 1-3 Months
   * They need information about brain recovery!!
   * They need to understand what can be done to help their brains recover

2. Address Triggers and Neural Cues
   * Completely change room or whatever place they got high
   * Avoid, whenever possible, all triggers that you can identify: songs, movies, Netflix, video games, places, routes you take to get places, pictures on your phone, old texts, movies, “high seats”
   * Clean out phone and change the number
   * Have plan for unexpected cueing of neural pathways

Recovery is a developmental process and goals need to be established accordingly

3. Cognitive Recovery

1 to 3months clean. Work on repairing your brain

- Lower, slower, take a little longer
- Read 15-20 minutes a day (even if you can't remember what you read)
- Rigorous physical activity, at least 30 minutes a day
- Challenge your brain (15-20 minutes) a day
- Puzzles
- Tangrams
- Word Search
- Word Scramble
- Sudoku
- Memory Games
- Lumosity Brain Training
- Limit Screens

* Education:

  If you are not enrolled in school—don't go back now.
  If you are in high school, ramp it down.

* Work:

  Simple job 20 hours a week

Recovery is a developmental process and goals need to be established accordingly

4. Build a New Life
* Therapy: Intensive Outpatient
* Individual

Build Recovery
* Daily meetings
* Social interaction with program people
* Sponsor
* Step One (Living the powerlessness)
* Find home group
* Do service work

Recovery is a developmental process and goals need to be established accordingly

5. Build structure:

* Every day:
* Start your day well
* Get up
* Clean up
* Dress up
* Show up
* Don't give up

Daily Schedule Every Day:

* What do I need to do?
* Who do I need to contact?
* When will I get this done?
* What are the steps I need to take?

Recovery is a developmental process and goals need to be established accordingly

6. Self Care:

* Feed self
* Take vitamins
* Take medication
* Sleep cycles
* Physical recovery- stretching, yoga, breathing
* Do something fun

- Don't Forget: All these things provide dopamine bumps, so does satisfaction or accomplishing, achieving and finishing.

Recovery is a developmental process and goals need to be established accordingly

It Works:

* Study of 200 NA members have been clean and involved with NA for 3 years. Anxiety and self-esteem rates similar to comparison group of 60 college students.

(Christo and Sutton)

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