

\* **Stages and Mechanisms of  
Change:  
Applying The Transtheoretical  
Model to Behavioral Health**

Carlo C. DiClemente Ph.D. ABPP  
Emeritus Professor of Psychology

[www.umbc.edu/psych/habits](http://www.umbc.edu/psych/habits)

[www.homevisitingtraining.umbc.edu](http://www.homevisitingtraining.umbc.edu)

[www.umbc.edu/psyc/habits](http://www.umbc.edu/psyc/habits)

- \* I have no conflicts of interest in the material I am presenting
- \* Dr. DiClemente is a consultant with Prevention Research Institute and receives royalties from a program developed with them called Solutions
- \* I would like to acknowledge the contributions of many of our colleagues and students at the University of Houston and University of Maryland Baltimore County for their help and support for the research in this presentation

## \* Conflicts and Disclosures

# \* Learning Objectives

Upon completion of this course, participants will be able to:

1. Identify critical tasks of change: creating interest and concern, decision making, commitment, planning, sustaining.
2. Identify personal mechanisms of change involved in creating change.
3. Understand differences between client tasks and processes and counselor strategies and skills.
4. Understand connections between motivational and cognitive behavioral interventions and tasks of stages.
5. Understand the function of failure in successful change
6. Manage expectations and adjust strategies in the planning and execution of integrated care interventions in light of client self regulation/self- control strength, context, culture, .

# \*The Process of Change

How Many of you have heard of the Transtheoretical  
Model or the Stages of Change Model?

# \*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 process and build interventions

- \* Many advances in understanding of recovery and the process of change involved in recovery from behavior health conditions
- \* Current scientific and clinical search is for key mechanisms of change -the engines that make behavior change happen in addiction and health.
  - \* “How” and not just “Why”
- \* Shifts in our understanding of the role of treatment in recovery - not just doing something TO a client

## \* Understanding Recovery over the Past 40 years

- \*The Transtheoretical Model has made both theoretical and practical contributions to advance our views of intentional behavior change
- \*Today we will explore some of the key dimensions of the process of change and how client and provider contribute to the process of change that is recovery

## \*Understanding the Process of Change

# **A Client Focused Model of Intentional Behavior Change**

## **STAGES OF CHANGE**

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

## **PROCESSES OF CHANGE**

### **COGNITIVE/EXPERIENTIAL**

**Consciousness Raising  
Self-Reevaluation  
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**

# \* Tenets of the Transtheoretical Model

- \* All Change is self-change
- \* Personal Process is more important than type of treatment for intentional change
- \* A variety of processes derived from leading theories of therapy and behavior change can create a more integrated, eclectic approach to treatment and training
- \* A focus on process can help providers address motivational and behavior change challenges and tasks across many different types of problems

**HEALTH PROMOTION &  
DISEASE PREVENTION**

**REQUIRE**

**BEHAVIOR  
CHANGE**

**CANCER PREVENTION**

**INITIATION**

**HEALTH PROMOTION**

**SAFETY & INJURY  
PREVENTION**

**MODIFICATION**

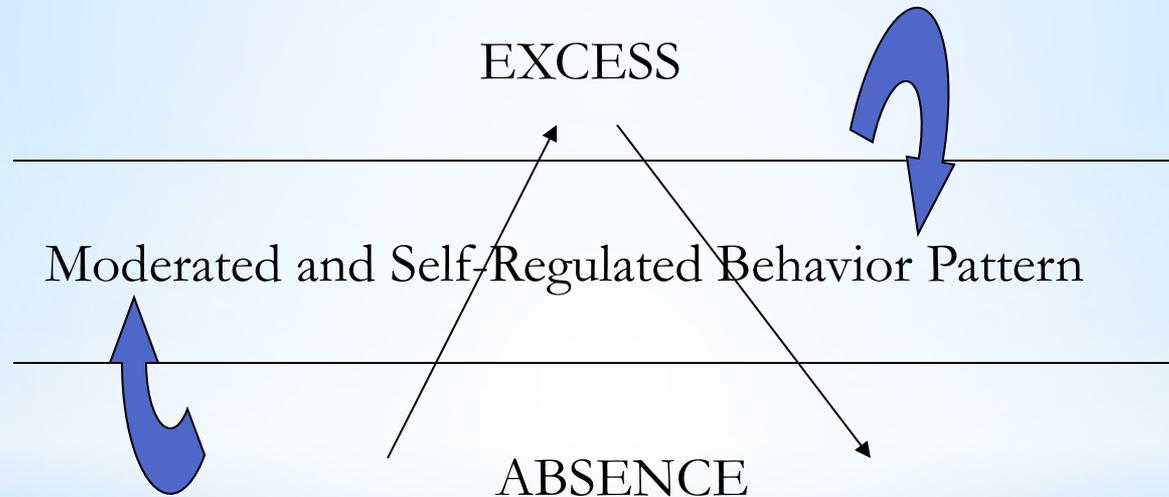
**MENTAL HEALTH**

**SUBSTANCE USE DISORDERS**

**CESSATION**

# \* Different Patterns of Behavior Change

Initiation, Modification, Cessation



Healthy  
Lifestyle  
And  
Wellbeing  
Zone

In Medio  
Stat Virtus

# \* 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

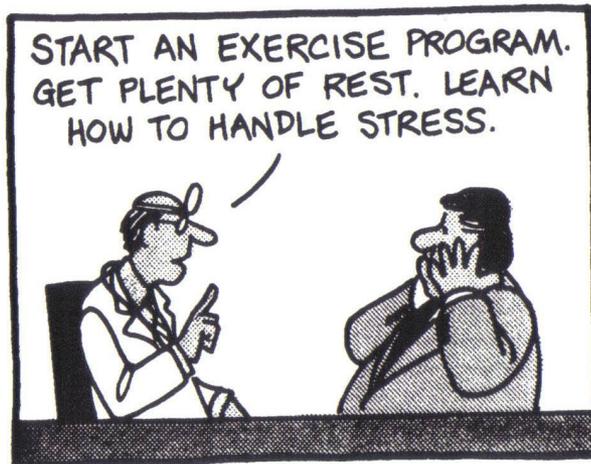
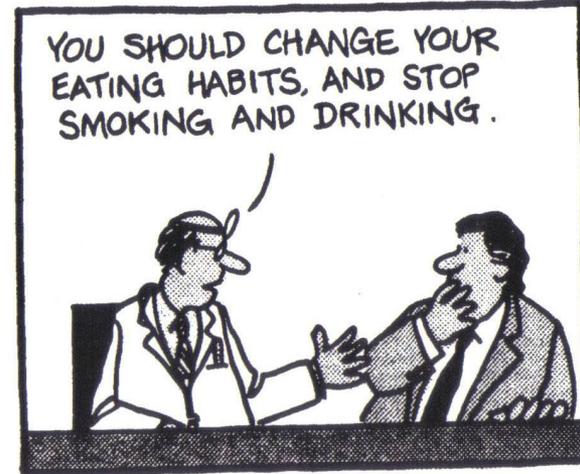
## \* Modifying Behaviors

- \* 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

# \*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*



# \* A Focus on Intentional Change

- \* There is a change process for intentional behavior change that is multidimensional with interactive dimensions
  - \* composed of key **tasks** needing to be addressed along the journey of change
  - \* a set of **client processes** that need to be engaged in accomplishing these key tasks.
- \* There are other types of change:
  - \* **Imposed change** made largely in response to or driven by external forces or extrinsic motivations (prison, some divorces, pregnancy smoking cessation).
  - \* **Developmental changes** such as aging and child development.
  - \* **Biological and neurological changes** separate from but often related to behaviors

# HOW PEOPLE CHANGE?



OR GOD  
HELPS  
THOSE WHO  
HELP  
THEMSELVES?

# \*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 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 process
- \* Values, emotional reactions, implicit cognitions, and salient experiences (events, motivating influences) affect engagement and completion of tasks

## \* **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 IN PAIRS

- \* **Basic self-regulatory capacity** and self control strength (Change Regulating Mechanisms)
- \* Understanding **target behavioral goal** and connected or adjunctive goals
- \* Managing **complicating problems** and securing important resources to accomplish and sustain change of target behavior
- \* **Motivation** and completing **critical tasks of stages** through engagement in appropriate coping processes to create sustained change

## \* **Essential Elements for Change**

- \* NOT CONVINCED OF THE PROBLEM OR THE NEED FOR CHANGE - UNMOTIVATED
- \* NOT COMMITTED TO MAKING A CHANGE - UNWILLING
- \* DO NOT BELIEVE THAT THEY CAN MAKE A CHANGE - UNABLE

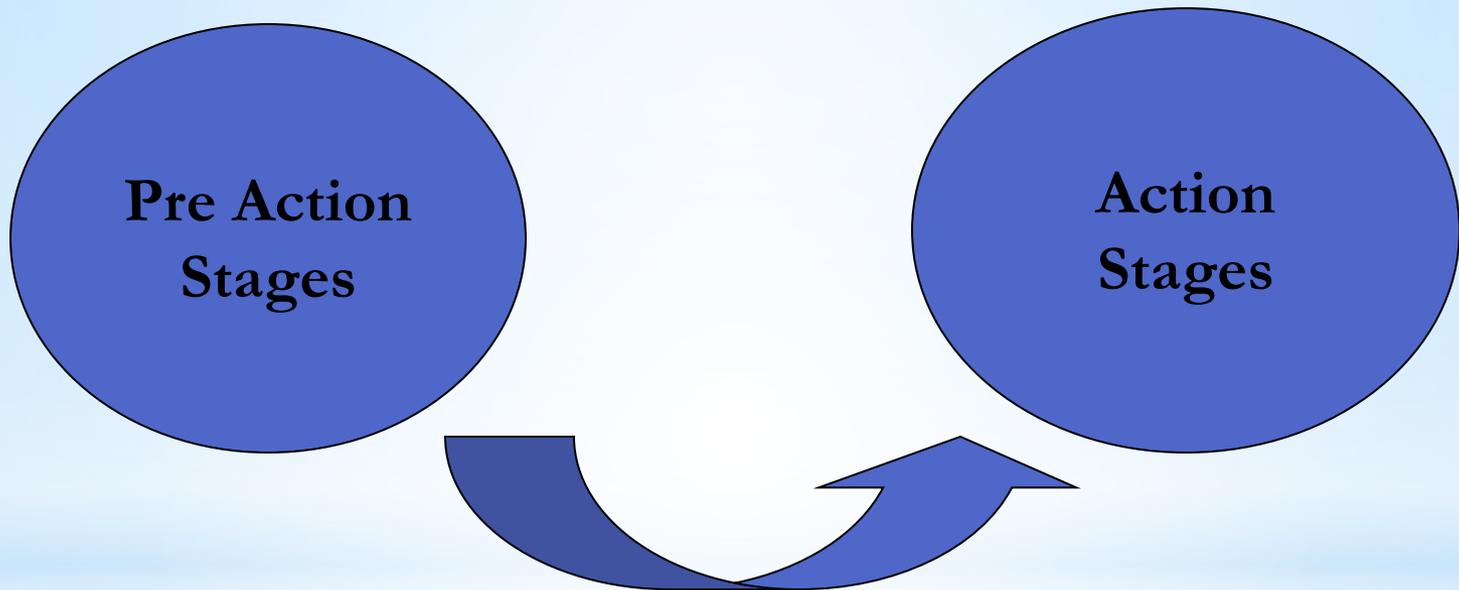
**\* WHY DON'T PEOPLE OR ORGANIZATIONS CHANGE?**

# \* Motivation and the Change Process

- \* Clients are not unmotivated! They are either
  - \* Just motivated to engage in behaviors that others consider harmful and problematic
  - Or
  - \* Not ready to begin behaviors that we think would be helpful
- \* Motivation belongs to clients and their process of change
  - \* However, can be enhanced or hindered by interactions with others and events in the life-context of clients
- \* We have excellent and effective self-management techniques
  - \* However, often not used even after they are taught to people who come voluntarily for help. Why?

