

* **Addiction and Change:
Understanding the
Journey of Addiction
and Recovery**

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- * I have no conflicts of interest in the material we are presenting
- * Dr. DiClemente is a consultant with Prevention Research Institute and receives royalties from a program developed called Solutions and is on the advisory board of Westbridge, a dual diagnosis treatment program
- * I would like to acknowledge the contributions of many of our colleagues and students in Houston and at UMBC to the research supporting this presentation

* Conflicts and Disclosures

- *The Transtheoretical Model has made both theoretical and practical contributions to advance our views of intentional behavior change
- *Today we will explore key dimensions of the process of change and how they relate to initiation of addiction and recovery
- *We focus particularly on how client and provider contribute to the process of change that is recovery

*Understanding the Process of Change

*The Beginning

- * Over 40 years ago I began a journey exploring what people did to be successful in changing behaviors
- * A clinical psychotherapy perspective
- * Spurred on by curious research findings:
 - * Different treatments were most often equally successful despite radically different philosophies and approaches (Temple psychotherapy study)
 - * Over 250 types of therapy - Jim Prochaska was exploring common processes from different therapies (psychodynamic, gestalt, cognitive, behavioral, systems)
 - * Many smokers successfully quit on their own - how did they do it? Luckily NCI was also interested and funded us for 10 years to study this

TTM: A Client Focused Model of Intentional Behavior Change

STAGES OF CHANGE

**PRECONTEMPLATION → CONTEMPLATION → PREPARATION →
ACTION → MAINTENANCE**

PROCESSES OF CHANGE

COGNITIVE/EXPERIENTIAL

**Consciousness Raising
Self-Revaluation
Environmental Reevaluation
Emotional Arousal/Dramatic Relief
Social Liberation**

BEHAVIORAL

**Self-Liberation
Counter-conditioning
Stimulus Control
Reinforcement Management
Helping Relationships**

CONTEXT OF CHANGE

- 1. Current Life Situation –current concerns, symptoms, housing, stresses**
- 2. Beliefs and Attitudes – religious, political, familial, cultural**
- 3. Interpersonal Relationships –significant others**
- 4. Social Systems –family – work –legal - societal**
- 5. Enduring Personal Characteristics –personality characteristics – identity – implicit attitudes**

MARKERS OF CHANGE

Decisional Balance

Self-Efficacy/Temptation

**HEALTH PROMOTION &
DISEASE PREVENTION**

REQUIRE

**BEHAVIOR
CHANGE**

CANCER PREVENTION

INITIATION

HEALTH PROMOTION

**SAFETY & INJURY
PREVENTION**

MODIFICATION

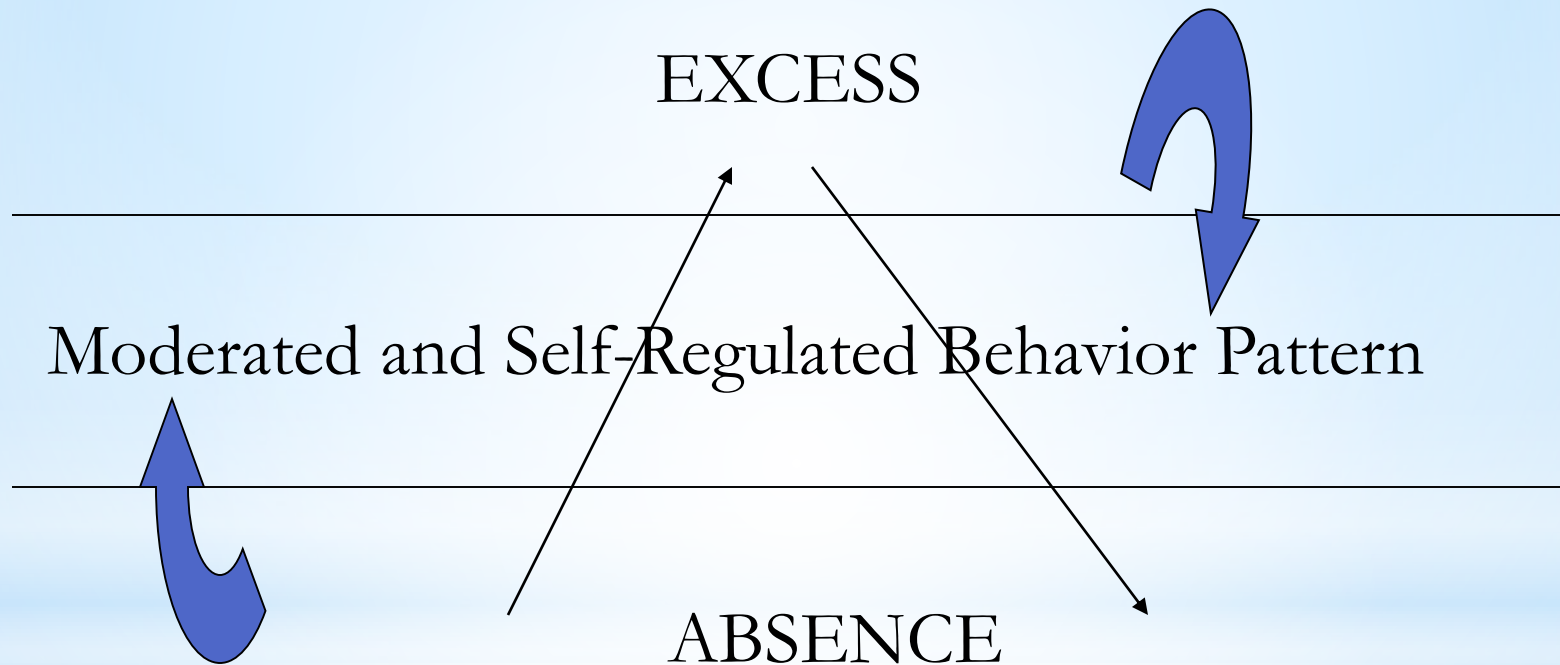
MENTAL HEALTH

SUBSTANCE USE DISORDERS

CESSATION

* Different Patterns of Behavior Change

Initiation, Modification, Cessation



* Common Health Change Targets

* Initiating Health-Promoting or Desirable Behaviors

- * Screening (Cancer, Infectious Disease, etc.)
- * Physical Activity
- * Sleep Hygiene
- * Utilizing Stress Management Skills
- * Condom Use
- * Prosocial Networks and Activities

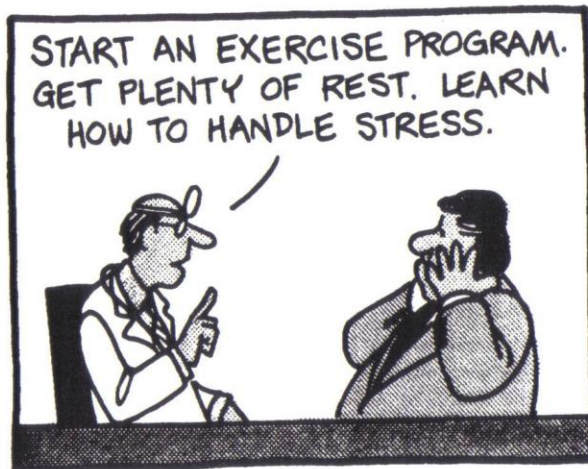
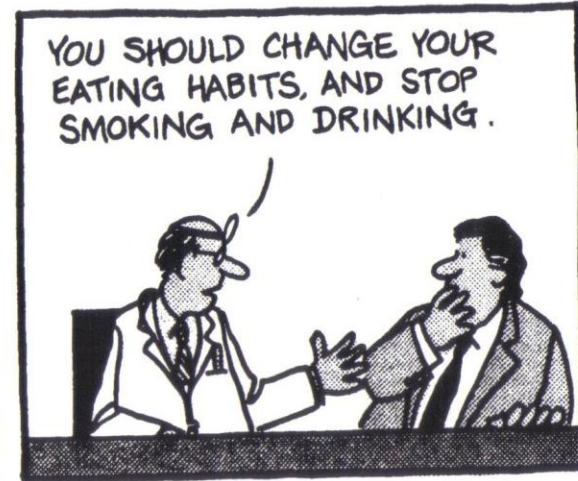
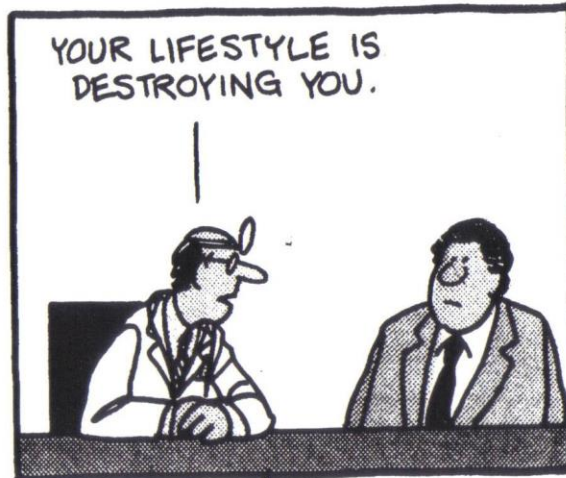
* Modifying Behaviors

- * Medication Adherence
- * Reducing Caloric Intake
- * Drinking Alcohol in Moderation
- * Drinking and Driving

* Cessation of Health-Defeating or Undesirable Behaviors

- * Tobacco Use
- * Illicit Substance Use
- * Abstinence from Alcohol
- * Domestic Violence

TTM has been studied with almost all these behaviors



Free and Unrealistic Advice Hinders Change or Shifts the Target of Change

- * MULTIPLE
- * MULTIDIMENSIONAL
- * VARY IN FREQUENCY
- * VARY IN INTENSITY
- * REQUIRE DIFFERING LEVELS OF MOTIVATION
- * CAN BE INTEGRATED INTO DIFFERENT LIFESTYLES TO VARYING DEGREES
- * UNDERSTANDING THE CHANGE BURDEN

What am I asking or expecting my client to do?

*** DESIRED HEALTHCARE BEHAVIORS***

*Includes Mental Health and Substance Use Behaviors

*Breaking News

- * In a large study researchers at National Cancer Institute in the US have discovered that watching television more than 1 to 2 hours a week causes brain cancer.
- * How many of you would stop watching TV immediately?

HOW PEOPLE CHANGE?



OR GOD
HELPS
THOSE WHO
HELP
THEMSELVES?

* How Do People Change?

* People change voluntarily only when...

* They become interested and concerned about the need for change

* They become convinced that the change is in their best interest or will benefit them more than it will cost them

* They organize a plan of action that they are committed to implementing

* They take the actions that are necessary to make the change and sustain the change

* Stage of Change Labels and Tasks

* STAGE

* Precontemplation

- * Not interested

* Contemplation

- * Considering

* Preparation

- * Preparing

* Action

- * Initial change

* Maintenance

- * Sustained change

* TASK

- * Interested, concerned and willing to consider

- * Risk-reward analysis and decision making

- * Commitment and creating a plan that is effective/acceptable

- * Implementing plan and revising as needed

- * Consolidating change into lifestyle

- * Stages are **not boxes** with well defined edges; they represent tasks that can be completed more or less adequately to sustain movement
- * A logical sequence of tasks but not followed in a linear fashion
 - * regression, getting stuck, and recycling
- * Behavior and Goal specific
- * Not always a rational or completely conscious processes
- * Values, emotional reactions, implicit cognitions, salient experiences and other motivating influences affect engagement and completion of stage tasks and influence successful behavior change

* **Misconceptions About Stages**

*What I might want to change about myself?

On a sheet of paper write down some of the behaviors that you have thought you might like to change

Or one that someone else in your life suggested (or is nagging you) to change

Is there one particular one that you are specially focused on or are there a number of behaviors?

What are the challenges to making these changes for you?

What stage of change or tasks are you working on with this behavior change

SOMETHING TO DISCUSS DURING LUNCH?

*The Focus of the TTM is on the Personal Change Process

- *Growing evidence that a constellation of what the client does (**client process of change variables**) have the greatest potential to be mechanisms:
 - *directly related to a particular change (behavior specific)
 - *are involved in changes that occur with and without active ingredients of formal treatment (self-change, mutual help, placebo)
 - *Involve client coping behaviors
 - *Interact with contextual variables at times working together to promote change and at other times competing and interfering with change

- * 1. Understanding Substance Use Disorders and Addiction Mechanisms as a Journey that has many different parts
- * 2. Understanding the journey involves Mechanisms of Addiction and Recovery
 - * Mechanisms of Addiction that make substance use disorders difficult to change
 - * Mechanisms of Recovery: Recovery Journey of Change
- * 3. Understanding how treatment interacts with the process of change

* Challenges

*What are Addictions?

- * Habitual patterns of intentional, appetitive behaviors
- * Become excessive, problematic and produce serious consequences
- * Stability of these problematic behavior patterns over time
- * Interrelated physiological, psychological and social components
- * Addicted individuals have difficulty modifying and stopping these patterns of behavior (smoking, alcohol, marijuana, heroin or process addictions like gambling, sex, etc.)

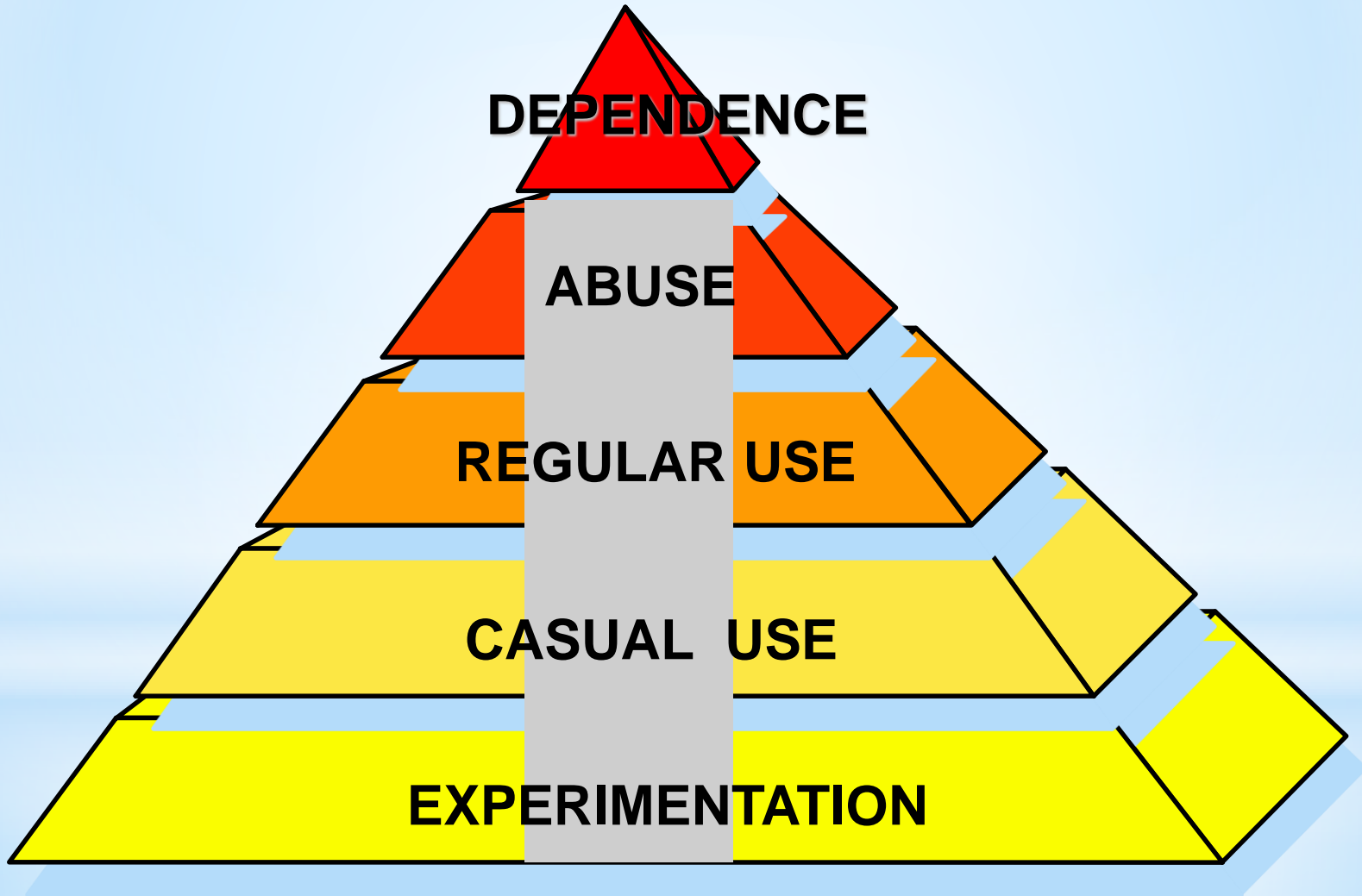
*Addiction and Change

- ❑ Both acquisition of and recovery from an addiction require a personal journey
- ❑ Through an **intentional** change process marked by personal decisions and choices
- ❑ Each journey is influenced by many biological, psychological, and social factors
- ❑ Defining Addiction should
 - ❑ describe the problematic nature of the behavior and
 - ❑ offer clues about recovery

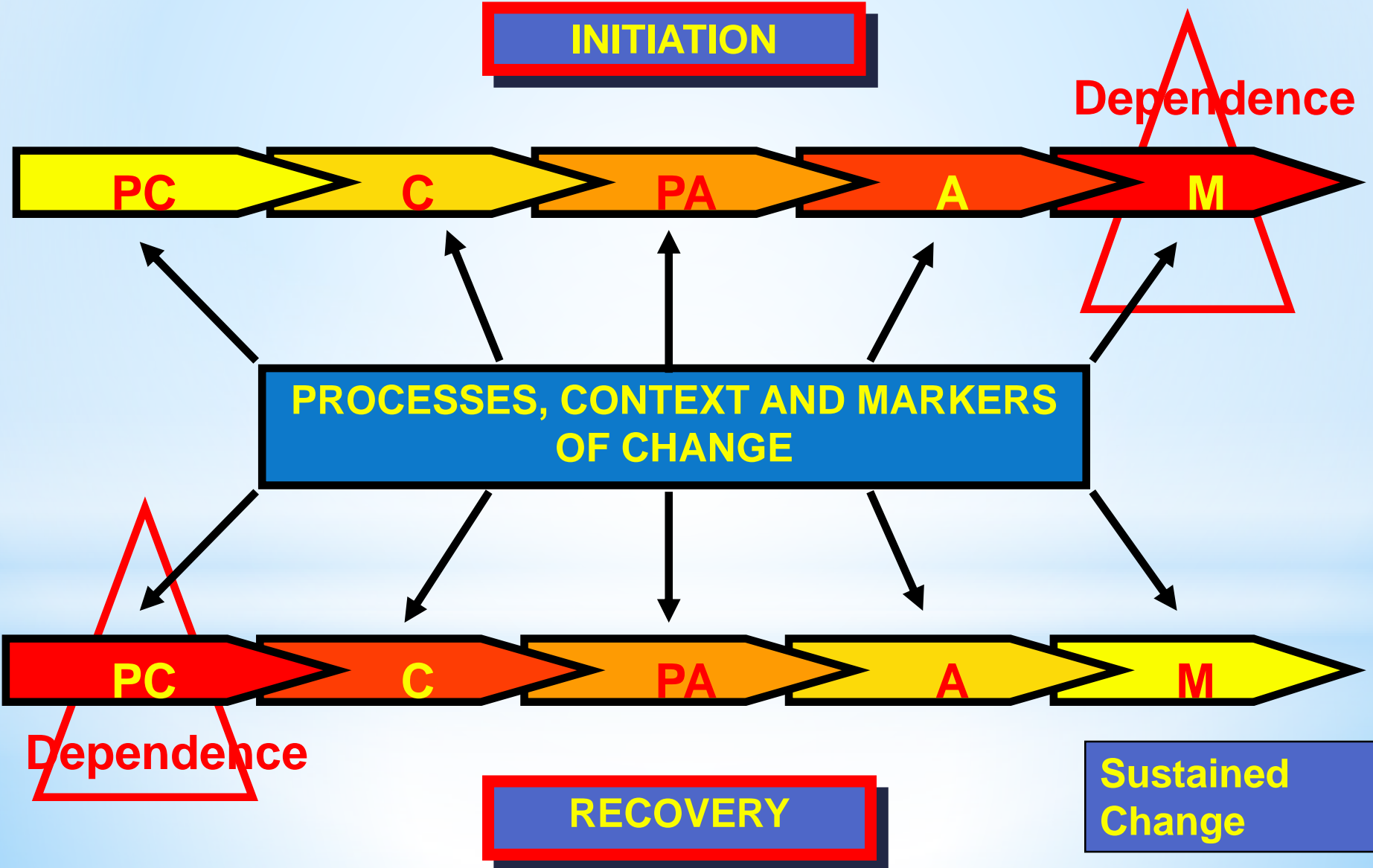
- * Happens over a Period of Time
- * Has a Variable Course
- * Involves a Variety of Predictors that involve both Risk and Protective Factors
- * Involves a Process of Change

*** Becoming Addicted**

* **THE COURSE OF ADDICTION:
A Behavioral Perspective**



*** THE STAGES OF CHANGE:
THE JOURNEY INTO ADDICTION AND RECOVERY**



- * As individuals move through **stages of initiation** they move from
 - * **thinking** about doing it, to
 - * **experimenting**,
 - * **developing a pattern** of behavior (social drinker, binge drinker, daily drinker, non drinker) that
 - * becomes **habitual** or consistent over time.
- * Many patterns are normative and socially acceptable, do not create problems or get judged excessive - not SUD
- * Addiction is best represented as a **well maintained, problematic pattern of engagement** best equated with a moderate to severe use disorder or dependence
- * Once someone creates a maintained, stable pattern of problematic engagement, the focus shifts from prevention of initiation to recovery from addiction

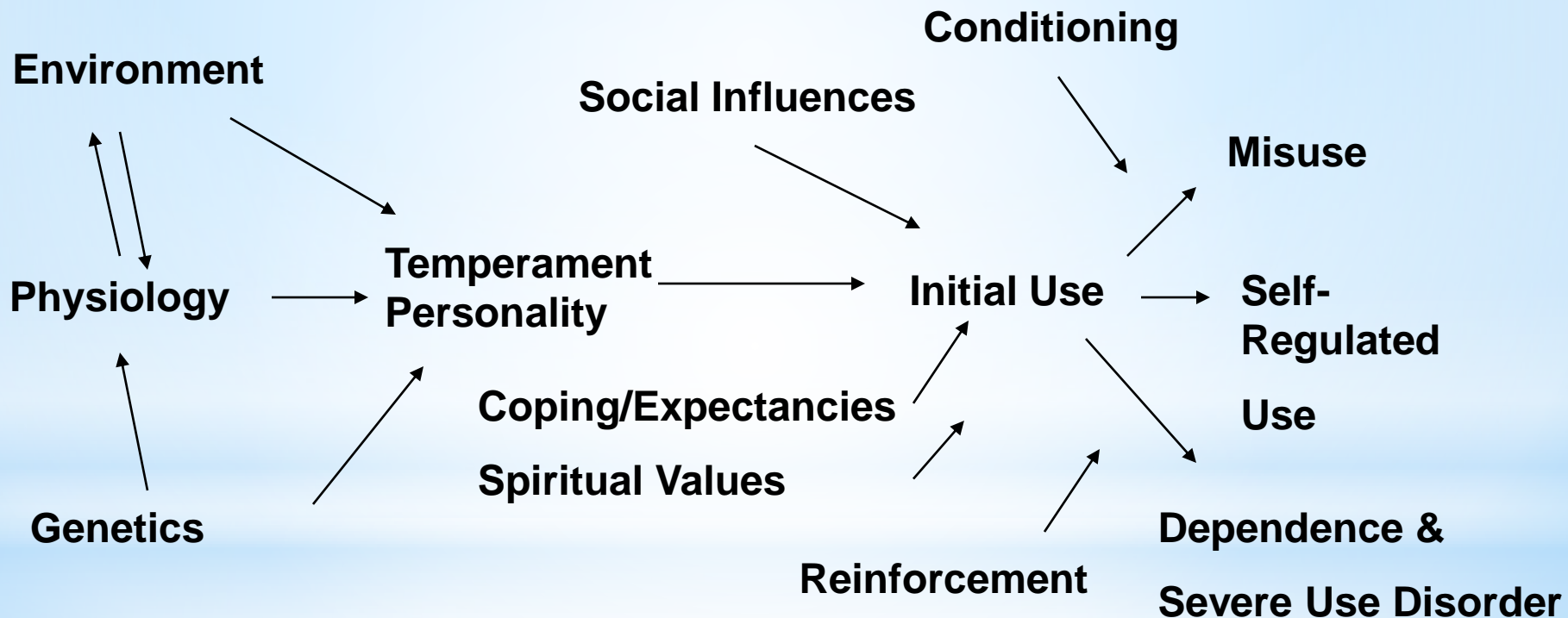
* **Initiation of An Addictive Behavior**

- * Many of us have moved through stages of initiation to achieve a regular pattern of consuming alcohol, smoking, gambling
- * So it is critical to be able to distinguish among engagement patterns:
 - * Use, Misuse, Dependence, or
 - * DSM Mild, Moderate, Severe Use Disorders
- * Trajectories of engagement
 - * can change over time (social use to misuse to dependence)
 - * depend on developmental and contextual factors and influences (e.g., time limited heavy binge drinking pattern in college; casino gambling, family/peer influences)
- * **Motivation** focuses on how individuals move into and out of these different patterns of behavior;
- * **Addiction** focuses on the end state

Stages of Change are Pattern Neutral

* Etiology of Addictions

A BIO PSYCH SOCIAL SPIRITUAL PERSPECTIVE



All of these factors can have arrows to initial experience and then to any or all of the three patterns of use. Most arrows could be linear and/or reciprocal

* Shake Your Family Tree

- * Most families can identify family members with a substance use or gambling disorder
- * On a piece of paper write first names of extended family members who have or have had one (make sure you include alcohol, marijuana, nicotine, etc.)
- * Most of us know addiction personally. How did it happen to our family members? Did it ever happen to us?
- * We need to keep in mind that we are talking about loved ones not “Addicts” “Homeless Substance Abusers” “Druggies”

* Stage of Change Labels and Tasks

* STAGE

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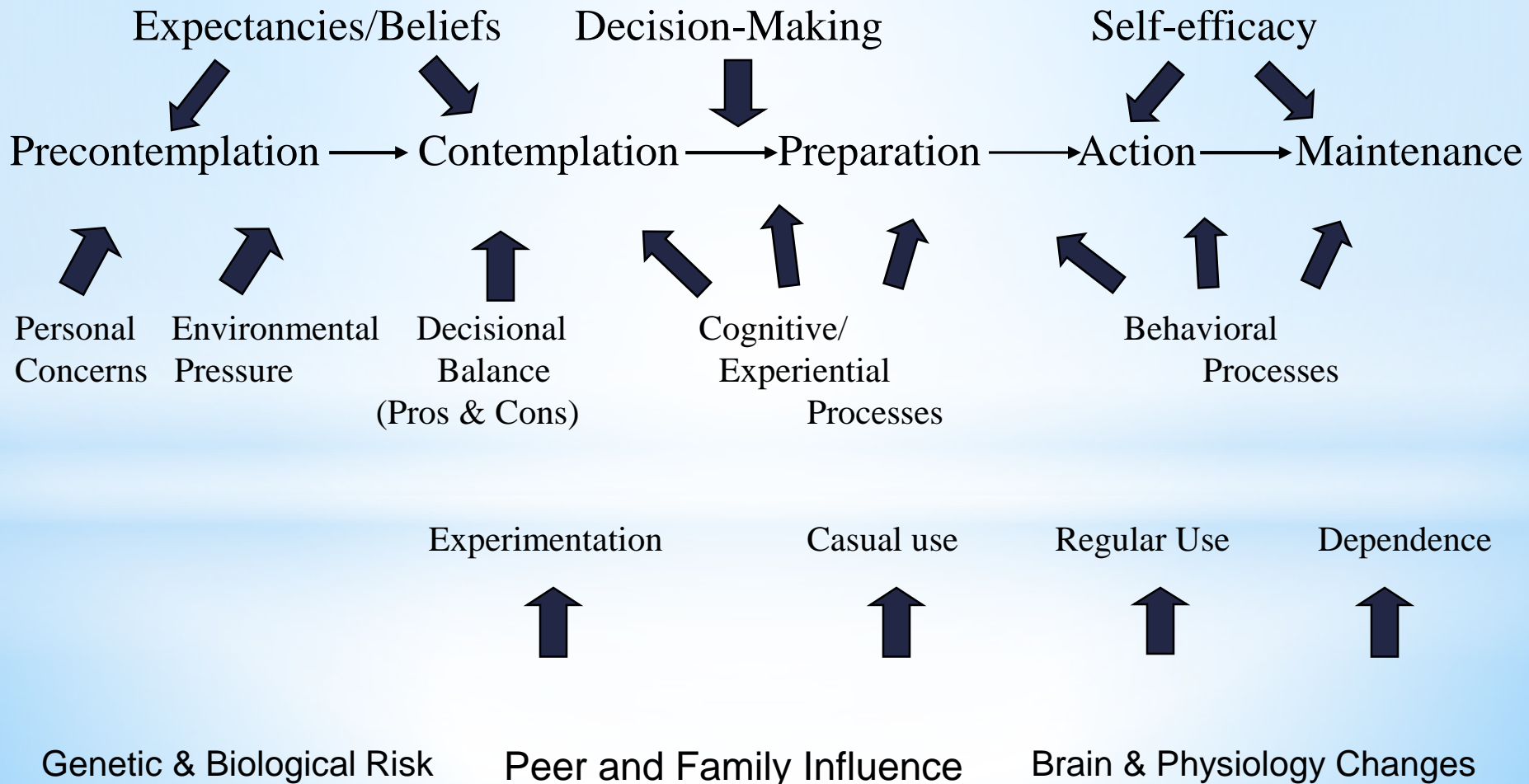
- * Risk-reward analysis and decision making

- * Commitment and creating a plan that is effective/acceptable

- * Implementing plan and revising as needed

- * Consolidating change into lifestyle

Theoretical and practical considerations related to Stages of Initiation and Prevention



*** A STAGE BY ADDICTIVE BEHAVIOR PERSPECTIVE ON ALLEN**

TYPE OF BEHAVIOR	STAGE OF INITIATION				
	PC	C	PA	A	M
ALCOHOL				X	
NICOTINE/VAPING					X
MARIJUANA					X
HEROIN	X				
COCAINE	X				
AMPHETAMINES		X			
LSD			X		
GAMBLING	X				
EATING DISORDER	X				

*Stages of Initiation for Cigarettes, Alcohol & Marijuana by School Level in 2010

Stages of Substance Initiation by School Level

	Substance	Precontemplation	Contemplation	Preparation	Action	Maintenance
Middle School	Cigarettes	84.1	13.6	1.1	.8	0.5
	Alcohol	78.7	3.9	5.8	7.4	4.3
	Marijuana	84.7	4.7	3.0	4.8	2.9
High School	Cigarettes	66.9	20.6	4.2	3.6	4.7
	Alcohol	32.0	21.7	13.7	17.3	15.4
	Marijuana	57.1	12.9	8.0	12.4	9.6