# \* Clear Difference Between Pre-Action and Action Stages

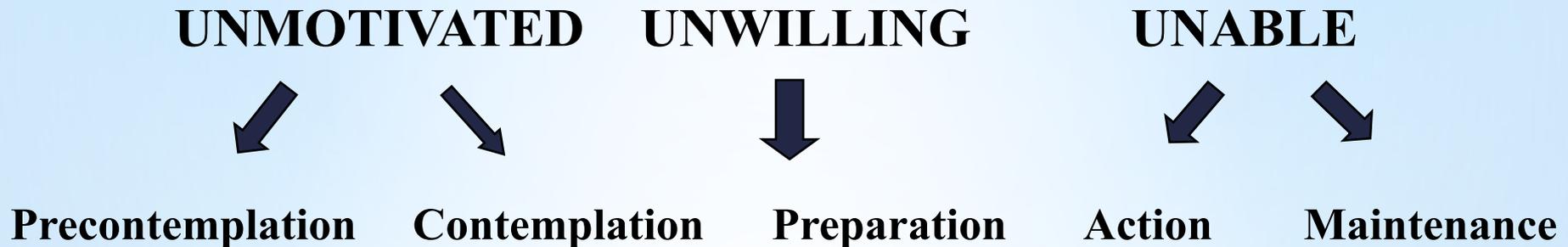
The Key Link



**What do individuals have to do in Pre-Action Stages to be successful in Action Stages? What do they have to do in the Action stages to sustain success?**

# Understanding Barriers to Change and the Tasks of the Stages of Change

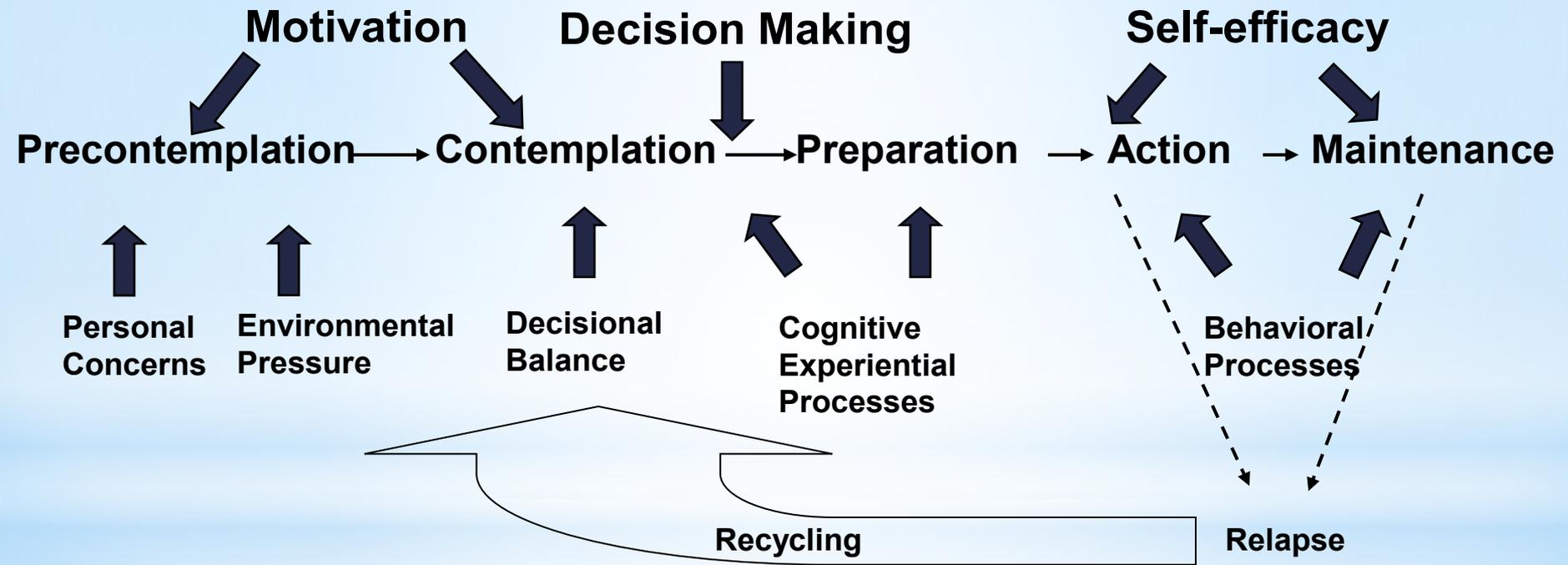
---



These tasks build on one another

Simple statements like "you need to get motivated, just do it, and you can do it" are not very helpful. Viewing these obstacles through the lens of the stages offers a more nuanced and multidimensional view of the process of making a behavior change.

# Theoretical and Practical Considerations Related to Movement Through the Stages of Change



What would help or hinder completion of the tasks of each of the stages and deplete the self-control strength needed to engage in the processes of change needed to complete the tasks?

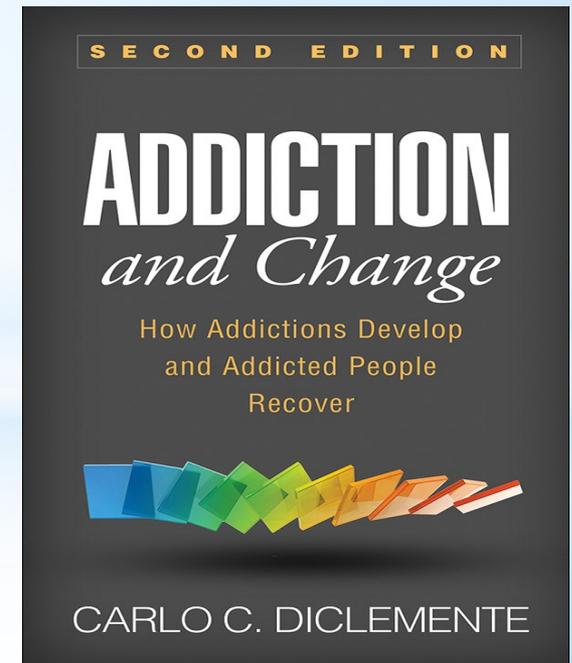
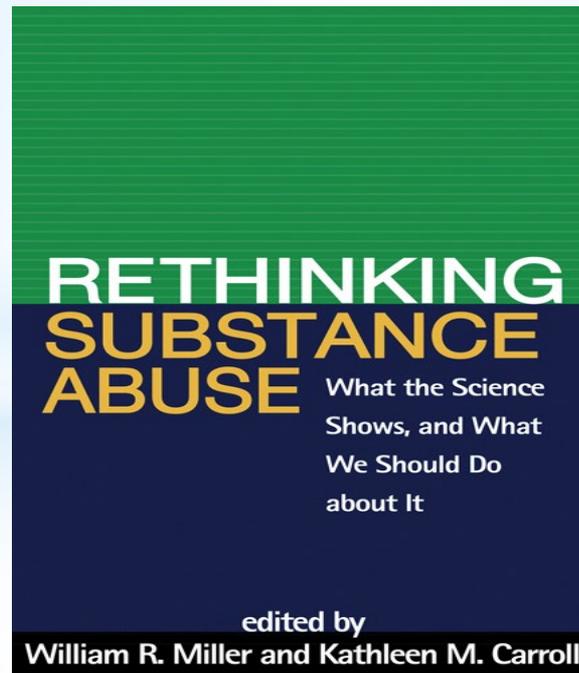
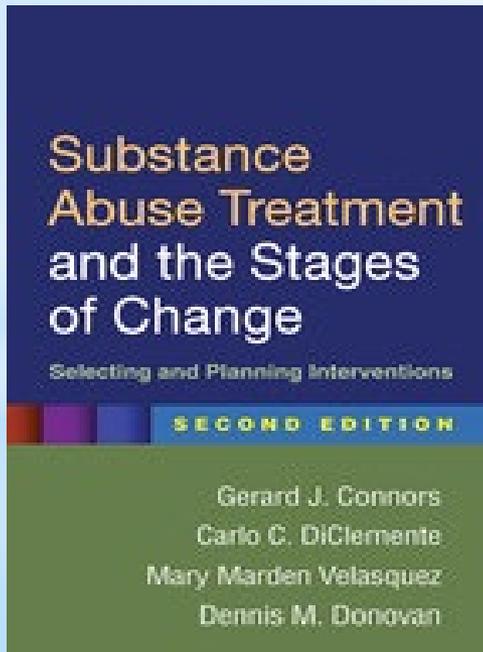
- \* Readiness is usually behavior specific.
- \* Motivation is multidimensional and extends throughout the entire change process
- \* Critical focus on key behavioral goals and important component goal related behaviors
  - \* Cutting Down vs. Abstaining;
  - \* Dietary change vs. Exercise
- \* Multiple behavior change is also possible:
  - \* A constellation of behaviors Under an overarching goal (healthy lifestyle)
  - \* Quantum Change: A conversion or awakening to new life

**\* Readiness to Change**

**\* A STAGE BY HEALTH BEHAVIORS INITIATION**

TYPE OF BEHAVIOR	STAGE OF INITIATION				
	PC	C	PA	A	M
Physical Activity		X			
Medication - A					X
Medication - B			X		
Glucose Monitoring	X				
Fruits & Vegetables				X	

# Questions?



# \* Addiction and Change: Understanding Initiation and Recovery

A Prototype for  
Understanding the  
Change Process

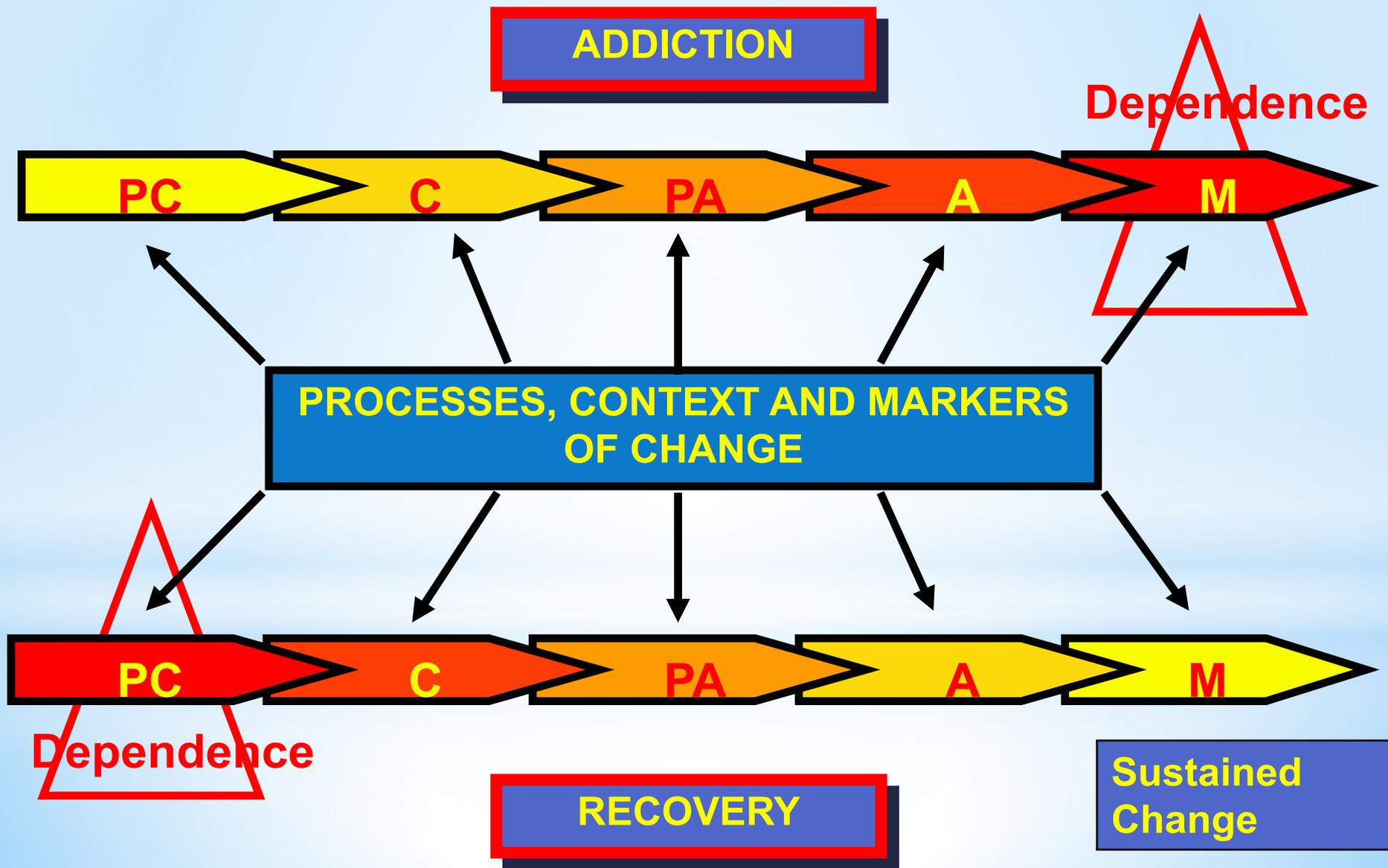
# \*What are Addictions?

- \* Habitual patterns of intentional, appetitive behaviors
- \* Become excessive and produce serious consequences
- \* Stability of these problematic behavior patterns over time
- \* Interrelated physiological and psychological components
- \* Addicted individuals have difficulty modifying and stopping them

# \*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 at various points by
  - ❑ biological, psychological, and social factors
- ❑ Defining Addiction Severity should describe the problematic pattern of involvement in the addictive behavior
  - ❑ end state of initiation and beginning of recovery

# \* THE STAGES OF CHANGE FOR ADDICTION AND RECOVERY

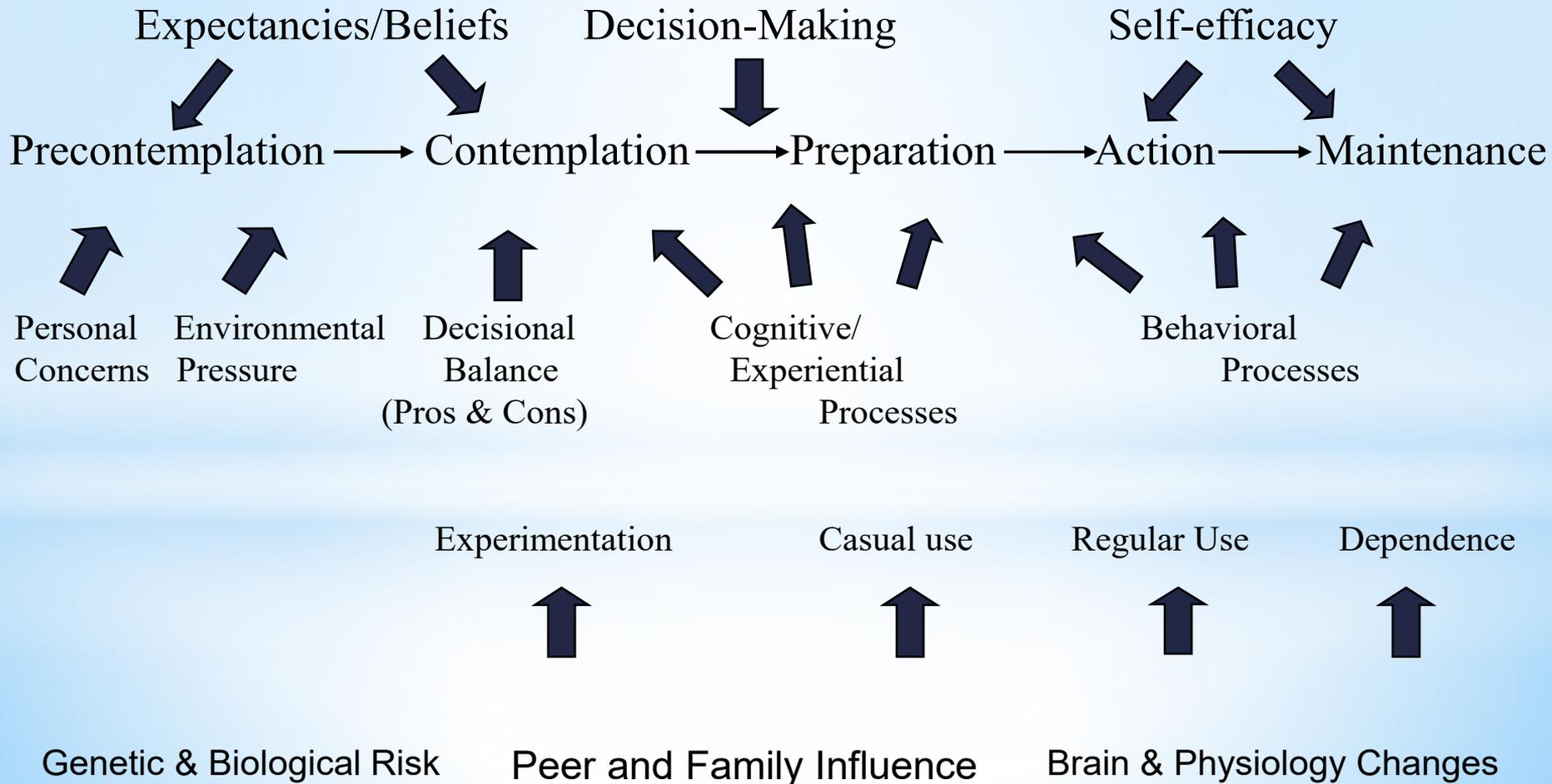


- \* As individuals move through **stages of initiation** they move
  - \* from **thinking** about doing it,
  - \* to **experimenting**,
  - \* to **developing a pattern** of behavior (social drinker, binge drinker, daily drinker, non drinker)
    - \* that becomes **habitual** or consistent over time.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

# \* **Addiction and Stages**

# Theoretical and practical considerations related to Stages of Initiation and Prevention

---



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

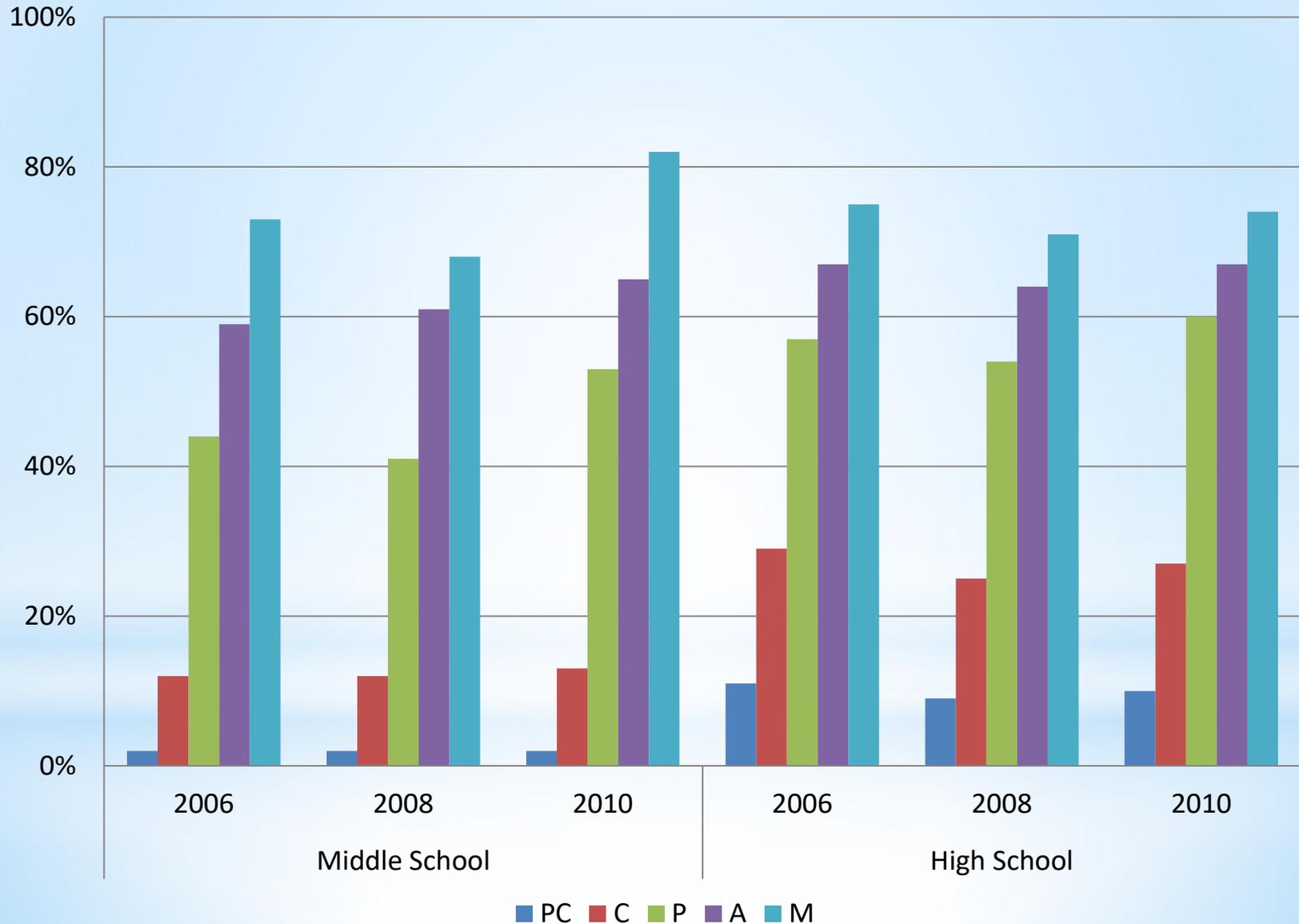
Stages of Substance Initiation by School Level