Percentages of Stages of Smoking Initiation by Stages of Alcohol Initiation 2010

	Stages of Alcohol Initiation					
Stage of Smoking Initiation	Precontemplation	Contemplation	Preparation	Action	Maintenance	Total
Precontemplation	73.2	14.6	7.9	4.2	0.2	73.1
Contemplation	29.1	30.7	22.4	17.2	0.6	17.8
Preparation	7.9	21.9	27.1	39.9	3.2	3.1
Action	6.1	16.6	23.2	48.6	5.5	2.7
Maintenance	4.0	14.0	15.4	52.2	14.3	3.3
Total	59.3	17.7	11.7	10.4	0.9	100

Percentages of Stages of Smoking Initiation by Stages of Marijuana Initiation

	Stages of Marijuana Initiation					
Stage of Smoking Initiation	Precontemplation	Contemplation	Preparation	Action	Maintenance	Total
Precontemplation	89.7	5.7	2.2	2.2	0.2	73.5
Contemplation	62.8	19.9	8.6	7.9	0.8	17.9
Preparation	23.4	22.7	20.7	28.7	4.5	3.0
Action	17.2	16.8	18.4	40.7	7.0	2.6
Maintenance	12.3	11.2	10.6	42.4	23.5	3.1
Total	78.6	9.2	4.6	6.3	1.4	100

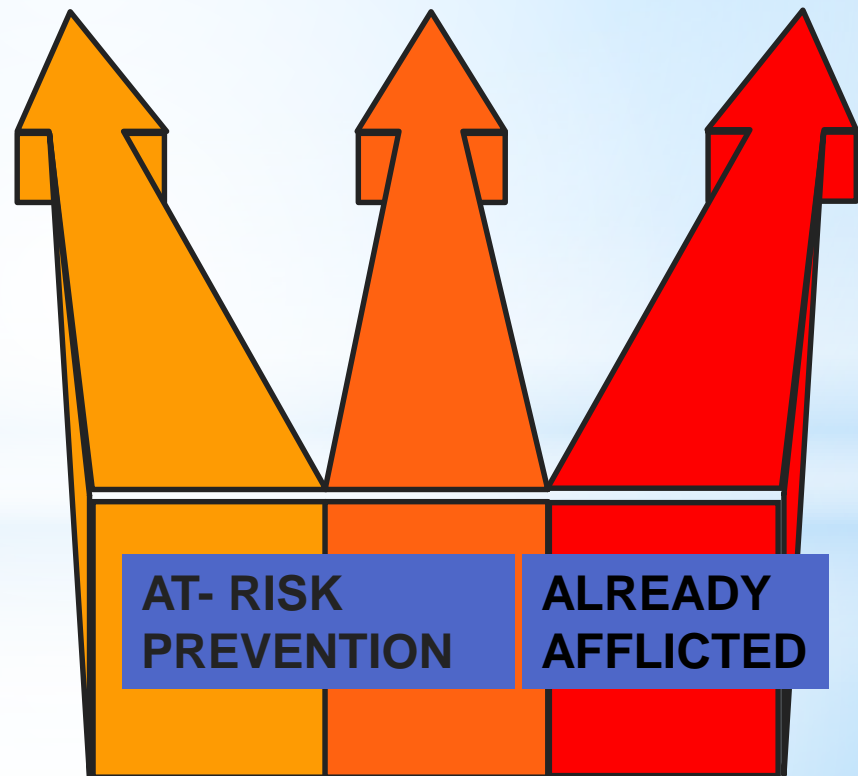
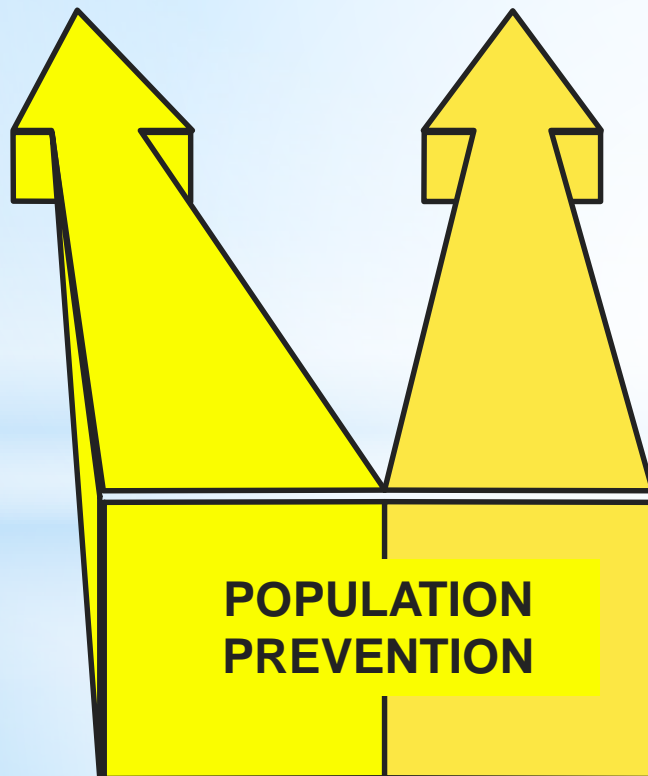
* PREVENTION OF INITIATION OF ADDICTION

PC - C

C - PA

PA - A

A - M



* Types of Prevention

- * Interventions to disrupt initial stages of initiation (**primary/universal prevention**)
 - * Keep students in precontemplation (not interested in behavior)
 - * Educate about the dangers and encourage precontemplation by decision not default
- * **Indicated prevention** for risky engagement (At risk/secondary/indicated prevention)
 - * Disrupt the initiation process once individual has begun experimenting or using
 - * Monitoring, increase costs or consequences, disrupt access, regression
- * Once a pattern of problematic use or dependence (**Already afflicted** or tertiary prevention focuses on **Early Intervention, Harm Reduction, and Treatment**)
 - * SBIRT and other early intervention building bridges to treatment
 - * Naloxone for overdose recovery
 - * Sterile syringes to prevent STIs and HIV

- * Currently defined as a Moderate to Severe Use Disorder
- * It is the end state of a process of INITIATION
- * It is the beginning of a process of RECOVERY
- * It is both an ENDING and a BEGINNING
- * Let's look at this well maintained state of being addicted or having a severe use disorder and how we define it

* **Addiction**

- * How do we define severity of patterns of use?
 - * Consumption/Engagement, Consequences, Context, and Control are often used to define severity of a pattern of use
- * Problems with all these single factor ways of defining severity
- * Patterns can change so need to identify both current and lifetime severity (critical for harm reduction and recovery; NESARC Study; consequences accumulate over time - alcoholic liver disease)
- * Differs assessing risky behavior in a screening or a use disorder (NIAAA guidelines or DSM-5)

* Addiction Severity and Patterns of Use

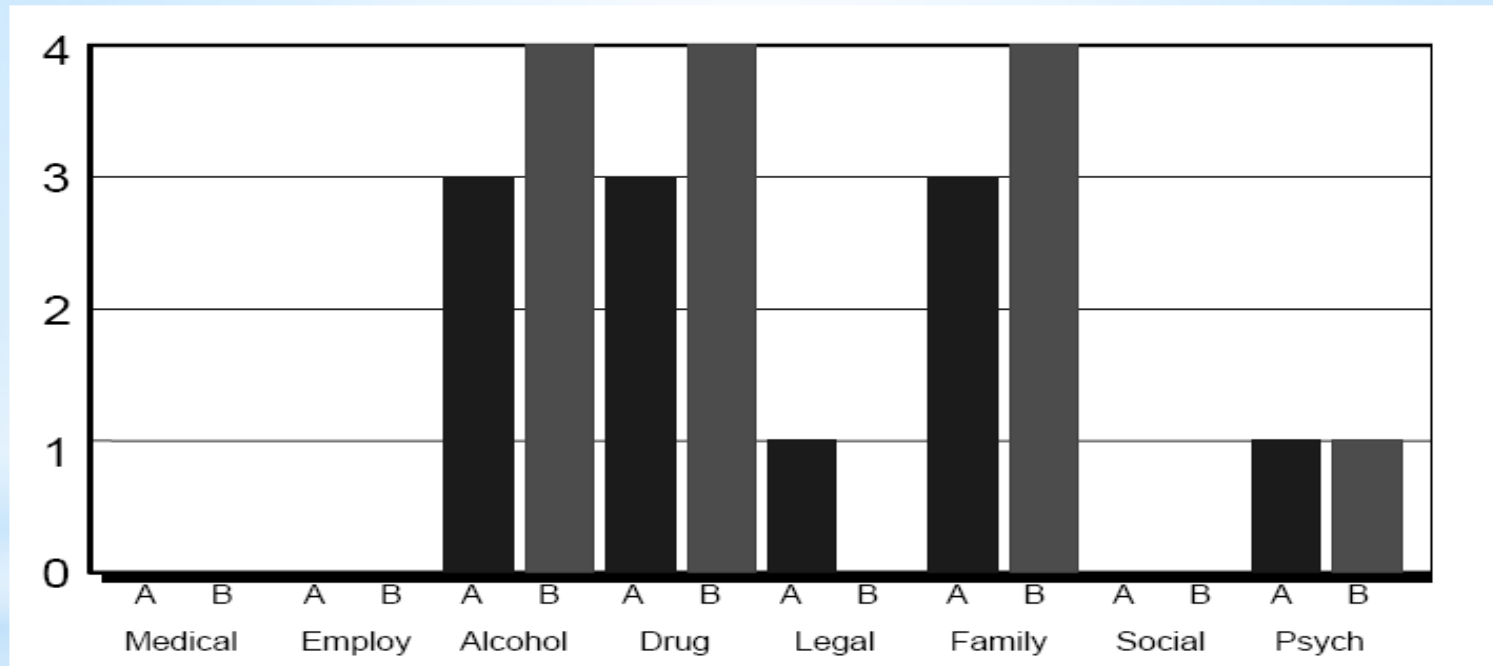
- * **DSM 5** - number of symptoms/indicators (6 + of 11)
- * **Quantity and Frequency** (PDA, DDD)
 - * Percent Days Abstinent
 - * Drinks per Drinking Day
- * **Consequences/Problems** attributable to drinking/drug use
 - * Physical, social, legal, or psychological
- * **Craving**
- * **Co-morbidity** (other diagnosable conditions)
- * **Multiple Problems in Life Context**
 - * Homelessness, domestic violence, legal problems
- * **Environment** (Peer use and Surrounding Environment)

* **Assessing Addiction Severity?**

Client Perception of Problem and Need for Treatment: Addiction Severity Index

A = Client's Rating of Problem

B = Client's Rating of Desire for Treatment



Legend:

0-Not at all, 1-Slightly, 2-Moderately, 3-Considerably, 4-Extremely



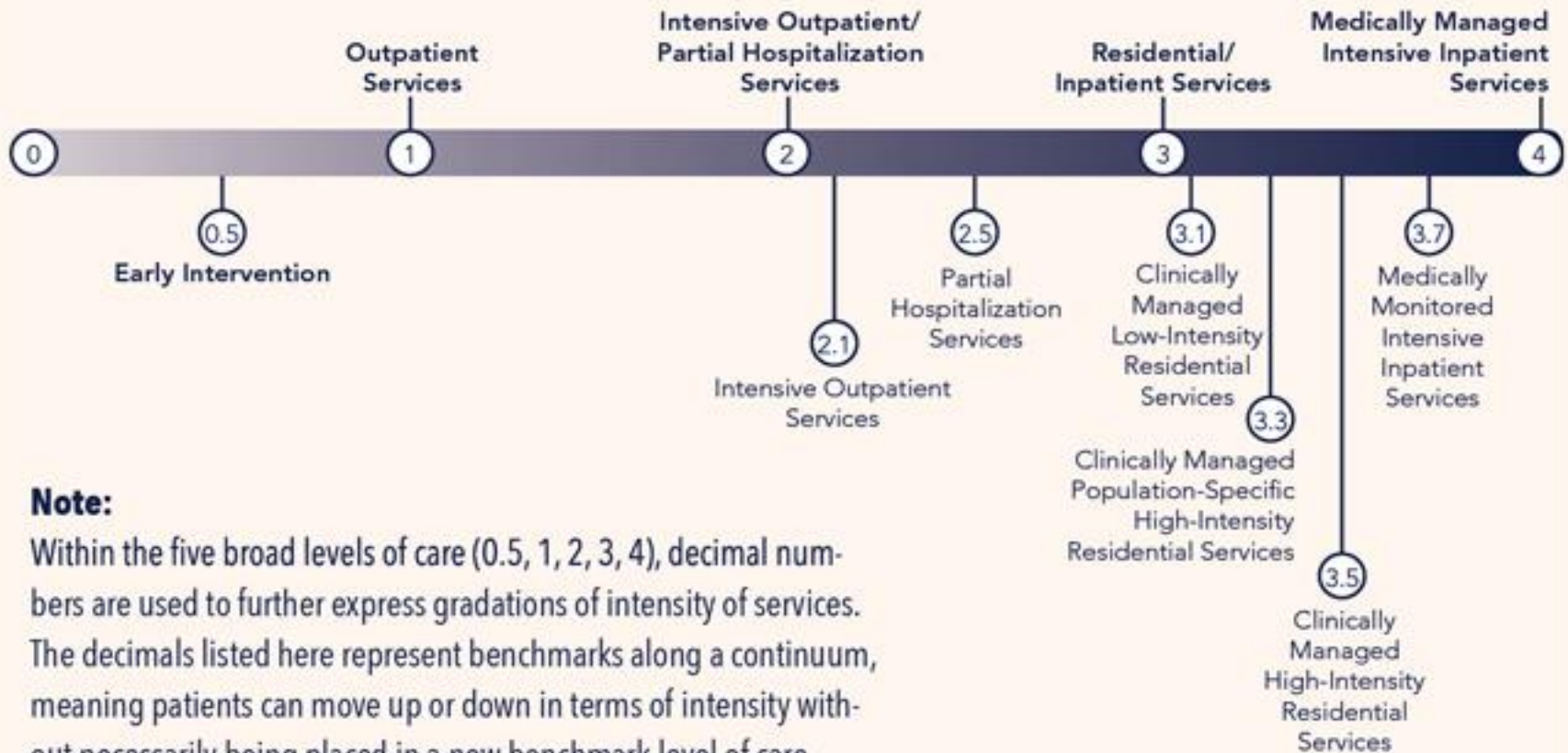
ASI Evaluation

AT A GLANCE: THE SIX DIMENSIONS OF MULTIDIMENSIONAL ASSESSMENT

ASAM's criteria uses six dimensions to create a holistic, biopsychosocial assessment of an individual to be used for service planning and treatment across all services and levels of care. The six dimensions are:

1	DIMENSION 1	Acute Intoxication and/or Withdrawal Potential Exploring an individual's past and current experiences of substance use and withdrawal
2	DIMENSION 2	Biomedical Conditions and Complications Exploring an individual's health history and current physical condition
3	DIMENSION 3	Emotional, Behavioral, or Cognitive Conditions and Complications Exploring an individual's thoughts, emotions, and mental health issues
4	DIMENSION 4	Readiness to Change Exploring an individual's readiness and interest in changing
5	DIMENSION 5	Relapse, Continued Use, or Continued Problem Potential Exploring an individual's unique relationship with relapse or continued use or problems
6	DIMENSION 6	Recovery/Living Environment Exploring an individual's recovery or living situation, and the surrounding people, places, and things

REFLECTING A CONTINUUM OF CARE



Note:

Within the five broad levels of care (0.5, 1, 2, 3, 4), decimal numbers are used to further express gradations of intensity of services. The decimals listed here represent benchmarks along a continuum, meaning patients can move up or down in terms of intensity without necessarily being placed in a new benchmark level of care.