	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	<b>73.2</b>	<b>14.6</b>	7.9	4.2	0.2	73.1
Contemplation	<b>29.1</b>	<b>30.7</b>	22.4	17.2	0.6	17.8
Preparation	7.9	21.9	<b>27.1</b>	<b>39.9</b>	3.2	3.1
Action	6.1	16.6	23.2	<b>48.6</b>	<b>5.5</b>	2.7
Maintenance	4.0	14.0	15.4	<b>52.2</b>	<b>14.3</b>	3.3
Total	59.3	17.7	11.7	10.4	0.9	100

## Percent who binge drank (5+ drinks on one occasion) in the past month by Stages of Smoking Initiation & school status over time



**\* 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			
PSYCHEDELICS			X		
GAMBLING	X				
EATING DISORDER	X				

# \* PREVENTION OF INITIATION OF ADDICTION

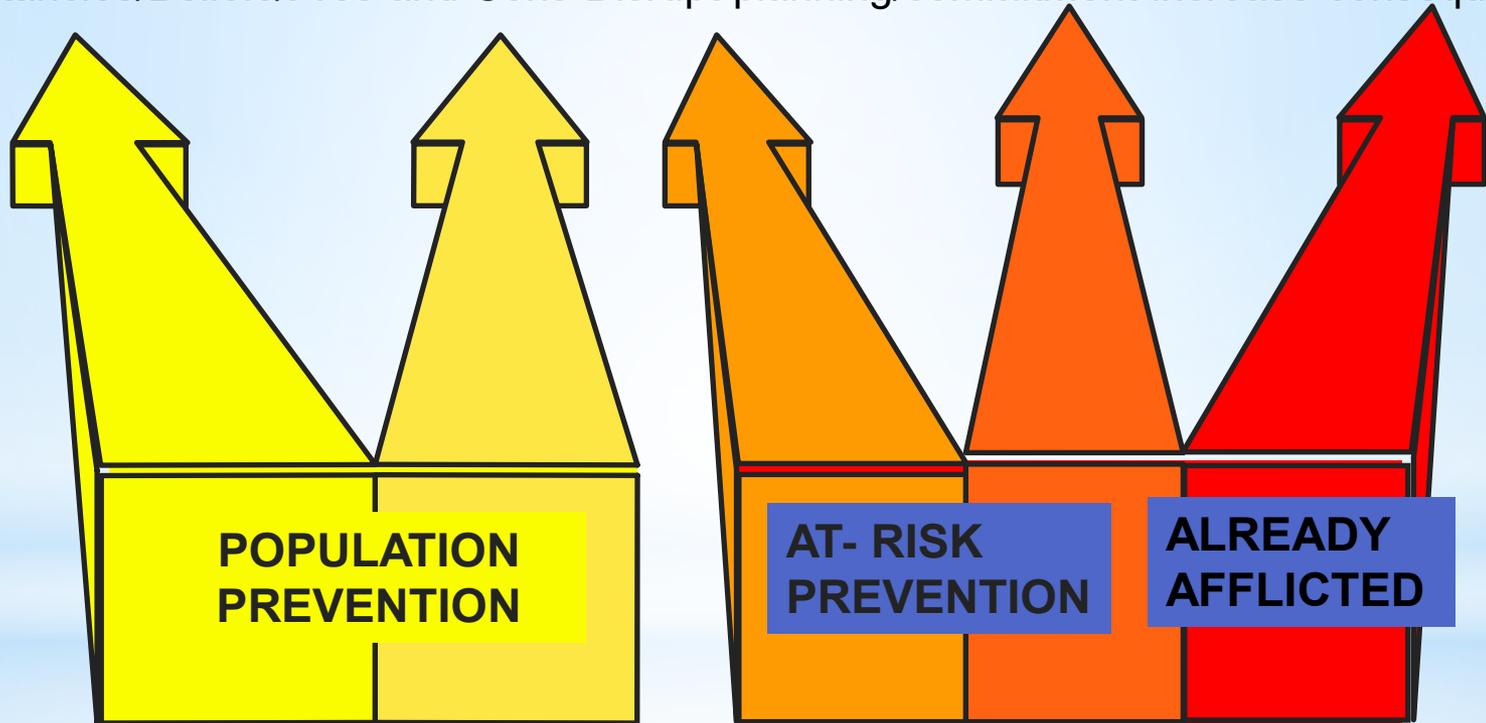
**PC - C**

**C - PA**

**PA - A**

**A - M**

Expectancies/Beliefs/Pros and Cons-Disrupt planning/commitment-increase consequences



Mild SUD may need more Prevention than treatment

# \*Types of Prevention

- \* **Early intervention** to disrupt initial stages of initiation (primary/universal prevention)
  - \* Keep youth in precontemplation
  - \* Educate about the dangers and encourage precontemplation by decision
- \* **Indicated prevention** for risky engagement (secondary/indicated prevention)
  - \* Disrupt the initiation process once individual has begun using
  - \* Monitoring, increase costs or consequences, disrupt access, regression
- \* **Early Intervention, Harm Reduction, and Treatment** once experiencing an SUD (**Already afflicted** or tertiary prevention minimizing harm, highlighting consequences)
  - \* SBIRT & other early interventions building bridges to change and treatment
  - \* Naloxone for overdose recovery
  - \* Sterile syringes to prevent STIs and HIV

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

\* **Addiction**

- \* It is clear that end state of initiation of a moderate to severe use disorder represents a stable, sustained pattern of behavior that is difficult to modify
- \* What are the critical mechanisms and dimensions that then keep people doing these behavior and most often keeps them in the precontemplation stage for recovery?

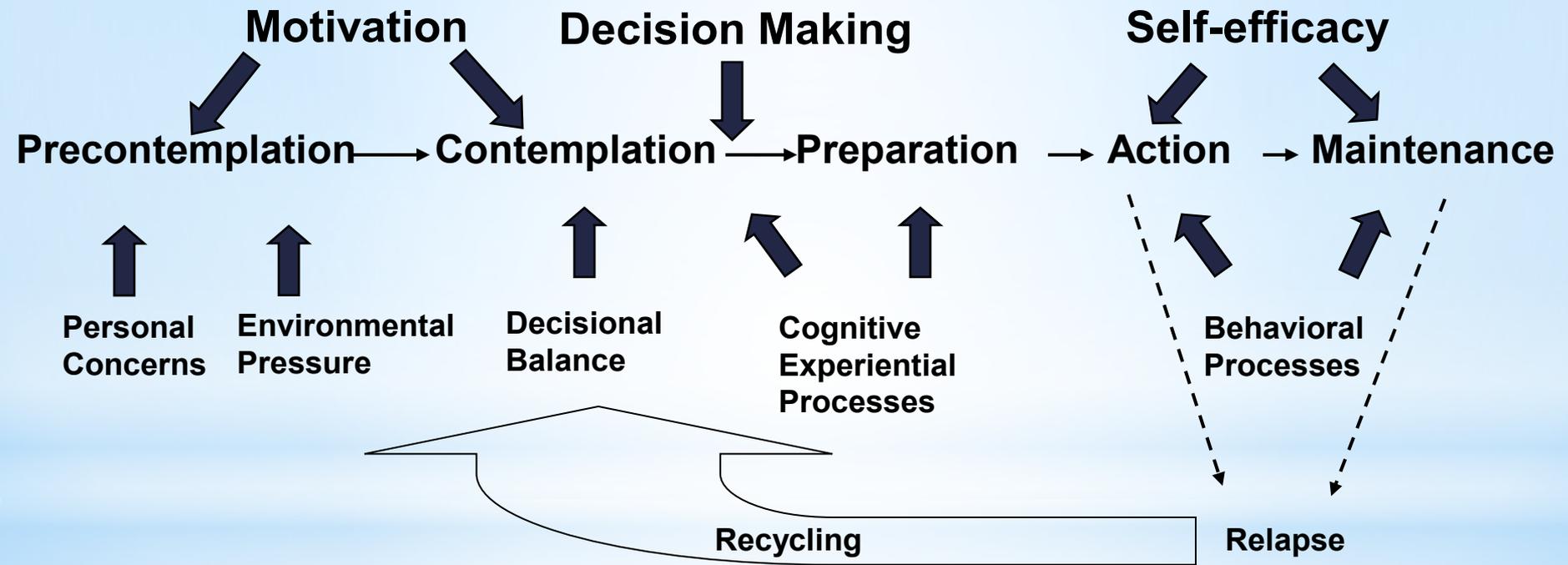
**\*The end state of initiation**

- \* **Mechanisms Contributing to a Well-Maintained Addiction**
- \* A small set of mechanisms characterize the end state of addiction and can be used to indicate severity
  - \* **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)

- \* How do these mechanisms operate in the Initiation of addictions and in Recovery
- \* Critical considerations for Prevention and Treatment
- \* How to effectively address these mechanism
- \* Depends on where the individual is in their process of change and how addiction mechanisms interact with stage tasks
  - \* Neuroadaptation's role in initiation and recovery
  - \* Impaired Self-Regulation's role in initiation and recovery
  - \* Salience and Value of the addictive behavior in the life of the individual in initiating and in recovering from an addiction

# \* Key Questions for both Prevention and Treatment

# How do these Mechanisms influence Completing Tasks and Movement through the Stages



How do these mechanisms help or hinder completion of the tasks of each of the stages and the ability for the individual to engage in the processes of change needed to complete the tasks?

# \* ACTIVITY: Guess the Stage

Victor presents at a primary care/medical clinic. After reading about his current situation, identify which Stage of Change he is in for each problem area.

See Handout  
for details



Remember: People can be in different stages  
for different behaviors

# \* Meet Victor

Victor is a 39-year-old African American male who is married with two young children. He lost his job last year and has been hustling on the street to make money for his family. Since losing his job he returned to using crack cocaine. When he is high, he stays away from home so his wife doesn't find out and has admitted to several anonymous sexual encounters when he's been high. Victor came to the clinic today reporting feeling "hopeless" and "down".

He tested positive for HIV last month and is worried that he has infected his wife. Victor does not know how he contracted HIV but reports that he doesn't think he used condoms when he had sex high and never uses one with his wife. He wants to protect his wife from HIV but is unsure how to bring up using condoms. Victor is not currently engaged in HIV treatment because he reports being ashamed of his diagnosis and fears that no one will hire him if they know he is getting treated for HIV.

Victor stated during his appointment that he "desperately needs to get his life together for his family" and knows that he has to get a job and stop doing drugs. However, when asked how his drug use impacts engaging in risky sex, Victor denied any relation.

At the end of the visit, Victor agreed to an appointment with an addiction counselor and a case manager to discuss employment. He said he will think about a mental health appointment but feels that once he gets a job, he will feel better.

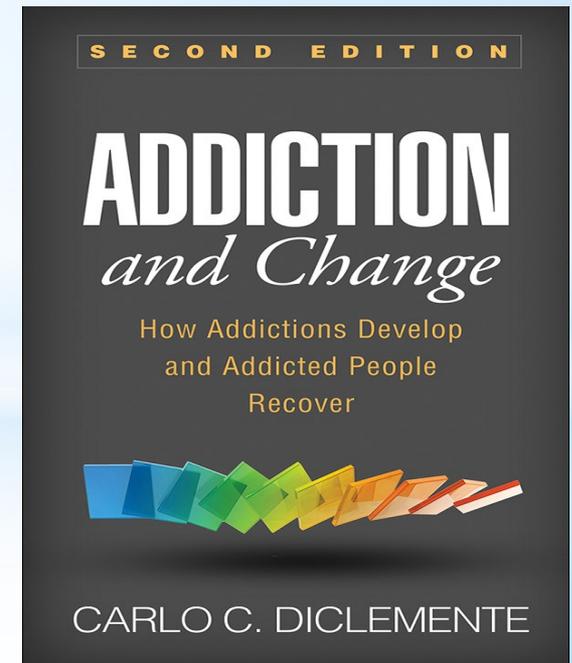
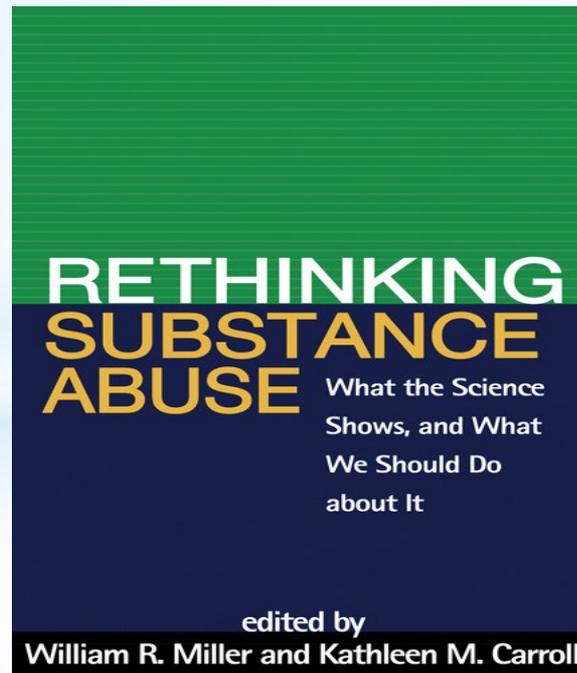
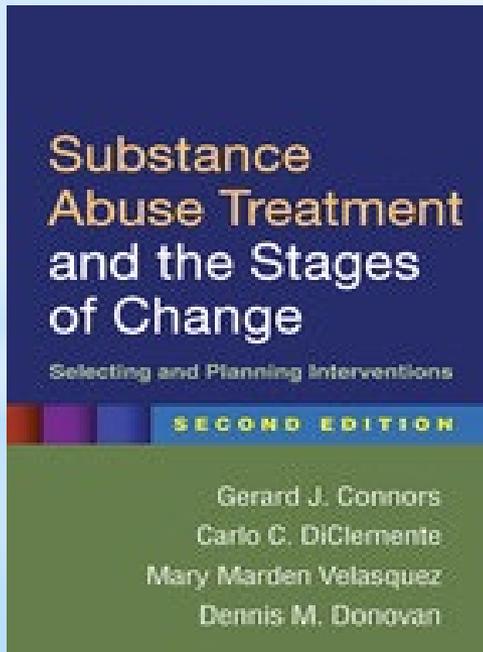
# \*Victor:

Stages of Change	Pre-contemplation	Contemplation	Preparation	Action	Maintenance
Quitting Crack Cocaine Use					
Attending Mental Health Treatment					
HIV Treatment Engagement					
Using Condoms Regularly					
Attending Sexual Risk Reduction Counseling					
Attaining Employment					

# \*Victor:

Stages of Change	Pre-contemplation	Contemplation	Preparation	Action	Maintenance
Quitting Crack Cocaine Use			X		
Attending Mental Health Treatment		X			
HIV Treatment Engagement	X				
Using Condoms Regularly		X			
Attending Sexual Risk Reduction Counseling	X				
Attaining Employment			X		

# Questions?

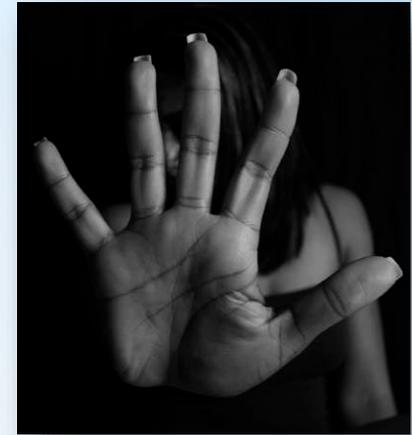


# Tasks and Goals for Precontemplation

- \* **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)

- \* 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

See Handout on Stages  
& Motivational Communication  
by Stage Task Table & Example

# \* Using MI Spirit/Style and Strategies

# \* 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

# 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 behavior more attractive, useful, 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. You can reach valuable goals
- \* Remove barriers to initiating a behavior -easy access
  - \* E.g., Free sample; Try one of mine; free gym membership

## \* 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.

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

- \* Help support them in making a decision
  - \* Explore important reasons for 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
  - Overcome ambivalence: find important reason for change
  - 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**

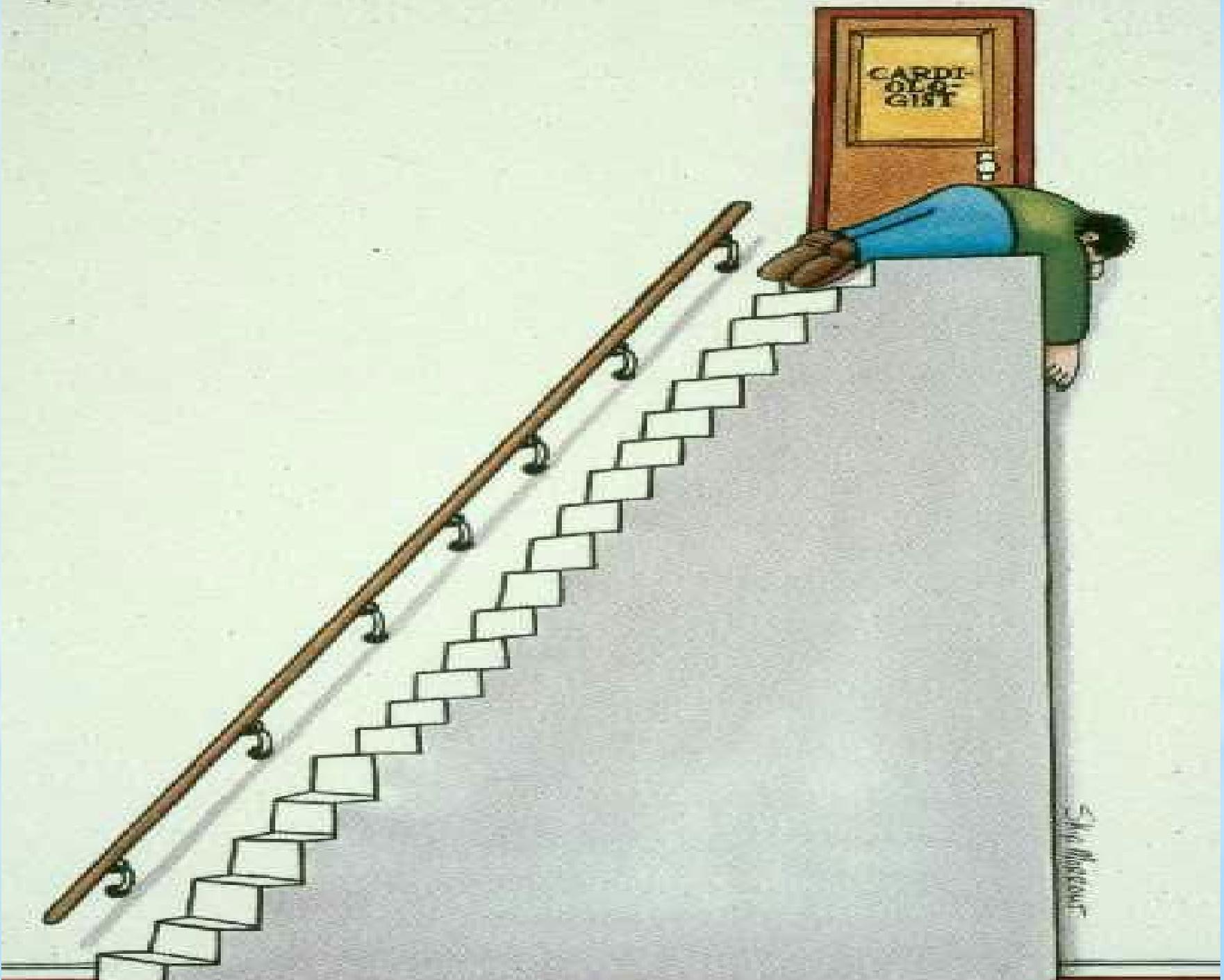
FANCIS, THE MOTHERS CLUB IS OFFERING  
MOTIVATIONAL SEMINAR TONIGHT CALLED  
"STOP MAKING EXCUSES." WOULD YOU  
LIKE TO GO WITH ME?

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.



Steve Meyers

# \* 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 SMART goals and 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 sure the plan is accessible to them
  - \* Make it a collaborative plan - You cannot do it for them!
- Support the plan with your help and resources
  - Encourage them to set a timeline or date to begin / make the change
  - Help them to identify possible barriers & plan for overcoming these
  - Build implementation skills
  - Manage procrastination

- \* 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 (continued initiation or recovery)
- \* 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 my favorite show tonight.

## \* Adjusting the Plan, As Needed

- \* Plans often need to be revised (Initiation or Recovery)
- \* 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**

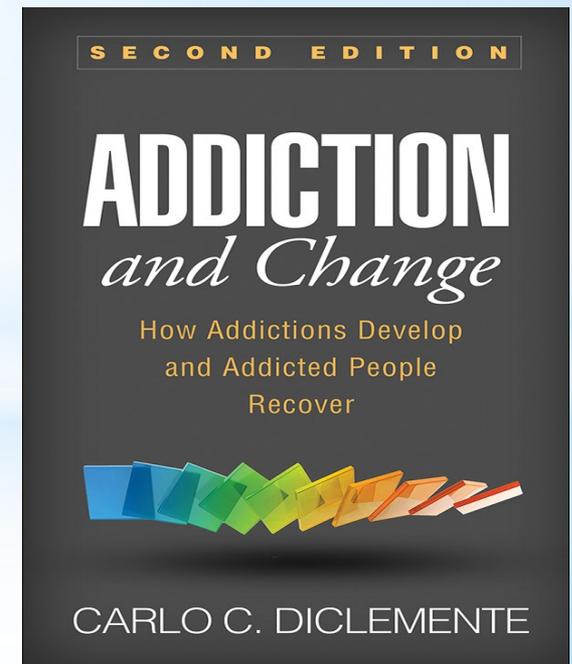
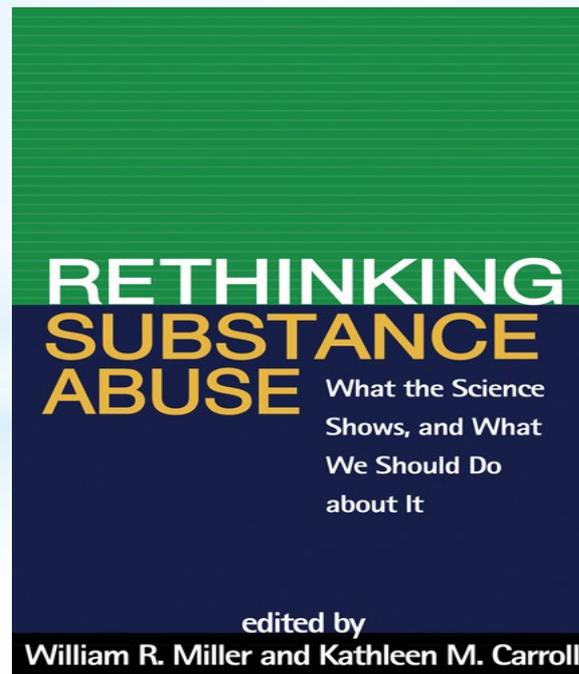
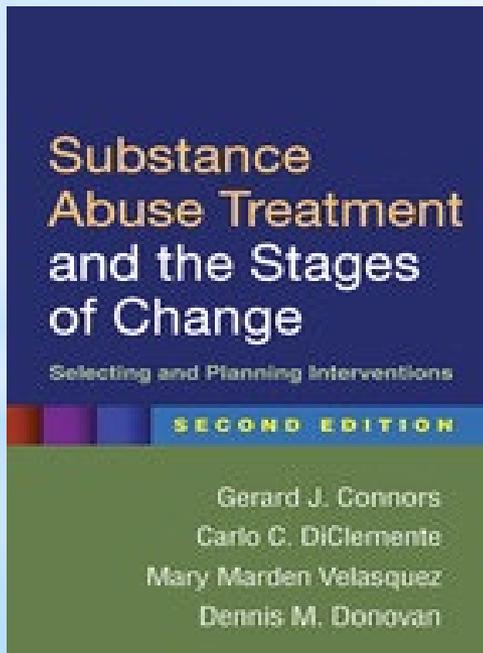
# \*SMALL GROUP DISCUSSION