* Attempts to connect severity with the Continuum of Care

- * All these attempts offer important dimensions to consider but have their limitations:
 - * **Single dimensions** of the behavior seem inadequate: severity is multidimensional
 - * collection of **categories or symptoms** seem arbitrary and not connected well to treatment
 - * Lack of unifying **conceptual framework** or perspective
 - * Not always clear if multiple dimensions indicate severity of the Addiction or **severity of other serious problems** (co-morbidity, consequences)

* **Need A New View of Severity**

- * How to create a new view that acknowledges multidimensionality of mechanisms and patterns that can
 - * Aid us with diagnosis
 - * Understand better how severity influences motivation
 - * Offer specifics for treatment planning and matching

* A New View of Addiction Severity

* My Critical Assumptions

- * **Quantity and Frequency** must be part of how we define severity
- * **Dimensions and not categories** are needed to understand severity (not just present or absent)
- * **Highlight critical mechanisms** based on how the addictive behavior is operating in individual's life
- * Include **biological, psychological and behavioral** factors involved in the addiction
- * Include the larger **Context** of Individual's life so the view of severity can be comprehensive

* **Creating a New View of Addiction Severity**

Defining Severity of Addiction

Use Patterns

- No Risk
- Low-Risk
- Infrequent High Risk
- Frequent High-Risk
- Extensive High-Risk

Mechanisms

- Neurobiological Adaptation
- Reduced Self Regulation
- Salience/ Narrowing

Mild

Severe



Domains of Impairment

Social

Psychological

Physical

* Although difficult to pin down and clearly measure, **quantity and frequency** of use are important for assessing relative risk

* Quantity and Frequency are clearly related to motivational goals (cutting down) and as indicators of change (creating a different pattern of use) but difficult to measure with certain drugs/behaviors

* Amazingly quantity and frequency are not at all or only indirectly included in DSM 5 and in other views of severity

* **Use Patterns critical to Understanding the Behavior**

- * **No Risk**
- * **Low Risk** (within guidelines; sporadic or controlled use)
- * **Infrequent High Risk** (infrequent binge drinking or problematic infrequent marijuana use)
- * **Frequent High Risk** (frequent binge drinking, opiate use habit, frequent high stakes gambling)
- * **Extensive High Risk** (recurrent/daily excessive drinking, marijuana use, heroin use)

* **One Way to Define
Quantity and Frequency**

Males

* Low Risk - 0 to 2.9 drinks

* Medium Risk - 3.0 to 4.3

* High Risk - 4.4 to 7.1

* Very High Risk - 7.2+

Females

* Low Risk - 0 to 1.4 drinks

* Medium Risk - 1.5 to 2.8

* High Risk - 2.9 to 4.3

* Very High Risk - 4.4+

Numbers of standard drinks of alcohol

* WHO Alcohol Risk Levels for Men and Women

- * Although engaged in a risky pattern of use, people can differ in how much they can do without creating problems or consequences
- * Use patterns can tell us a lot if the use is extreme (drinking 20 to 30 beers a day; smoking marijuana 10 times a day)
- * Often more difficult to change if use less frequent or frequent high risk use
- * Need to understand mechanisms of addiction not just use patterns

*** How much and how often:
helpful but not enough**

* Mechanisms of Addiction Severity

- * A small set of mechanisms characterize the end state of addiction and can be used to indicate severity
- * My candidates are the following:
 - * **Neurobiological Adaptation** - brain and biological adaptations to frequent exposure to addictive behavior/substance (a brain disease)
 - * **Reduced/Impaired Self-Regulation** - The sense of loss of control and compromised self-regulation despite consequences that are the hallmark of addictions (a behavioral control disease)
 - * **Salience and Narrowing of Behavioral Repertoire** - The addictive behavior becoming so valued a reinforcer that the behavior becomes more ubiquitous and potent in the life of the individual (a crisis of values; spiritual disease)

* *Neurobiological* Adaptation

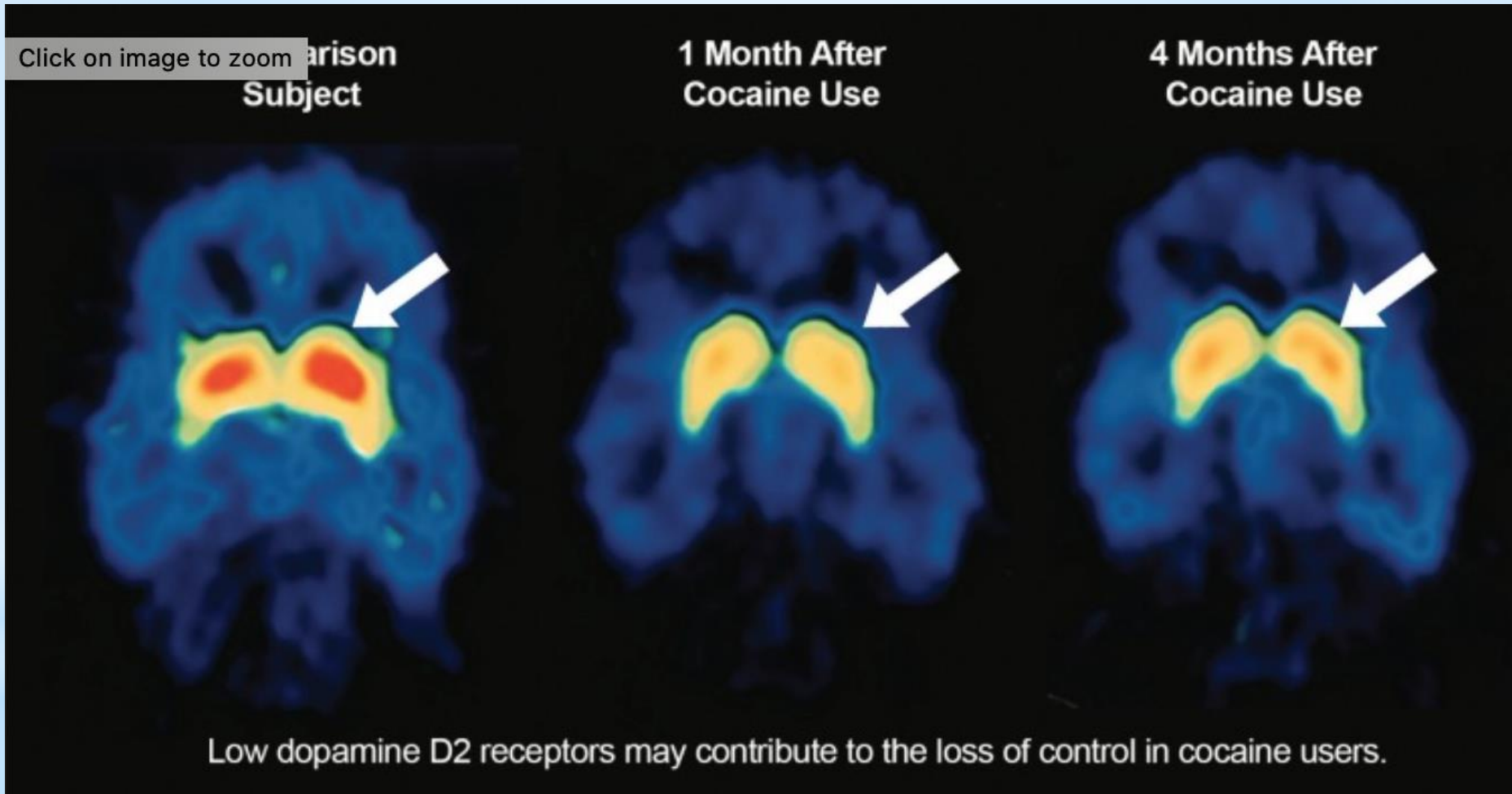
- * Ability to use more/tolerance
- * State dependent learning
- * Compulsive like use
- * Altered thresholds of stress & pleasure
- * Increased strength and scope of cues
- * Negative emotional states when use is blocked
- * Possible withdrawal & other rebound effects
- * FMRI indicators



Mild

Severe

* Neuroadaptation Example



Retrieved from <https://www.ncbi.nlm.nih.gov/books/NBK424849/>

This is what they mean when people say I use to feel normal!

*Reduced Self-Regulation

- * Use becomes more automatic
- * Difficulty controlling or cutting back
- * Using to cope and self-regulate
- * Continued use despite consequences
- * Impulsivity increases
- * Cannot function if use is interfered with
- * Underestimating consequences
- * Both ECF and Affect Regulation effects

Mild

Severe

Increased Salience and Narrowing of Behavioral Repertoire

- * Highly valued & meaningful; Expectancies of use
- * Integral part of lifestyle
- * Preferred way to cope with life problems & stress
- * Substitute for more basic needs (food, sleep, shelter)
- * Difficult to imagine life without it
- * Conflicted when incongruent with other values (self-stigma)
- * Decreases in other important/pleasurable activities
- * More time using; arranging for use
- * Social interactions and networks narrowed to similar users



Mild

Severe

- * Impact of the addictive behavior pattern on **Domains of Functioning (more consequences greater severity)**
- * Consequences/sequelae and not simply salience or how important or extensive in the person's life.
- * Key Domains:
 - * **Biological** - Needing the substance to feel normal, delusions, DTs, craving, OD, serious physical consequences (COPD, HPC, Liver disease, Neuropsychological conditions)
 - * **Psychological** - substance use becomes a psychological coping mechanism that can try to cope with or create mental health conditions, negative emotions and stress, trauma
 - * **Social** - How addictive behavior integrated into the social context and network, into meeting social and interpersonal needs (sex, fun, social events, work functioning)
- * **Consequences in Critical Domains of Functioning**

Defining Severity of Addiction

Use Patterns

- No Risk
- Low-Risk
- Infrequent High Risk
- Frequent High-Risk
- Extensive High-Risk

Indicators

- Neurobiological Adaptation
- Reduced Self Regulation
- Salience/ Narrowing

Mild

Severe



Consequences

Social

Psychological

Physical


Defining Severity of Addiction: College Drinking

Use Patterns


- Low-Risk
- Infrequent High Risk
- Frequent High-Risk
- Extensive High-Risk

Indicators

Neurobiological Adaptation




Reduced Self Regulation

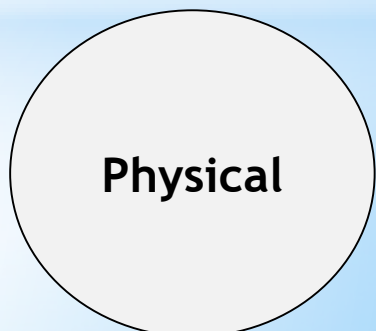
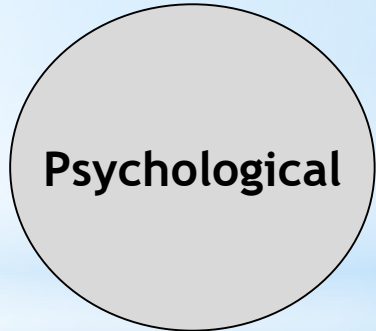
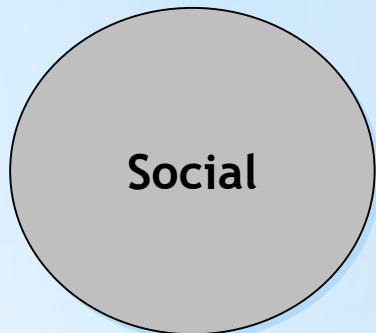


Salience/ Narrowing

Mild Severe



Domains



Defining Severity of Addiction: Binge

Use Patterns

- Low-Risk
- Infrequent High Risk
- *Frequent High-Risk*
- Extensive High-Risk

Indicators

Neurobiological Adaptation



Reduced Self Regulation



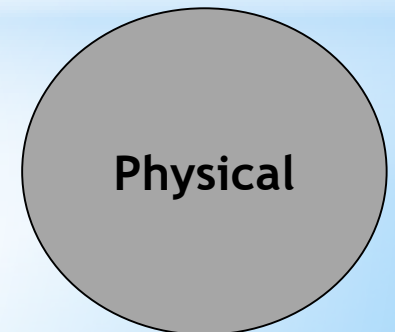
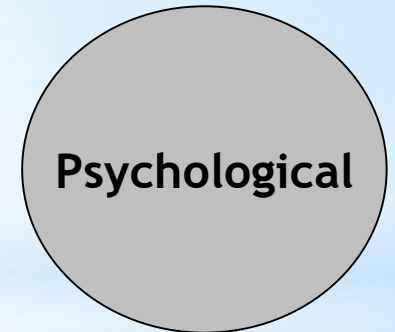
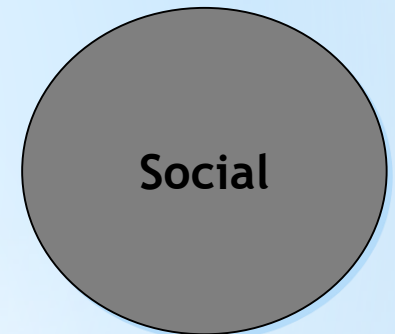
Salience/
Narrowing

Mild

Severe



Domains



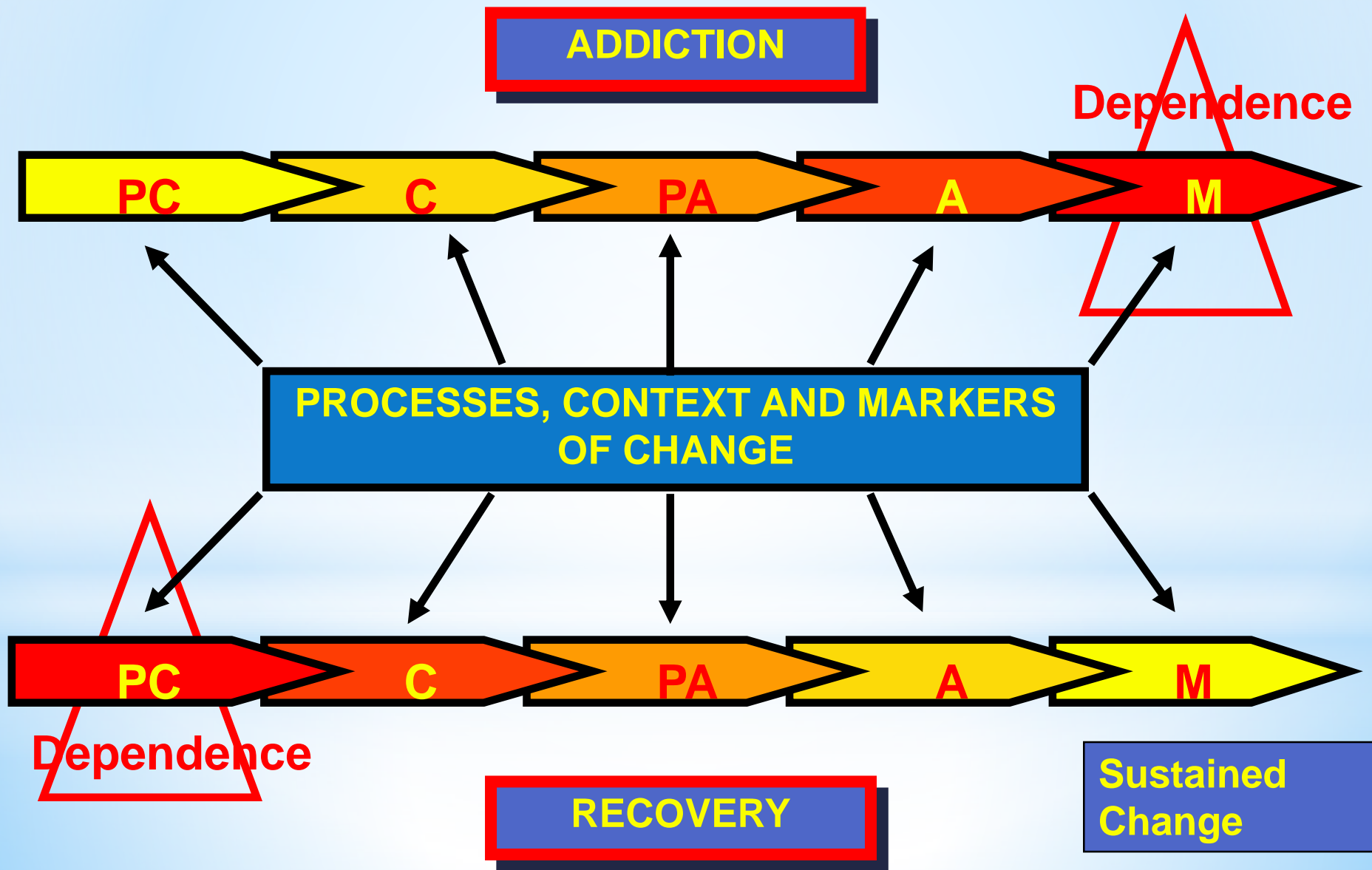
- * Severity makes recovery and completing **tasks** that are critical to moving through the stages more challenging
- * Motivation is **behavior and goal specific** so my pattern of use and severity are critical to my goal setting
- * Severity **impairs self-regulation and self-control** that are critical to using coping skills needed to manage the recovery journey
- * Severity **interacts** with ambivalence, decision making, commitment, support, planning, and implementation of action plan as well as relapse and recycling

* **How does Severity interact with Motivation**

*Questions??

Break

* THE STAGES OF CHANGE FOR ADDICTION AND RECOVERY



*SAMHSA's View of Recovery

- “A process of change through which individuals improve their health and wellness, live self-directed lives, and strive to reach their full potential.”
- Recovery is built on access to evidence-based clinical treatments and recovery support services for all populations

*Not just putting a Band-Aid on a wound
or just stopping using a substance or
just going to treatment*



* Stage of Change Labels and Client Tasks

* STAGES

* Precontemplation

- * Not interested

* Contemplation

- * Considering

* Preparation

- * Preparing

* Action

- * Initial change

* Maintenance

- * Sustained change

* TASKS What client needs to do

- * Interested, concerned and willing to consider

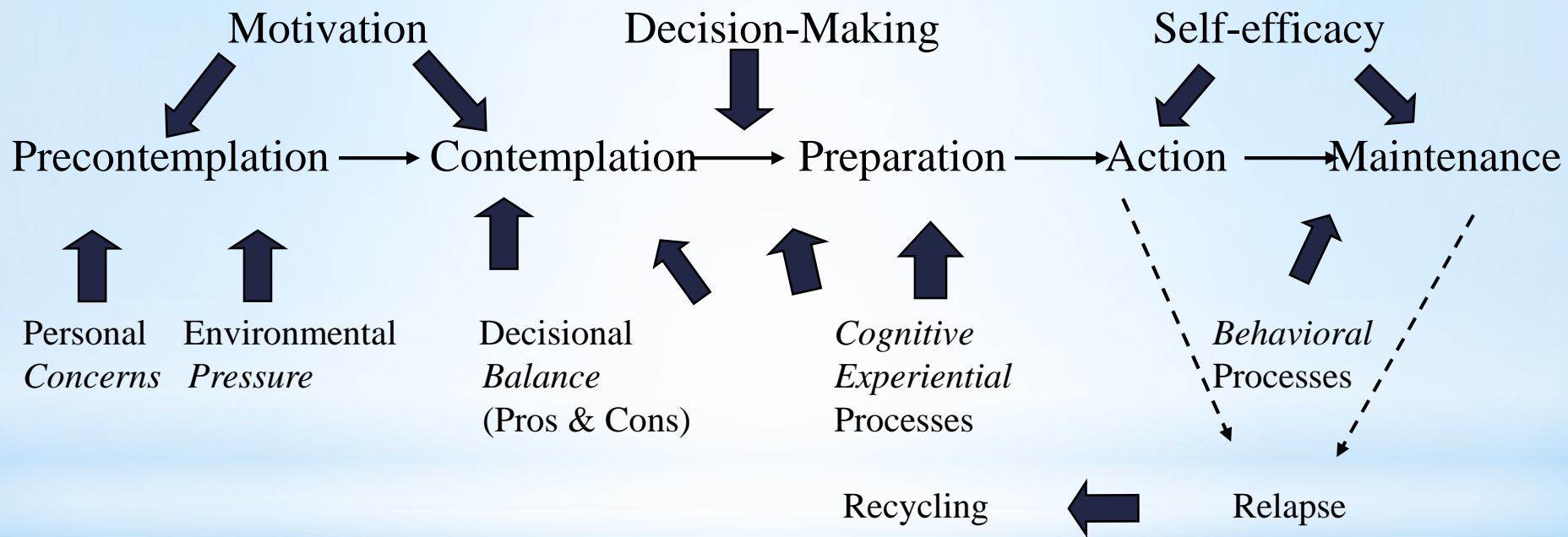
- * Risk-reward analysis and decision making

- * Commitment and creating a plan that is effective/acceptable

- * Implementing plan and revising as needed

- * Consolidating change into lifestyle

Theoretical and practical considerations related to movement through the Stages of Change for Recovery



Competing demands, contextual problems, and poor self regulation skills lead to incomplete or problematic completion of change tasks which in turn leads to failed attempts to change and undermines recycling and the readiness, willingness, and perceived ability to change. Treatment supports movement through the process

*Where Do We Come In?

STAGES	PROVIDER TASKS
Precontemplation <ul style="list-style-type: none">◦ Not interested in change	Raise doubt about continuing problematic behavior; Increase client's awareness of risks and problems
Contemplation <ul style="list-style-type: none">◦ Thinking about change	Encourage client to voice reasons for change & risks of not changing; help tip the balance of pros and cons
Preparation <ul style="list-style-type: none">◦ Preparing for change	Help build commitment and develop a personalized change plan
Action <ul style="list-style-type: none">◦ Initial change	Help the client implement plan, prevent relapse; Adjust change plan as needed; Seek support
Maintenance <ul style="list-style-type: none">◦ Long-term change	Help client identify strengths for long-term change; Provide support; Focus on wellness and self-directed life

Tasks and Goals for Precontemplation

- * **PRECONTEMPLATION** - The state in which there is little or no consideration of change of the current pattern of behavior in the foreseeable future. (NOT PRECONTEMPLATOR)
- * **TASKS:** Increase awareness of need for change and concern about the current pattern of behavior; envision possibility of change
- * **GOAL:** Serious consideration of change for this behavior

The “Five R’s”: How & Why People Stay in Precontemplation

- * **Reveling:** *“I like it the way it is.”*
- * **Reluctant:** *“Not now... not ever.”*
- * **Rebellious:** *“It’s my life... MYOB.”*
- * **Resigned:** *“The damage is done...there’s no use.”*
(Hopeless; Helpless)
- * **Rationalizing:** *“At least I’m not doing...XYZ.”*
(Harm minimization)



* PC: Key Issues and Intervention Considerations

INITIATION

- * For initiation of health-promoting or health threatening behaviors, promoting experimentation (just try it out!) may help move people in PC along in the process of change (Back on My Feet)
- * Make the behavior seem attractive, something you need to try
- * Social influences and media messaging often promote movement

RECOVERY

- * Coercion or courts cannot do it alone!
- * Confrontation breeds resistance
- * Education is often insufficient, motivational enhancement is needed
- * Smaller versus larger goals
 - * Consider harm-reduction strategies (e.g., encourage cutting back on cigarettes if you're not ready to quit)

* Supporting People in Precontemplation: *Not Interested in Change Right Now*

- * Encourage them to start thinking about change
 - * Be sure to emphasize that it is their choice
 - * Ask open-ended questions
 - * Avoid sustain talk
- Reflect change talk
 - With permission, provide motivating information
 - Assist them in identifying and emphasizing possible benefits of change
 - Reducing harm

- * Motivational Interviewing was designed to create a way to help people in Precontemplation, Contemplation and Preparation
- * Spirit/Style
 - * Collaboration/Partnership
 - * Acceptance, Empathy, Autonomy
 - * Compassion
 - * Evocation
- * Strategies (OARS)
 - * Open-Ended Questions, Affirmations, Reflections, Summaries
- * Can be used throughout work with clients but in action stages may need more directive skills building

*** Using MI Spirit/Style and Strategies**

Tasks and Goals for Contemplation

- * **CONTEMPLATION** - The stage where the individual examines the current pattern of behavior and the potential for change in a risk - reward analysis.
- * **TASKS:**
 - * Analyzing pros and cons of the current behavior pattern and costs and benefits of change.
 - * Decision-making.
- * **GOAL:** A thoughtful evaluation that leads to a decision to change.

* Contemplation: Key Issues & Intervention Considerations

* INITIATION

- * Families can help or hinder
- * Make the new behavior more attractive and exciting
 - * Can tip decisional balance in favor of making a change
 - * E.g. This is a fantastic feeling. Everyone is doing it. You are missing out. You will feel better
- * Remove barriers to initiating a behavior -easy access
 - * E.g., Free sample; Try one of mine; free gym membership, starter package of diet food

* CESSATION

- * Decisional considerations are personal
- * Families can help or hinder
- * Multiple problems or issues interfere w/ movement from Contemplation to Preparation
 - * Addressing barriers to change E.g., Stress management resources to help with quitting smoking
- * Making the behavior less convenient can help bump up the cons of continuing the behavior
 - * E.g., Smoke-free policies on workplace grounds, etc.

* Contemplation: Key Issues & Intervention Considerations

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* Supporting People in Contemplation: *Ambivalent About Making a Change*

- * Help support them in making a decision
 - * Explore important reasons and values related to change
 - * Assist them in identifying their most important values
 - * Explore ambivalence and the pros and cons of change
 - * Promote Harm Reduction
- Use double-sided reflections
 - Highlight change talk w/ reflections
 - Encourage **them** to make the arguments for change
 - With permission, share important information
 - Support their self-efficacy / confidence

- * Admit that the status quo is problematic and needs changing
- * The pros for change outweigh the cons
- * Change is in our own best interest
- * The future will be better if we make changes in these behaviors

* **MOTIVATED TO
CHANGE**

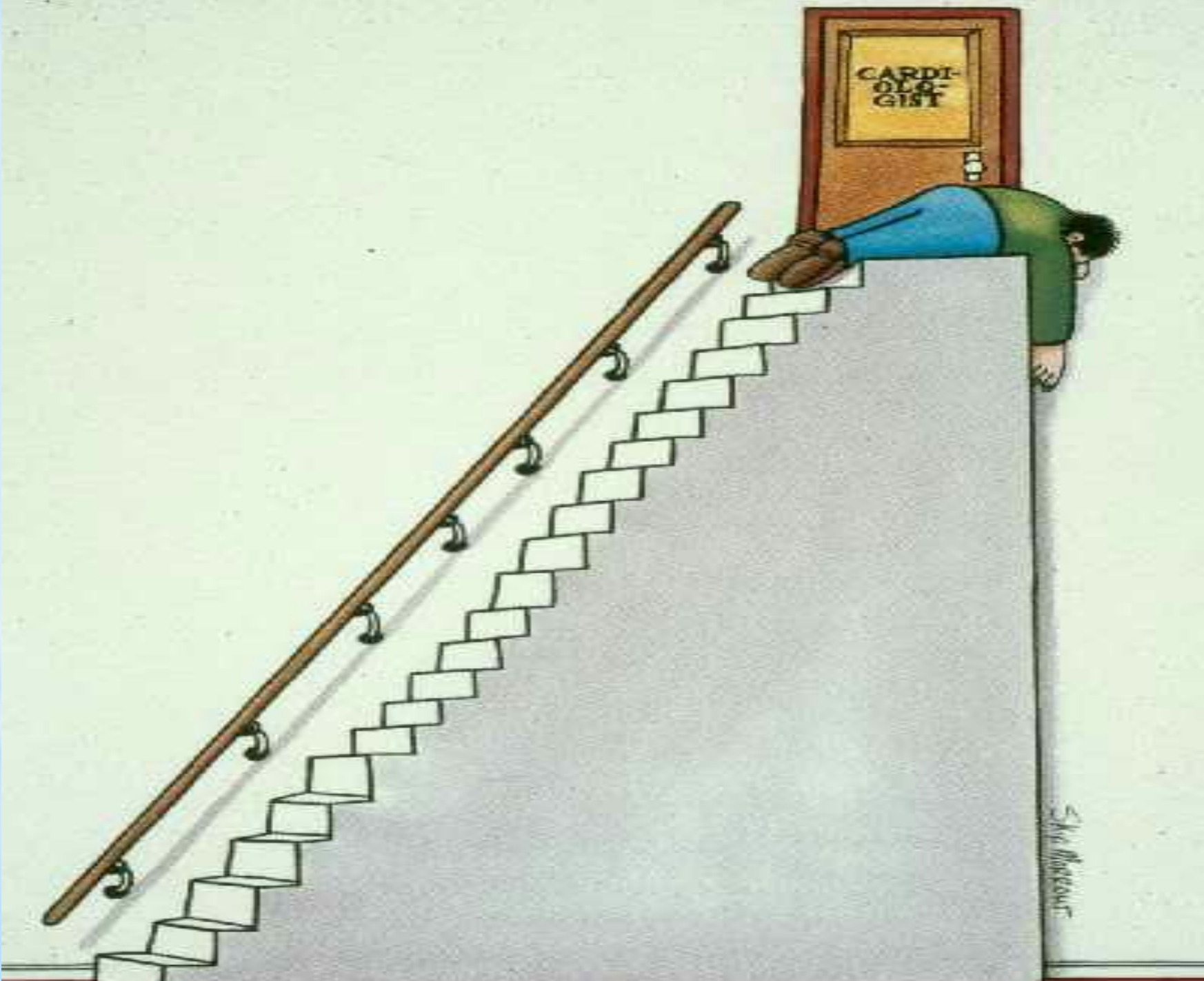
FANCIS, THE MOTHERS CLUB IS OFFERING
MOTIVATIONAL SEMINAR TONIGHT CALLED
"STOP MAKING EXCUSES." WOULD YOU
LIKE TO GO WITH ME?

NAH. IT'S TOO HOT,
I'M TIRED AND I
CAN'T FIND MY
SOCKS.



*Tasks and Goals for Preparation

- * **PREPARATION** - The stage in which the individual makes a commitment to take action to change the behavior pattern and develops a plan and strategy for change.
- * **TASKS:** Increasing commitment and creating a change plan.
- * **GOAL:** An action plan to be implemented in the near term.



* Preparation: Key Issues and Intervention Considerations

INITIATION

- * Behavior becomes more frequent
- * Expectations more positive
- * Openness & commitment to change increases
- * Support for new behavior grows
- * Plan around barriers

CESSATION

- * Offering incentives can help (if used well)
- * Need an effective, acceptable and accessible plan
 - * E.g., Smoking cessation → Can help if employer is able to offer free NRT
- * Support commitment and confidence/self-efficacy
- * Refining skills needed for plans
 - * E.g., Stress management skills to use in place of smoking or overeating

* Supporting People in Preparation:

Planning for Change

- * Assist them in preparing well to make the change
- * Help them develop an effective and acceptable plan
- * Make it a collaborative plan
 - You cannot do it for them!
- Support the plan with your help /resources
- Encourage them to set a timeline or date to begin / make the change
- Help them to identify possible barriers & plan for overcoming these

- * COMMITMENT TO TAKE ACTION
- * SPECIFIC ACCEPTABLE ACTION PLAN
- * TIMELINE FOR IMPLEMENTING PLAN
- * ANTICIPATION OF BARRIERS

* WILLING TO MAKE
CHANGE

* **ACTION** - The stage in which the individual implements the plan and takes steps to change the current behavior pattern; begins creating a new behavior pattern.