If we can turn chairs around and make a small discussion group for 15-20 minutes

How do you or can this view of the stages be used in your practice and what might you do differently in light of the tasks of the stages?

We will then come back in the larger group to address how to assess stages

# Discussion and Questions?



- \* There are some formal assessment instruments that have been used (URICA, Readiness to Change Scale, SOCRATES) are mostly used 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
- \* True for both Importance and Readiness as well as Efficacy/Confidence

## \* Readiness and Importance Rulers

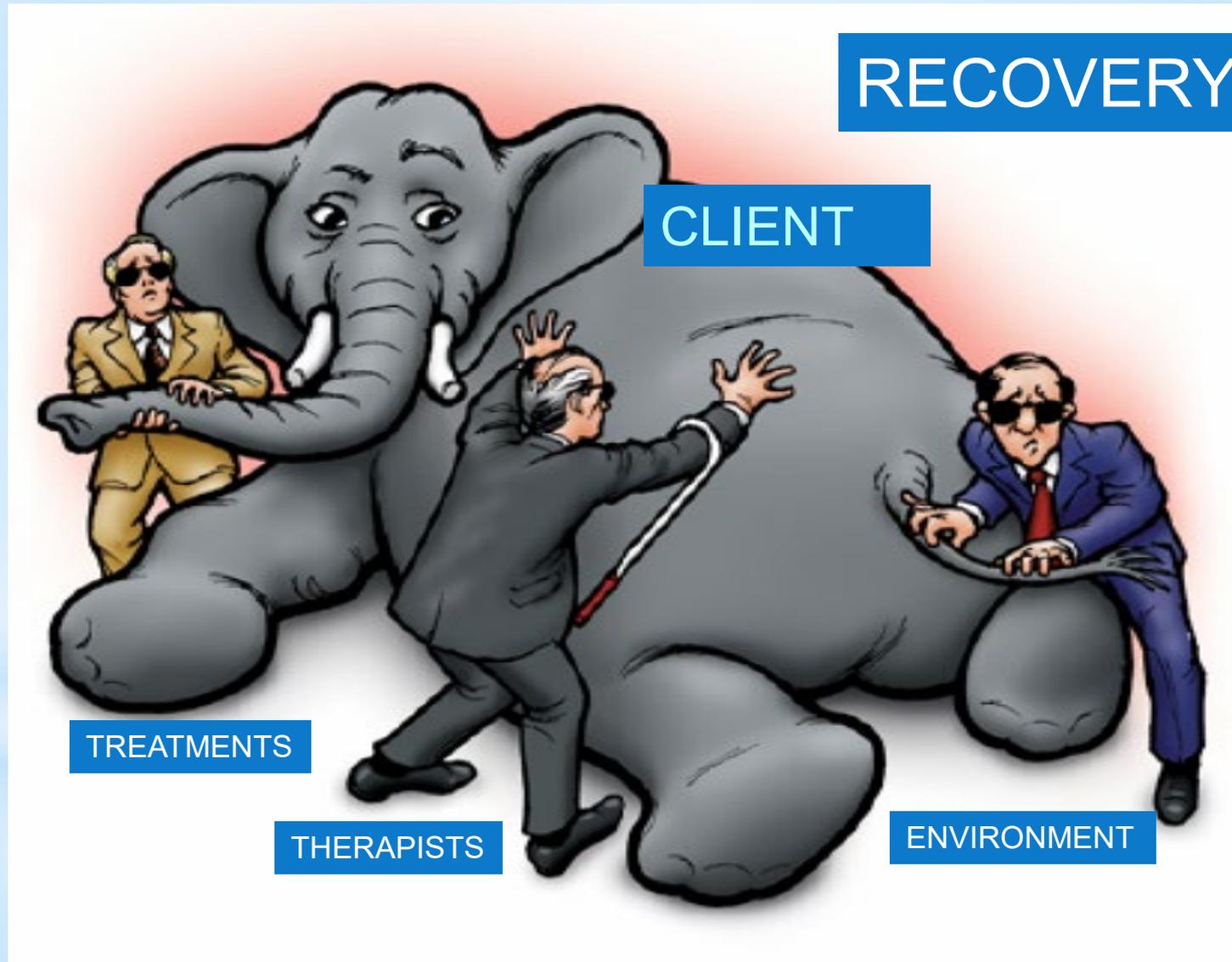
# \* Mechanisms of Change

What Do Individuals need to do to Accomplish the Tasks needed to move forward through the stages of change?

# \*What makes change happen?

- \* Is it treatment, therapists, programs?
- \* Is it consequences or families?
- \* Is it the person's process of change?
  
- \* **Mechanisms** usually are what makes something go (engine, gas)
- \* **Moderating** factors influencing the process (potholes, flat tire)
- \* **Markers** (speedometer) that just reflect what is happening

# Where Psychotherapy Research has looked for Mechanism of Change



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

- \* Growing evidence that a constellation of **client mechanisms or process of change variables** (What the client does) has the greatest potential to be mechanisms of change since they are
  - \* 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 engagement, activities, & coping behaviors
  - \* Interact with contextual variables
    - \* at times working together to promote change and at other times competing and interfering with change

\* 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**

- \* Change engines that enable movement through the stages of change
- \* Doing the right thing at the right time
- \* Cognitive/Experiential processes during early stages
- \* Behavioral processes in preparation, action and maintenance
- \* Engaging the person's cognitions, emotions, and coping/ behavioral strategies are important to promote behavior change

## \* Client Processes of Change

# \* Processes of Change: What are we trying to activate in the client

## **Cognitive/Experiential Processes**

Consciousness-Raising

Self-Reevaluation

Dramatic Relief

Environmental Reevaluation

Social Liberation

## **Behavioral Processes**

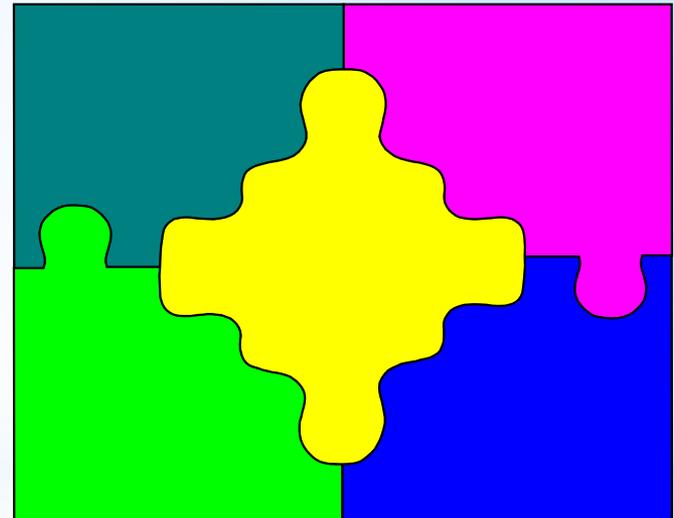
Self Liberation

Stimulus Control

Counter Conditioning

Reinforcement Management

Helping Relationships



See Processes of Change handout

# \*What are Processes of Change?

- \* Each process represents some human experience or activity of the person in context of that person's life
- \* 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.
- \* Not simply thoughts or feelings since thoughts and feelings without action represents unrealized potential
- \* Not simply action - Action without interest concern, risk reward analysis and decision making usually does not last

# \*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

- \* **Consciousness raising** is the human experience of becoming more aware, of understanding, of new knowledge.
- \* It is at the heart of what we hope education to do, offering information, making something related to change more aware in the thinking of the individual
- \* Not a tabula rasa, individuals have learning styles, preferences for sources of information, ways of processing information so what we do needs to activate this process, engage this process.
- \* So, we use experiences (beer goggles), pamphlets, presentations, videos, conversations, self-monitoring that try to promote consciousness raising about the behavior or the change.

# \* **Consciousness Raising**

# \* Self-Reevaluation

- \* **Self-Reevaluation** is the activity that involves reviewing and evaluating information, experiences, and personal values related to the behavior that is the target of change.
- \* Involves thoughts, beliefs, and feelings about the behavior and the prospect of change that align with their values and self-concept.
- \* Evaluative so there is a valence or judgement that involves
  - \* personal standards and comparisons with others
  - \* cultural and societal values and beliefs.
- \* Need to enter the personal space where individuals think and feel and evaluate whether the current behavior or the change are good for them
- \* Arguments for or against change happen here and interventions can influence this process but needs to be done carefully and skillfully
  - \* Often advertising, social media is geared to promote self-reevaluation and social influence also tries to put some considerations and emotional appeals into the mix.

# \* Environmental Reevaluation

- \* **Environmental Reevaluation** is similar to self-reevaluation in its activities and function. However, the focus of the considerations are on the larger context of the Again, life.
- \* Values and reevaluation involve others, the social context, the importance of others and the environment related to the behavior and change
  - \* Again, it involves values, beliefs, thoughts, and emotions.
- \* Both advertising and social messaging often appeal to and try to activate this process.
- \* Campaigns that highlight other centered values and their personal significance often try to influence this process and personal decision making
  - \* global warming, tobacco companies are lying to you, do this for your children's future. My marriage will be saved or be better if I can make this change.