* **TASKS:**

- * Implementing strategies for change
- * Sustaining commitment in face of difficulties
- * Revising plan as needed.
- * Supporting Self-Efficacy and Reducing Temptation

* **GOALS:**

- * Successful action to change current pattern.
- * New pattern is established over a period of time (3 to 6 months).

* **Tasks and Goals for
Action**

* Action: Key Issues and Intervention Considerations

* Support for Change

- * Create support for continued engagement in the behavior
- * Avoid negative consequences (escape punishment)
- * Consider rewarding progress, or encouraging to create and apply their own rewards
 - * E.g., If I stick to my eating plan today, I can watch Scandal tonight.

* Adjusting the Plan, As Needed

- * Plans often need to be revised
- * Flexible and responsive problem solving
- * Continued refining skills needed to implement the plan

* **MAINTENANCE** - Stage in which new behavior pattern is sustained for an extended period of time & consolidated into the lifestyle of the individual.

* **TASKS:**

* Sustaining change over time & across a wide range of situations.

* Avoiding partial or complete return to prior behavior pattern.

* **GOAL:** Long-term sustained change of the old pattern & establishment of a new pattern of behavior.

* **Tasks and Goals for
Maintenance**

* Maintenance: Key Issues & Intervention Considerations

- * It's not over 'til it's over
- * Support and reinforcement
- * Availability of services or resources to address other life issues / areas of functioning



- Offering valued alternative sources of reinforcement
- The “change” becomes the new norm

- * Continued Commitment
- * Skills to Implement the Plan
- * Long-term Follow Through
- * Integrating New Behaviors into Lifestyle or Organization
- * Creating a New Behavioral Norm

* **ABLE TO CHANGE**

- * There are some formal assessment instruments that have been used (URICA, Readiness to Change Scale, SOCRATES) mostly in research studies
- * Since stages are not boxes and people can move even within a session we need more clinically sensitive ways to assess stages
- * Best if done collaboratively with the client
- * Here are some ideas for assessing stages

* How to Assess the Stages of Change

- * Listen to what the client says especially about this behavior change or the change goal
- * Listen for Change Talk (Arguments for change) and Sustain Talk (Arguments or barriers against change)
- * Ambivalence usually indicates some contemplation activities but no decision to change and can last a long time

*** Listen to the Client**

- * Teach the client the stages of change
- * Ask them to say where they think they are in the stages or what tasks they are working on: concern and interest, decision making, planning, commitment, keeping in action
- * Often self-assessment is optimistic seeing themselves further along than in reality so offer some gentle feedback or get group members to offer feedback

* Self Assessing Stage Status

- * On a scale from 1 to 10 how ready are you to make this change (be specific about behavior and goal)
- * On a scale from 1 to 10 how important is it to you to make this change (be specific about behavior and goal)
- * Depending on the number you can begin a conversation about how and why they made that rating and why not lower or what would it take to get you to rate it higher

* Readiness and Importance Rulers

* Regression, Relapse and Recycling through the Stages

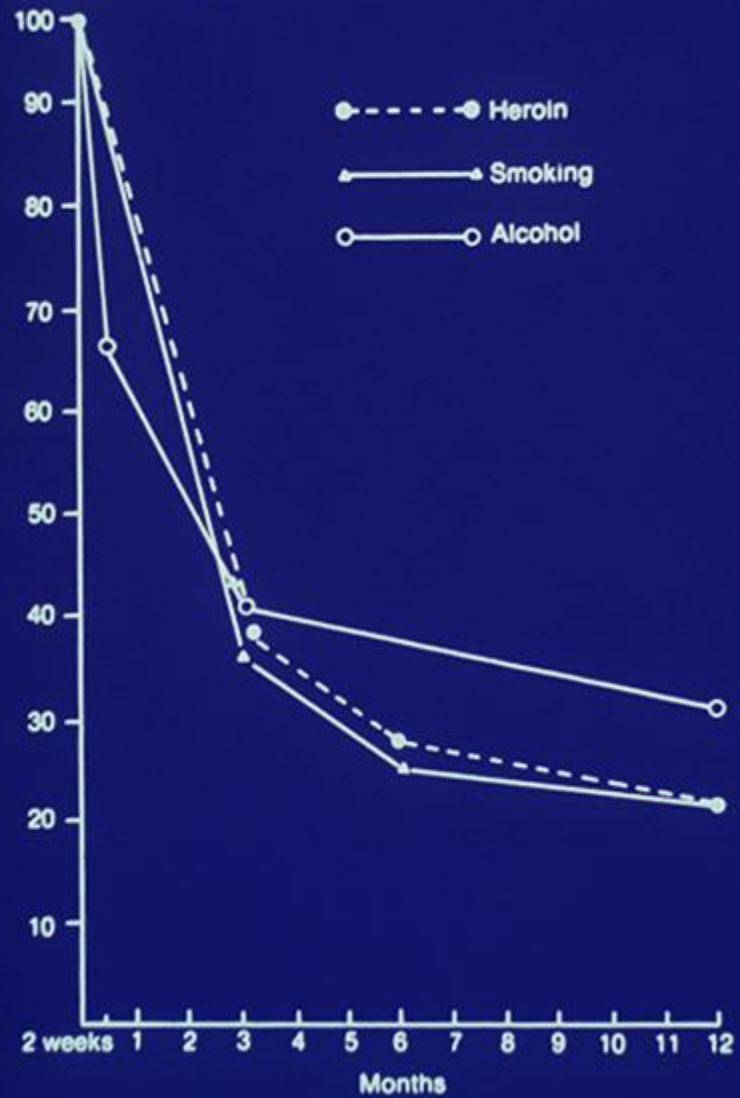
- ◆ **Regression** represents movement backward through the stages
- ◆ **Slips** are brief returns to the prior behavior that represent a some problems in the action plan
- ◆ **Relapse** is a return or re-engaging to a significant degree in the previous behavior after some initial change (Really individual giving up on change)
- ◆ After returning to the prior behavior, individuals most often **Recycle** back into pre-action stages

* Relapse and Recycling

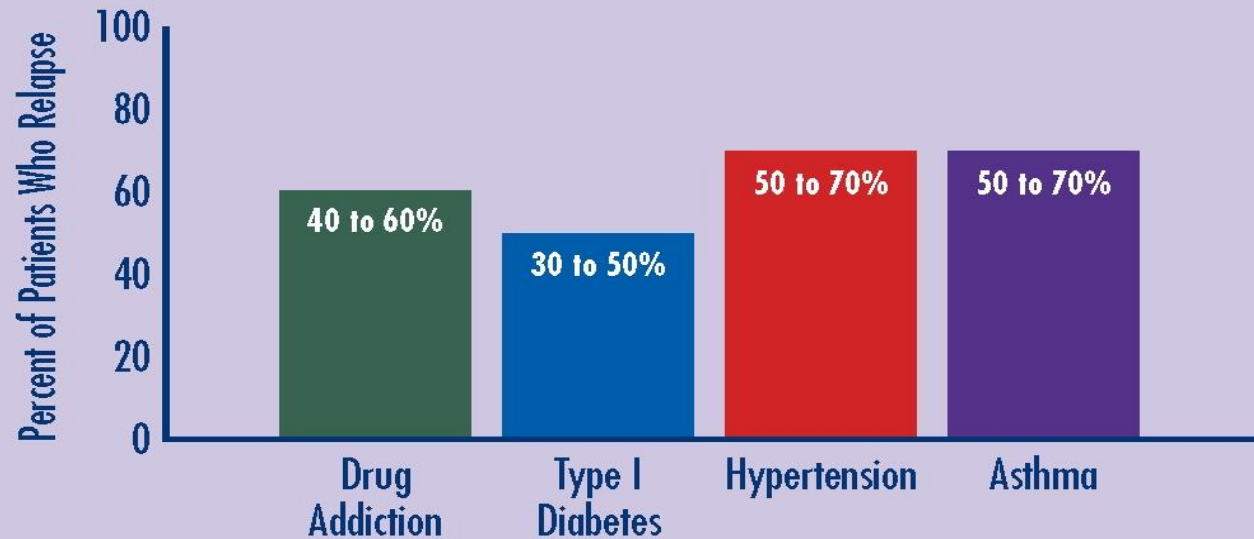


- * Movement through the stages is not inexorably linear: consists of stasis, progression and regression, slips/lapses; relapse and recycling
- * Relapse is not a stage of change
- * Recycling through the process is a reality
- * Need a learning perspective: Successive approximation learning not one trial

Relapse rate over time for heroin, smoking, and alcohol



COMPARISON OF RELAPSE RATES BETWEEN DRUG ADDICTION AND OTHER CHRONIC ILLNESSES

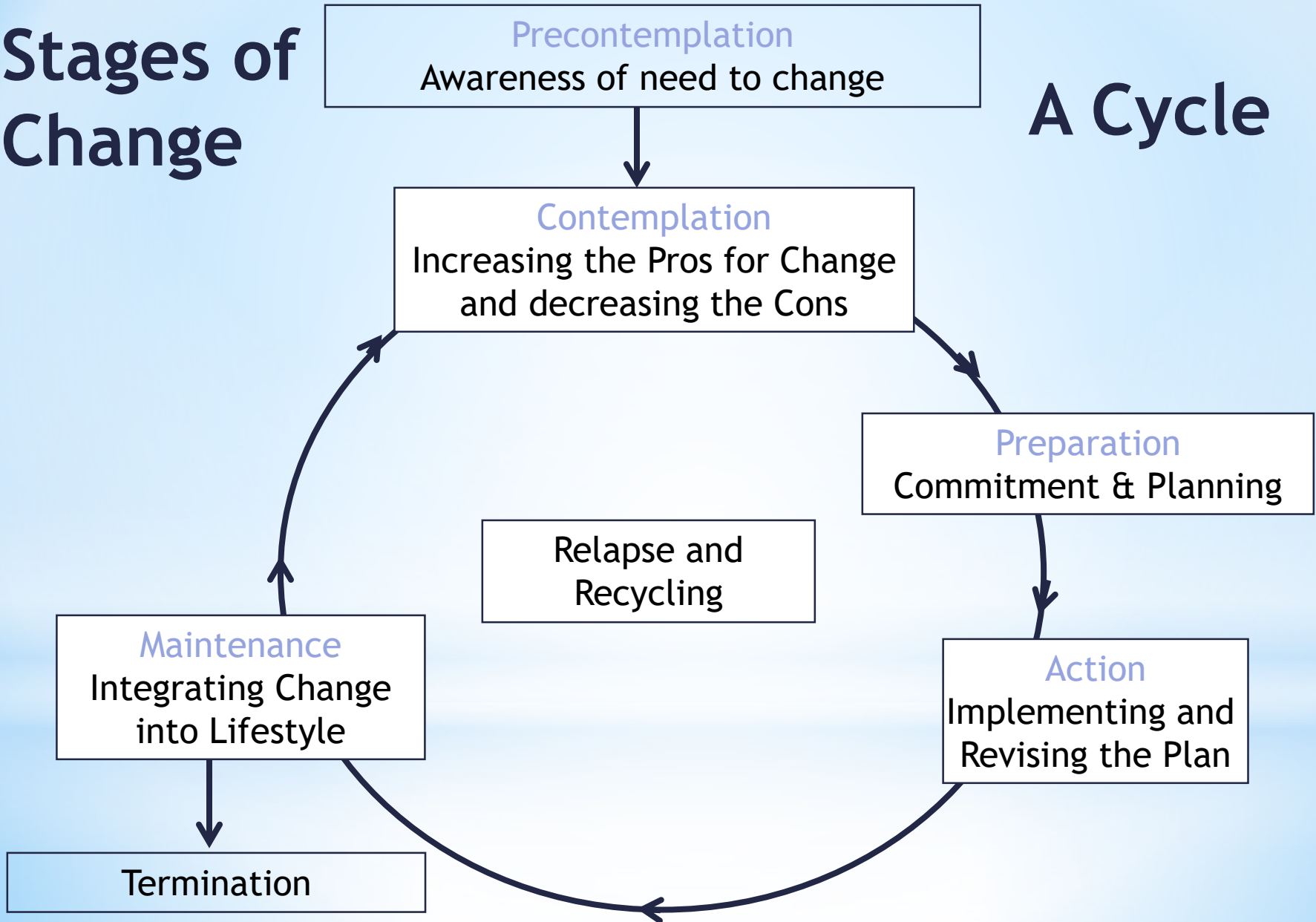


Relapse rates for drug-addicted patients are compared with those suffering from diabetes, hypertension, and asthma. Relapse is common and similar across these illnesses (as is adherence to medication). Thus, drug addiction should be treated like any other chronic illness, with relapse serving as a trigger for renewed intervention.

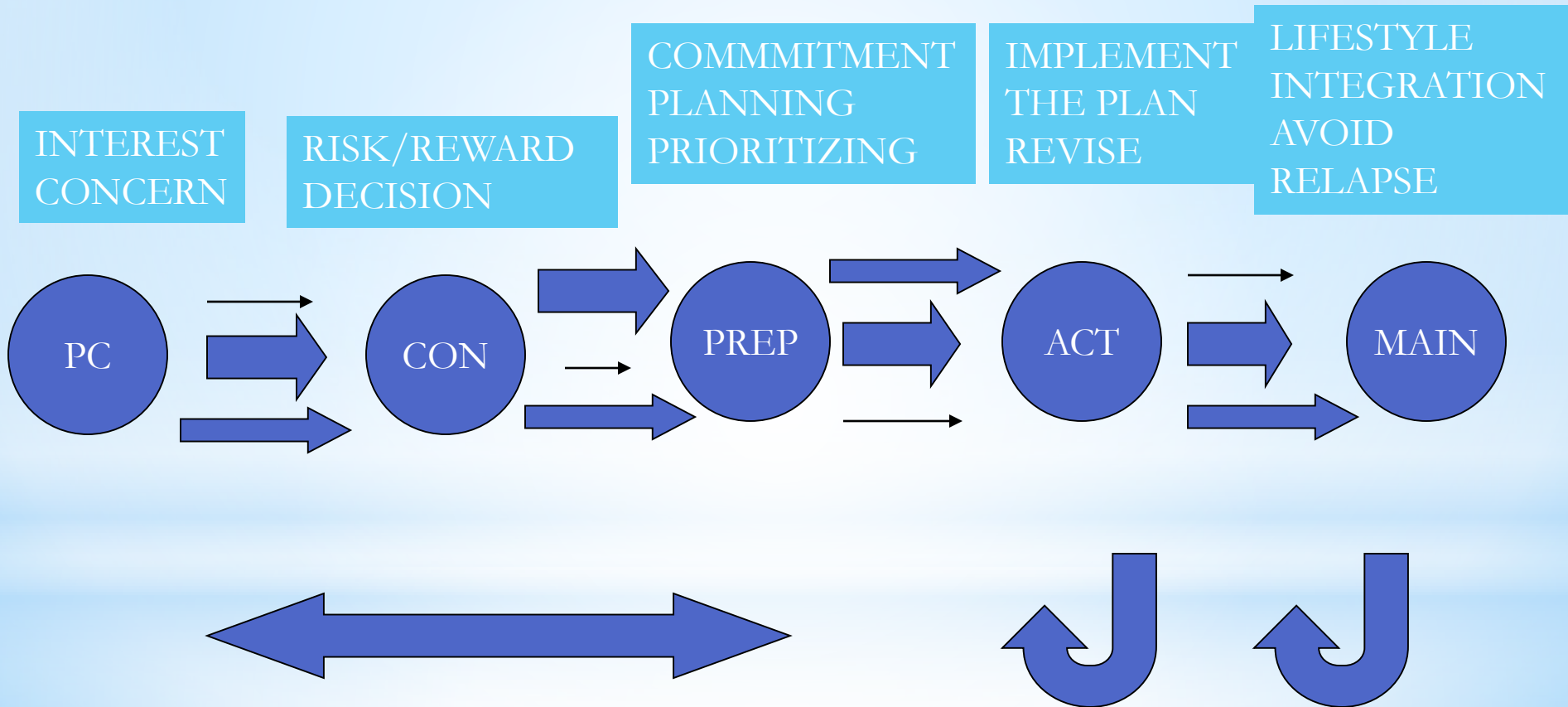
Source: McLellan et al., JAMA, 2000.