# \* Emotional Arousal

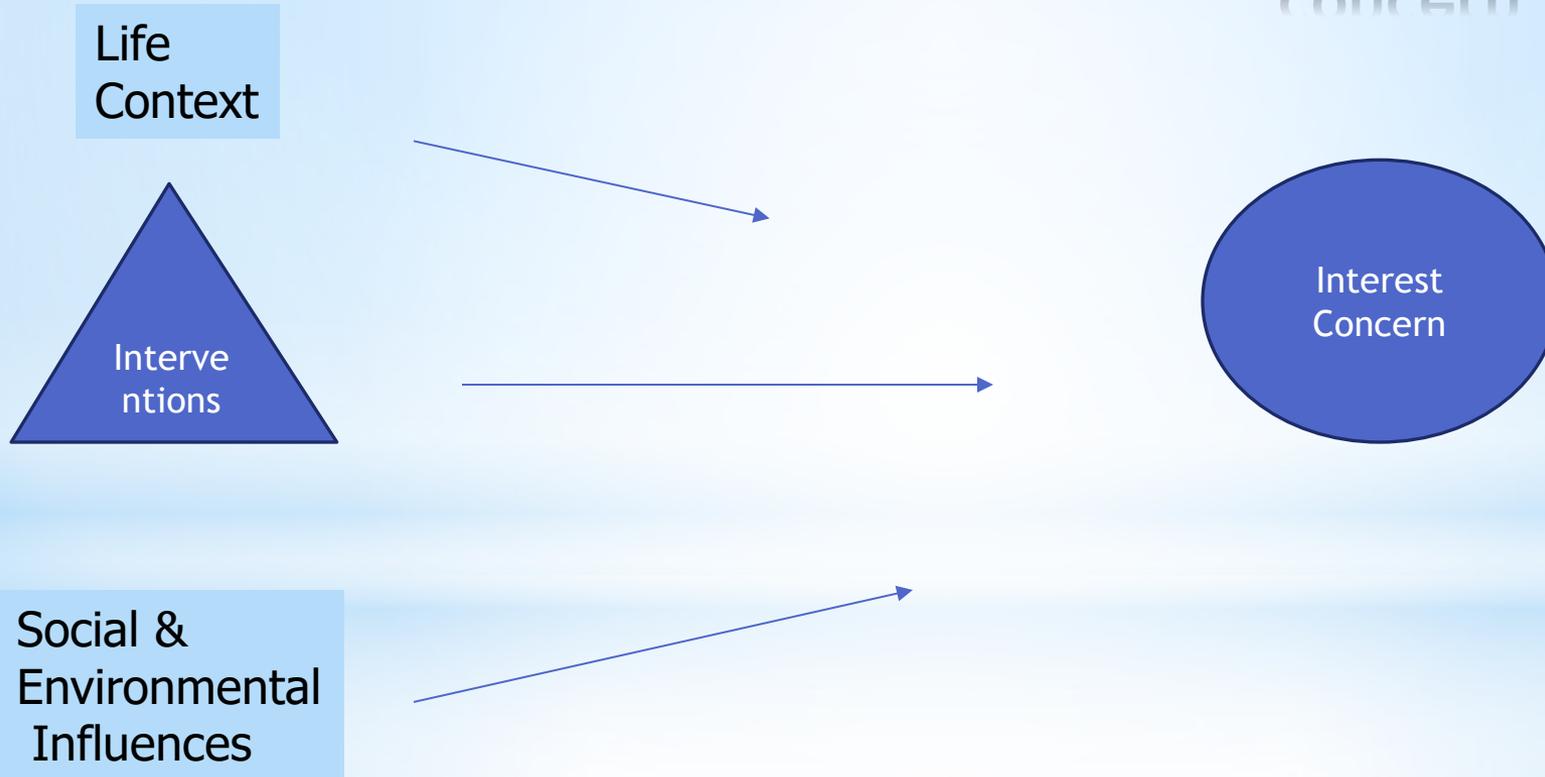
- \* **Emotional arousal** involves feelings and strong emotions related to the behavior and change
  - \* influence the persons concern and interest in changing and their decision making
- \* Emotions are also involved in reevaluation. However, here there is often a direct experience of strong compelling emotion
- \* Gestalt psychology often focused on feeling as a driver of change that is stronger than just thinking about something so this involves a more frank emotional experience and evaluation.
- \* There are many appeals to raw emotion in social media and in advertising.
  - \* Pictures of starving children, of animals being mistreated, of glaciers melting are appealing the emotions even more than the thoughts
  - \* some believe individuals are influenced more by emotions than simply a rational awareness or reevaluation of a behavior or change.

# \* Social Liberation

- \* **Social Liberation** involves environmental and societal experiences that involve the person recognizing and processing social cues and social customs.
- \* Clearly related to reevaluation and consciousness raising.
- \* Recognition that society is offering policies, practices, punishments, and prohibitions that relate to my behavior
  - \* offers pressure and opportunity to consider and enact change.
- \* Similar to the Environmental Reevaluation and often goes together with that process. The difference is that it is societal actions are encouraging or supporting the change.
  - \* Prohibitions about smoking indoors, changing the age to buy tobacco products to 21, AA having an alcohol-free New Year celebration are some examples, warning labels on products.
- \* In action stages of change, these policies and practices can act as reinforcement for change.
- \* In pre-action stages they can influence decisional considerations and offer reason for changing or sustaining the behavior.
  - \* **CAUTION:** Some individuals in pre-action get angry about the restrictions and decide not to change because no one can tell me what to do. So, interventions at the societal level should also offer some opportunities and incentives to change.

# \*How do Interventions Impact Stage Tasks?

\* One view of how interventions activate processes and Generate interest and concern



\*The interaction of the stage tasks and change processes/mechanisms are the heart of the model

\*How interventions activate processes and Generate interest and concern



INDIVIDUAL ENGAGING IN PROCESSES

# \* Behavioral Processes

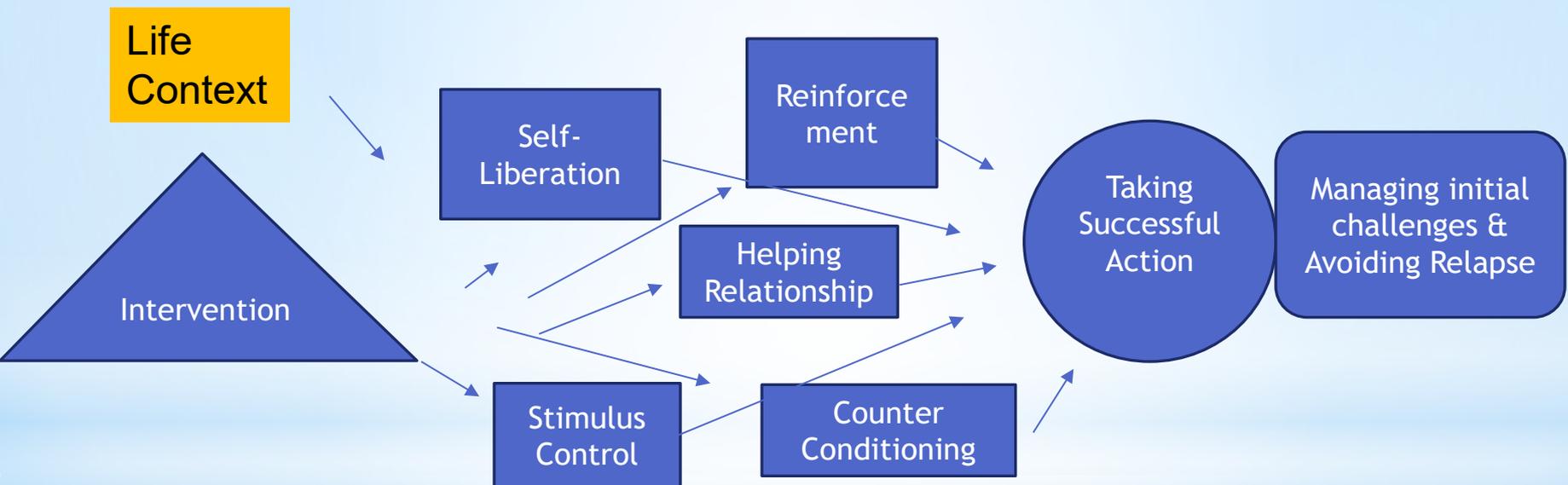
Behavioral Processes	Description
Self-Liberation	Making a choice and commitment to alter one's behavior
Stimulus Control	Creating, removing, or avoiding any cue or stimuli that might trigger one to engage a particular behavior
Counterconditioning	Substituting a new behavioral response to a stimulus instead 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

- \* **Choice and creating meaning** are important human functions highlighted by humanistic and existential psychology
- \* **Counterconditioning and Stimulus Control** are behavior change coping strategies to manage cue driven and habitual behaviors (Pavlov; Wolpe; Behavior Therapy)
  - \* Change the response
  - \* Change the cue
- \* **Reinforcement Management (Skinner)** - highlights the importance of rewards and reinforcement in managing behaviors
  - \* increasing for desired behaviors
  - \* decreasing for unwanted
- \* **Helping Relationships (Rogers)** - Support for a specific behavior change; empathy; affirmations; shared experiences

# \* Behavioral Processes

\*The interaction of the stage tasks and change processes/mechanisms are the heart of the model

\* **How interventions activate processes that can support successful action**



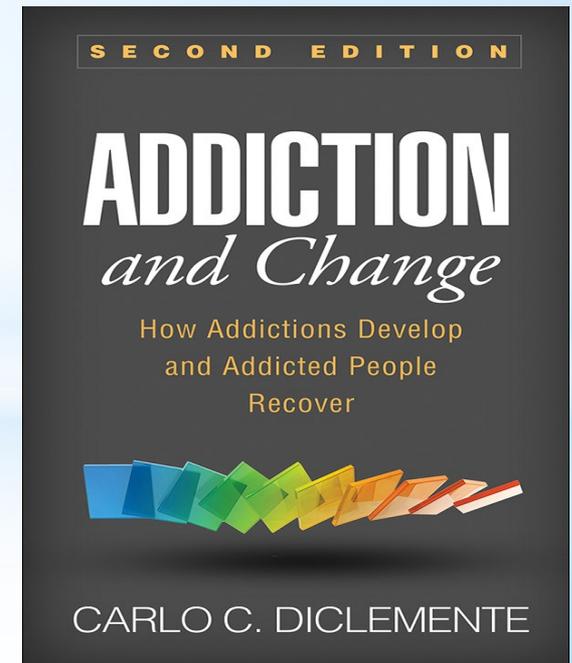
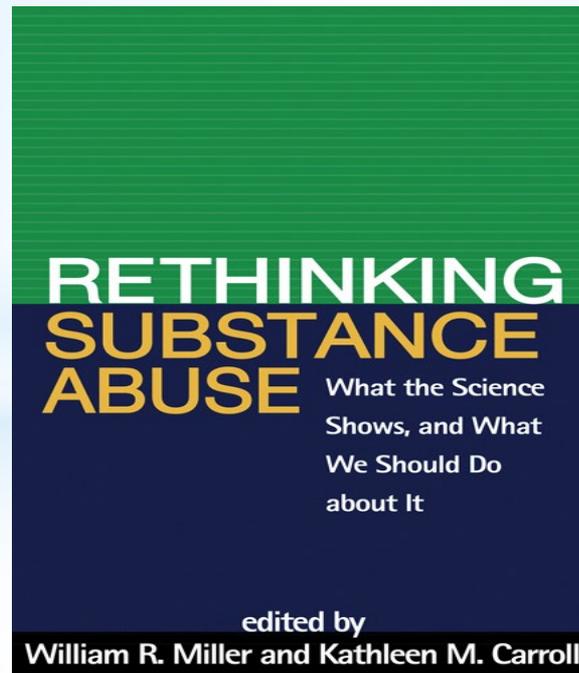
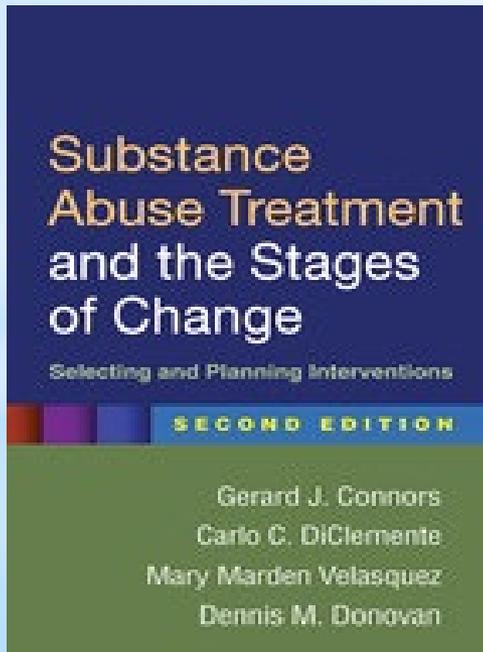
### INDIVIDUAL ENGAGING IN PROCESSES