Stages of Change

A Cycle



*TASK COMPLETION AND MOVEMENT BETWEEN STAGES



- * What is the client's work in making change happen?
- * What is the provider's tasks?
- * What is the difference?
- * Client = Processes and Coping Activities
- * Provider = Strategies and Services

* **MECHANISMS OF CHANGE:
A CLIENT PERSPECTIVE**

*What are Processes of Change?

- * Each process represents some human experience or activity of the person in context of that person's life
- * Processes are the property of the person making the change
- * Each process is a distinct mechanism but they often act in combination
- * Two sets of processes represent the two types of critical activities needed to enact behavior change derived from different therapies Theories.

*Experiential Processes

Experiential Processes	Description
Consciousness-Raising	Increasing awareness and information known about the current status quo and the behavioral change that is needed
Emotional Arousal	Experiencing strong emotions regarding the problem behavior
Self-Reevaluation	Considering how a target behavior—either the current or the ideal future behavior—fits or conflicts with one’s personal values, beliefs, and goals
Environmental Reevaluation	Individual considers how their current—or ideal future—behavior will positively or negatively impact others and their environment
Social Liberation	Considers social norms and societal sanctions regarding the current behavior and the targeted behavior change

* Behavioral Processes

Behavioral Processes	Description
Self-Liberation	Making a choice and commitment to alter one's behavior
Stimulus Control	Creating, removing, or avoiding any cue or stimuli that might trigger one to engage a particular behavior
Counterconditioning	Substituting a new behavioral response to a stimulus instead of a problematic behavioral response
Reinforcement Management	Creating rewards for engaging in a desired behavior and eliminating any rewards received from engaging in the unwanted behavior
Helping Relationships	Enlisting the support of others specifically for eliminating an old behavior or adopting a new one

*Change engines that enable movement through the stages of change

*Doing the right thing at the right time

*Cognitive/Experiential processes more during early stages

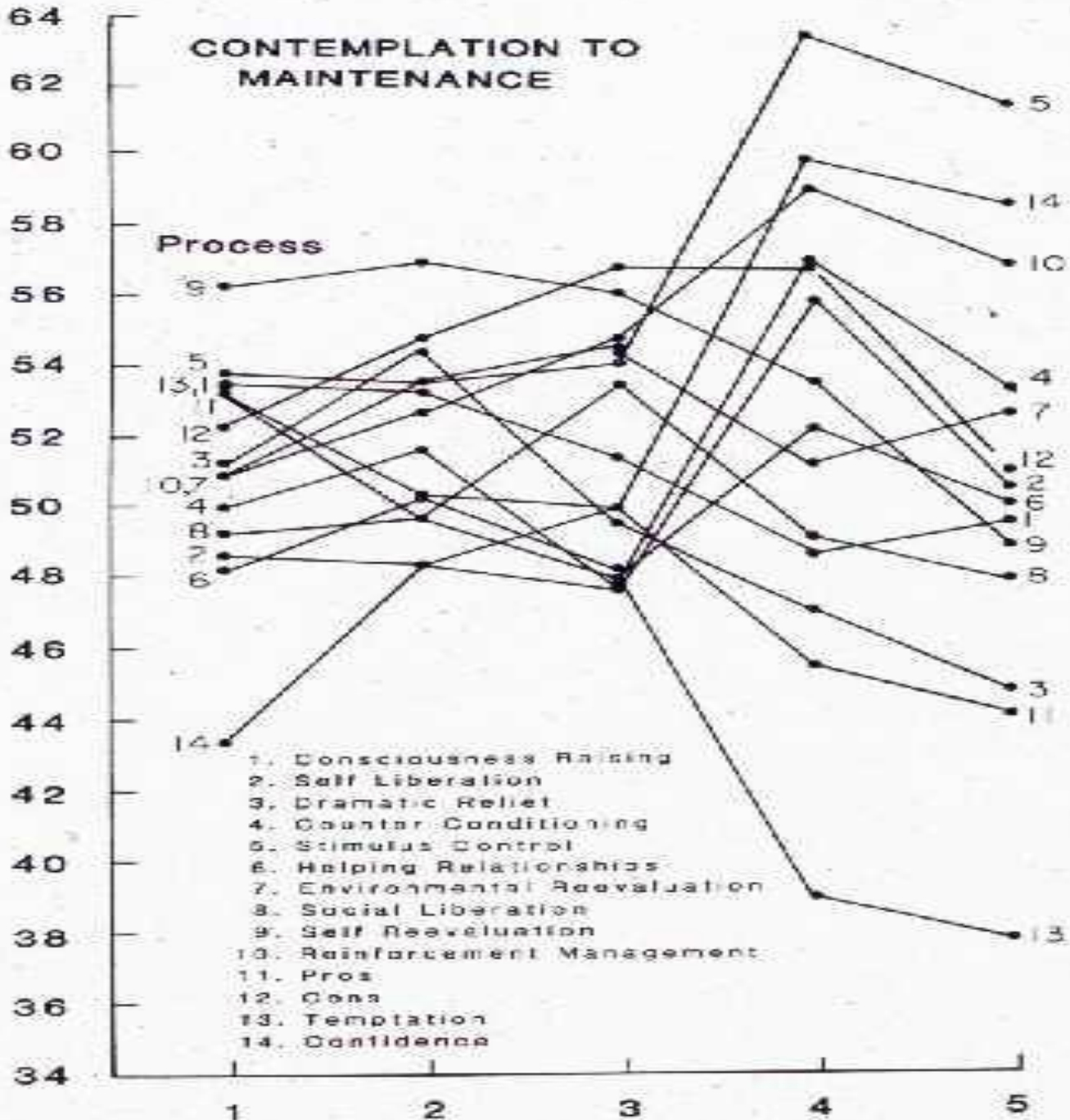
*Behavioral processes more in preparation, action and maintenance

***Client Processes of Change**

CONTEMPLATION TO MAINTENANCE

FREQUENCY

Standardized Scores



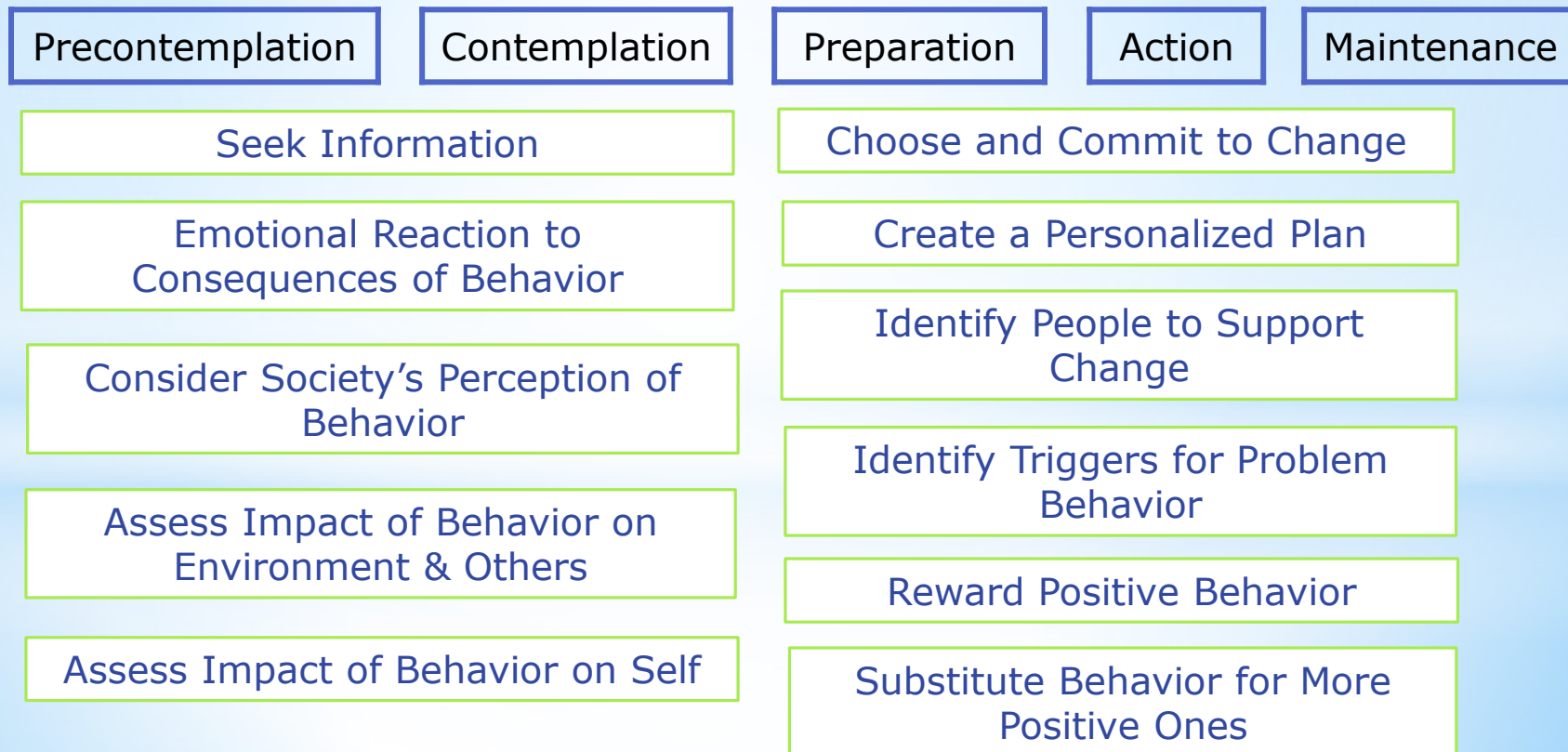
Every 6 months

ROUND

* Mechanisms of Change

Remember, change happens bit by bit.

To Promote it you need to get Clients to engage in these activities at different points in the process.



* Self Regulation and Important Dimensions of the Process of Change

- * Most models of self regulation include self-observation, self-evaluation, decision making, willingness to consider change, and planning (Miller & Brown, 1991, Bandura, 1986)
- * Self Management, Self Control, Self Monitoring have been critical concepts in treatment so this is not new to treatment providers

* Self Regulation and Important Dimensions of the Process of Change

- * The ability to manage both internal and external demands in a way that is
 - * responsive to feedback and available information,
 - * flexible in seeking solutions, and
 - * does not overtax the system
- * Important Self Regulation Skills & Abilities) for behavior change:
 - * Executive Cognitive Functioning
 - * Affect Regulation

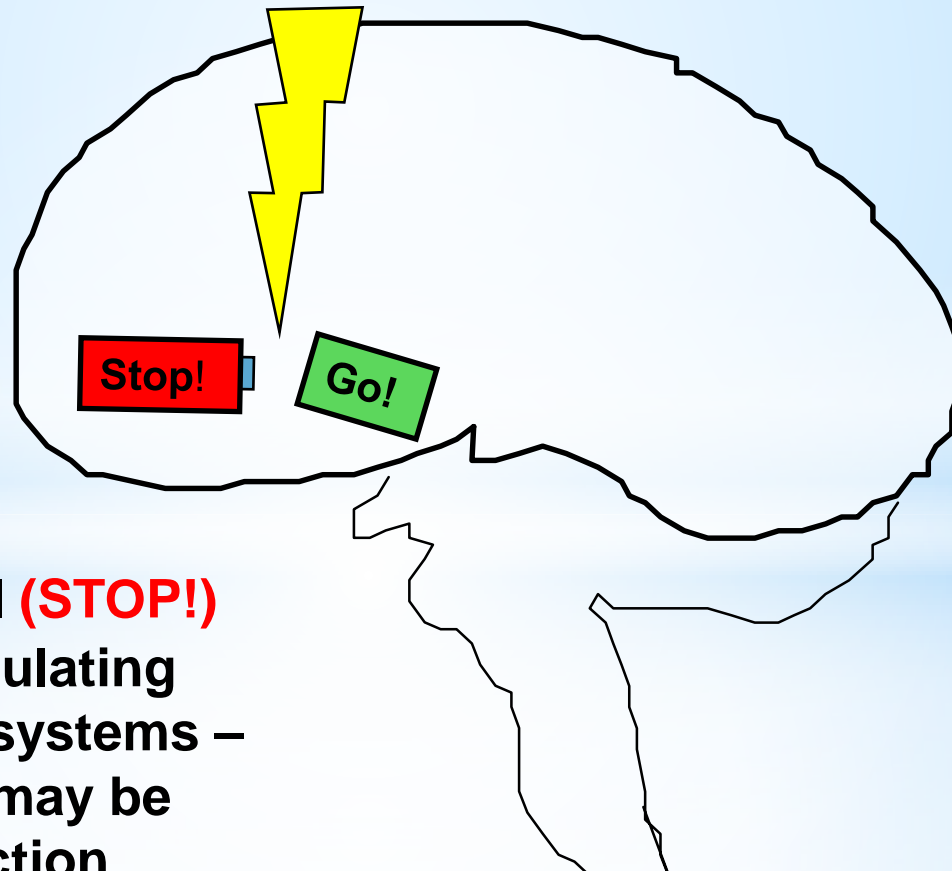
Self-regulation seems critical for understanding addictions, recovery from addictions, and management of other types of health problems and promotion

* Deficits in self-regulation are at the core of definitions of addiction and mental illness

* Interesting new information that looks at more generic mechanisms involved in self-regulation

* **What are we learning about
Self Regulation**

In a vulnerable brain....



..the brain's frontal **(STOP!)** circuitry is not modulating downstream **(GO!)** systems – the “brain brakes” may be bad – or the connection between the brakes and the other regions may be “broken”.

Result: poor decision-making...poor impulse control...greater risk-taking...poor inhibition...an “over-reacting” brain

*What is Self-Control?

- *Occurs when a person attempts to change the way he or she would otherwise think, feel or behave
- *Is needed to follow rules or inhibit immediate desires and to delay gratification
- *Involves overriding or inhibiting competing urges, behaviors, or desires as well as production of behaviors that are not immediately reinforcing
- *Differs from purely automatic processes since involves effort

*Self-Control Strength

- *“Is necessary for the executive component of the self (i.e., the aspect of the self that makes decisions, initiates and interrupts behavior, and otherwise exerts control) to function (Baumeister, 1998)”
- *“Acts of volition and control require strength”
- *This strength is a limited resource that is like a muscle that can become fatigued and depleted but can be replenished with regular exercise followed by periods of rest - Not just a Skill or a Capacity

* Managing Self-Control Strength

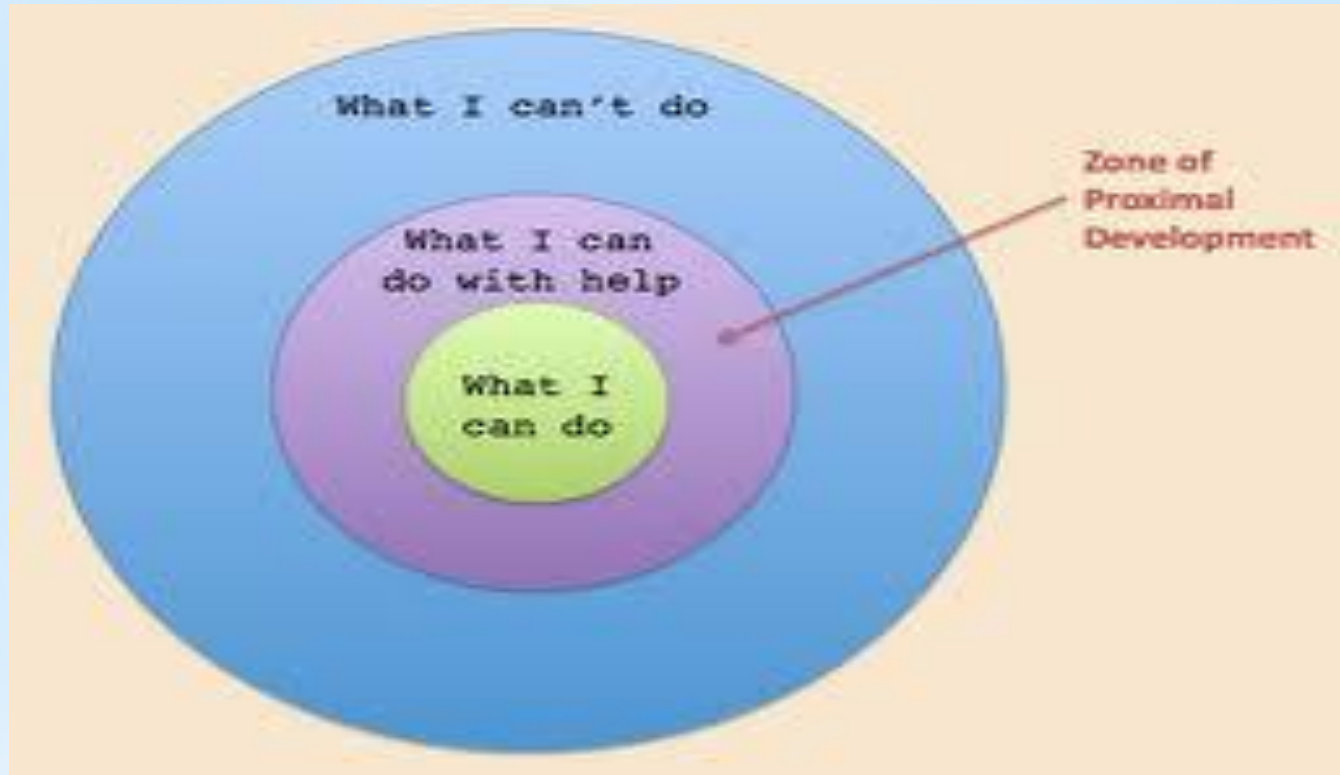
- * Not a limitless resource
 - * Must be conserved
 - * Can be increased but not infinitely
 - * Can be strengthened by exercise of self-control but need time to consolidate gains in strength
 - * Is involved in all efforts to inhibit or perform behaviors but less involved when they become automatic or habitual
- What depletes SC strength?
 - Coping with stress (focus attention, monitor, stop thoughts, urges, etc)
 - Affect Regulation and managing negative and emotions of depression, anxiety, anger
 - Managing or stopping addictive and excessive behaviors
 - Inhibiting thoughts and behaviors may require more self-control than performing behaviors

- * How does motivation and the process of change interact with this self regulation process and the self-control “muscle”?
- * Many of our clients with SUD have impaired or weak self-control muscles
- * How can we help?

*** Motivation, Self-Regulation,
& Change**



* Scaffolding: A strategy for
Managing Self Control
Strength



* One way to think about scaffolding

- * Recognize that this can disrupt the client's work and the process of change
- * Provide “scaffolding” external support systems that can support the change process
- * Provide a way the client can build self-control muscle
- * Make sure the building is well build before you take down the “scaffolding”

* What Can We Do About Impaired Self Regulation

- * AA meetings and sponsor
- * Residential treatment (Is it extensive enough and appropriately used)
- * More frequent sessions
- * Tailored services and treatments
- * Integrated care
- * Family support services
- * Emergency respite facilities
- * ACT teams
- * Employment services
- * Other

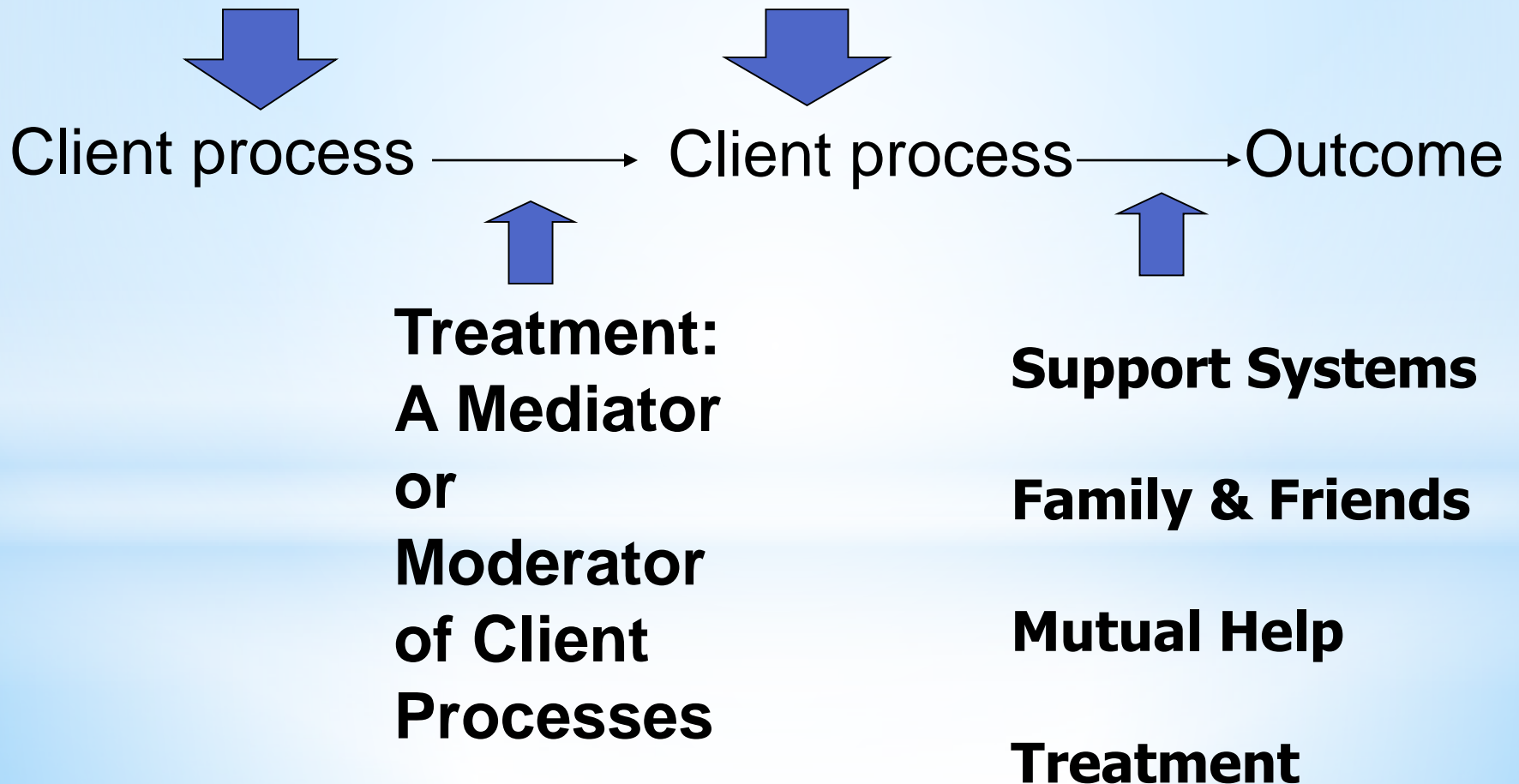
*** What are some examples of scaffolding in your work?**

- * Do something small that takes effort and repeat
 - * Get up when alarm goes off, make your bed, put away your clothes
- * Delay some desire or impulse even if for a brief period of time
 - * Don't take a second helping, stay talking to someone, surf a craving
- * Stop or counter automatic thoughts
 - * I am not a loser, this is “stinking thinking” stop it
- * Avoid doing something that is pleasurable for a period of time
 - * Postpone eating dessert, Lenten resolutions
- * Do something you avoid but might enjoy
 - * Get a manicure, go to a movie, call a friend to do something

* Building Self Control Strength Exercises

* How Do Treatment and Mutual Help Fit In

Self Regulation



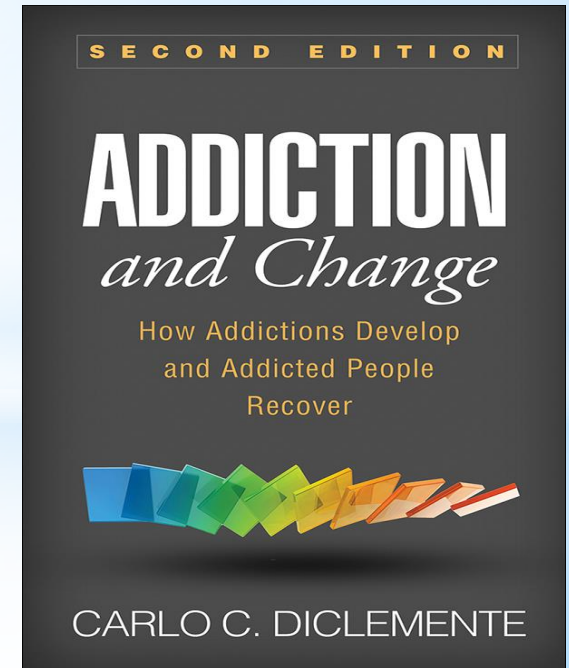
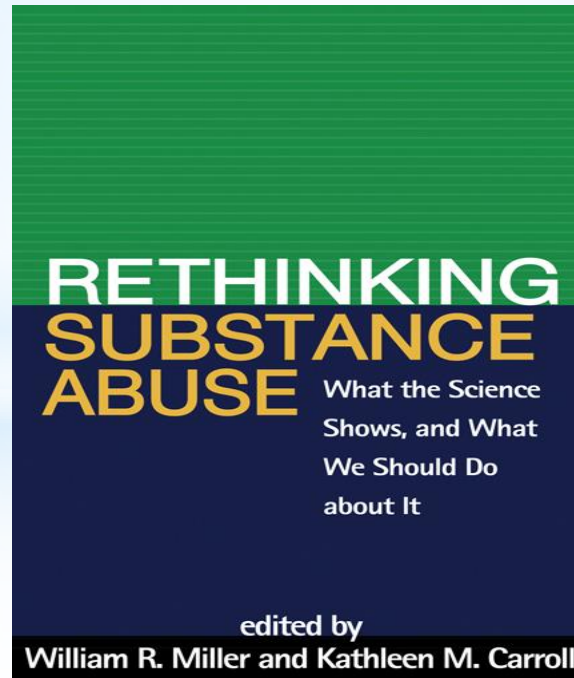
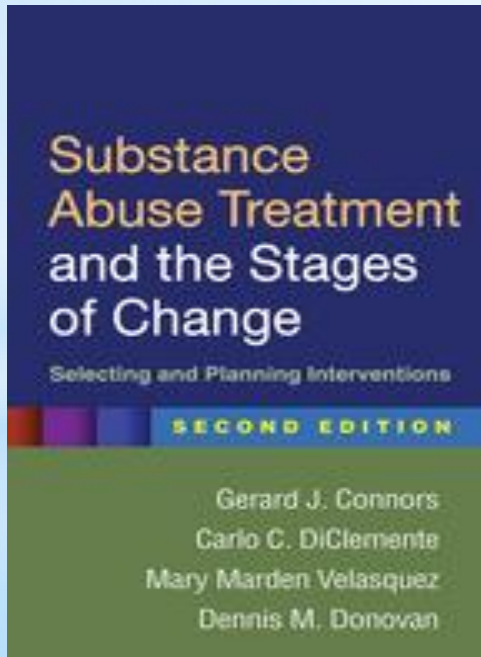
- * Focus on patient needs and desires, motivation, and self-regulation
- * Use scaffolding for impaired self-regulation
- * Create systems of care not treatment programs
- * Build Integrated Care training capacity that support all aspects of recovery
- * Create a system of communication among peers and providers that focuses on client and use it to coordinate interventions and treatment

*** Some Solution-Focused
Suggestions to support Recovery**

- * Change is a complicated process: We need a roadmap
- * A google earth view of the entire process as well as the turn by turn GPS navigation of the journey of a particular client
- * Entering the Client's Change Process requires
 - * patience and persistence;
 - * optimism and realism;
 - * the perspective of a minor league coach;
 - * self care, boundaries, cultural humility

*** Concluding Thoughts**

Questions?



* References

- * Connors, G., Donovan, D., & DiClemente, C.C. (2012) *Substance Abuse Treatment and the Stages of Change* (Second Edition). New York: Guilford Press.
- * DiClemente, C. C., Kofeldt, M., & Gemmell, L. (2011). Motivational enhancement. In M. Galanter, H. D. Kleber (Eds.), *Psychotherapy for the treatment of substance abuse* (pp. 125-152). Arlington, VA US: American Psychiatric Publishing.
- * DiClemente, C. C., Holmgren, M. A., & Rounsaville, D. (2011). Relapse prevention and recycling in addiction. In B. Johnson (Ed.), *Addiction Medicine: Science and Practice*, New York: Springer.
- * DiClemente, C.C. (2005) Conceptual Models and Applied Research: The Ongoing Contribution of the Transtheoretical Model. *Journal of Addictions Nursing*, 16, 5-12.
- * DiClemente, C.C., Schlundt, D., & Gemell, L. (2004) Readiness and Stages of Change in Addiction Treatment. *The American Journal on Addictions*, 13, 103-119.
- * DiClemente, C.C. (2018). *Addiction & Change: How Addictions Develop and Addicted People Recover*. (Second Edition) New York, NY: The Guilford Press.
- * DiClemente, C.C. (2006) Natural Change and the Troublesome Use of Substances. IN W.R. Miller & K.M. Carroll (Eds.) *Rethinking Substance Abuse: What the science shows and what we should do about it*. New York: Guilford Press.
- * DiClemente, C.C., & Velasquez, M. (2002). Motivational interviewing and the stages of change. In W.R. Miller & S. Rollnick (Eds.), *Motivational interviewing* (2nd ed., pp. 201-216). New York, NY: Guilford Publications, Inc.
- * Gregory, H. Jr., Van Orden, O., Jordan, L., Portnoy, G. A., Welsh, E., Betkowski, J., Charles, J. W., & DiClemente, C. C. (2012). New directions in capacity building: Incorporating cultural competence into the interactive systems framework. *American Journal of Community Psychology*, 50(3-4), 323-333.
- * Miller, W. R., Zweben, A., DiClemente, C. C., & Rychtarik, R. G. (1992). *Motivational Enhancement Therapy manual: A clinical research guide for therapists and individuals with alcohol abuse and dependence*. Rockville, MD: NI AAA.
- * Prochaska, J.O., Norcross, J.C. & DiClemente, C.C. (1994) *Changing for Good*. New York: Avon books.
- * Velasquez, M.M., Maurer, G.G., Crouch, C. & DiClemente, C.C. (2016). *Group Treatment for Substance Abuse: A Stages of Change Therapy Manual*. (Second Edition) New York: Guilford Press.