Life context and social influences provide additional mechanisms that can promote or hinder specific processes and undermine stage tasks

\* Let's Look at an  
Interview and see if we  
can see Processes of  
Change

The Rounder Video

# Questions?



**\*Some Research Supporting  
the Importance of  
Processes of Change**

# CONTEMPLATION TO MAINTENANCE

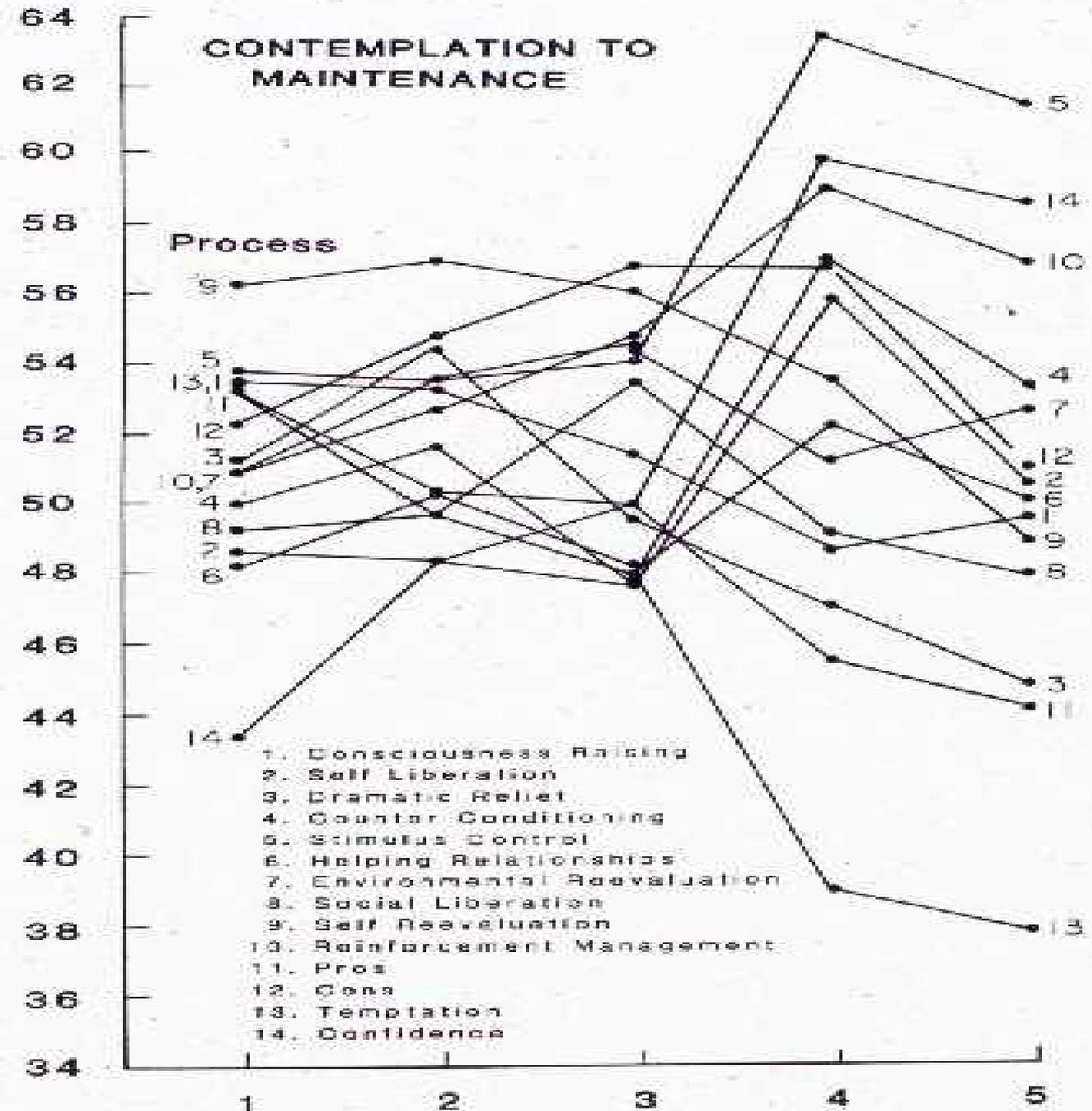
Standardized Scores

FREQUENCY

Process

Every 6 months

ROUND



\* Client status during one year follow-up period:

\* Abstinent

\* Moderate drinking

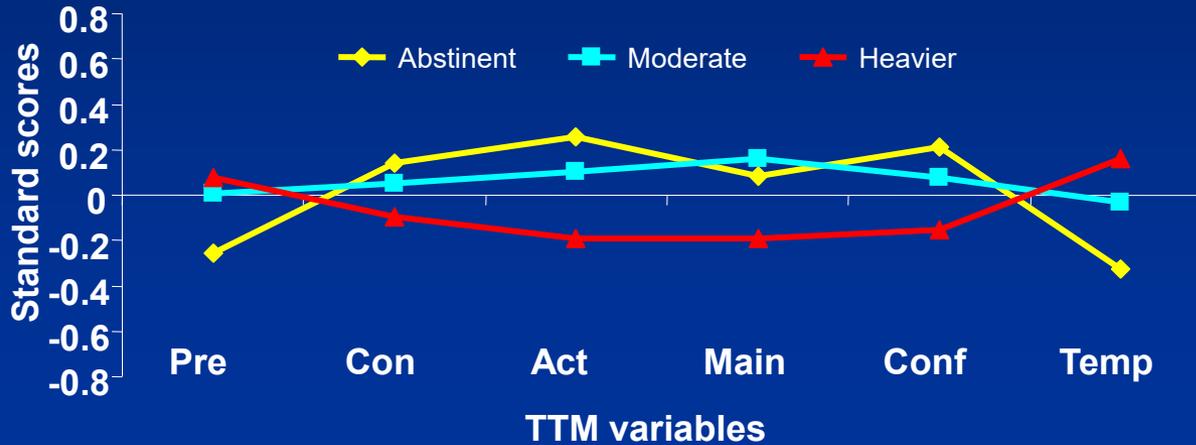
\* Heavier drinking

\* Baseline and End of Treatment Client profile on Stage of Change subscales, temptation to drink, abstinence self-efficacy, experiential and behavioral processes of change

\* No differences by three different Project MATCH treatments on these measures

\* End-of-Treatment-Success Profiles Support Process Dimensions and Predict Outcomes

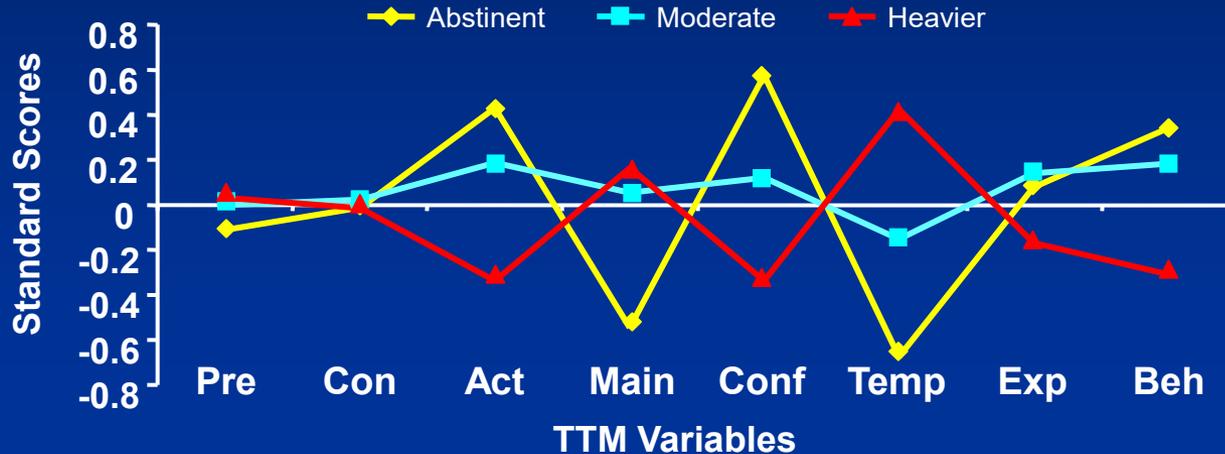
# TTM Profile: Outpatient PDA Baseline



TTM = Transtheoretical model

Carbonari & DiClemente. *J Consult Clin Psychol.* 2000;68:810.

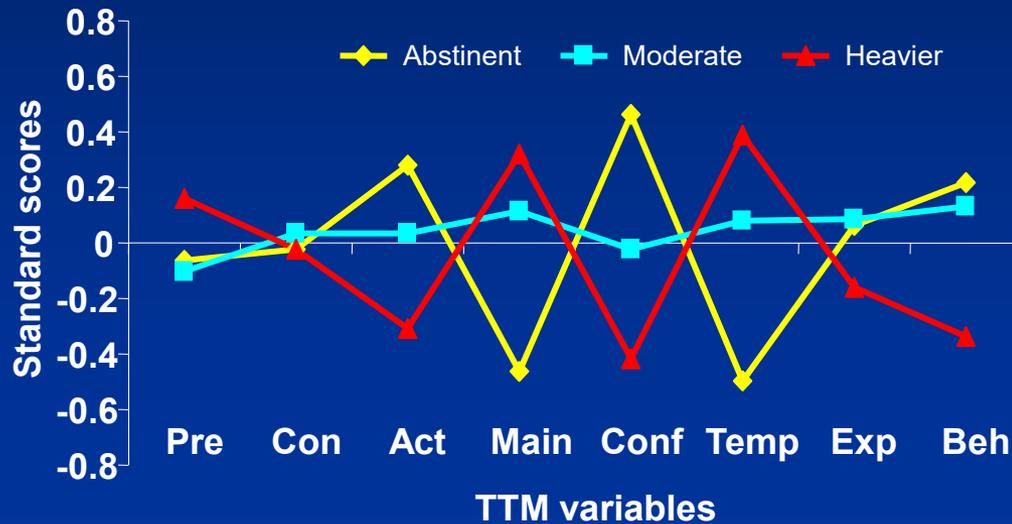
# TTM Profile: Outpatient PDA Post-treatment



PDA = percent days abstinent

Carbonari, JP & DiClemente, CC. *J Consult and Clin Psych.* 2000; 68:810.

# TTM Profile: Aftercare PDA Post-treatment



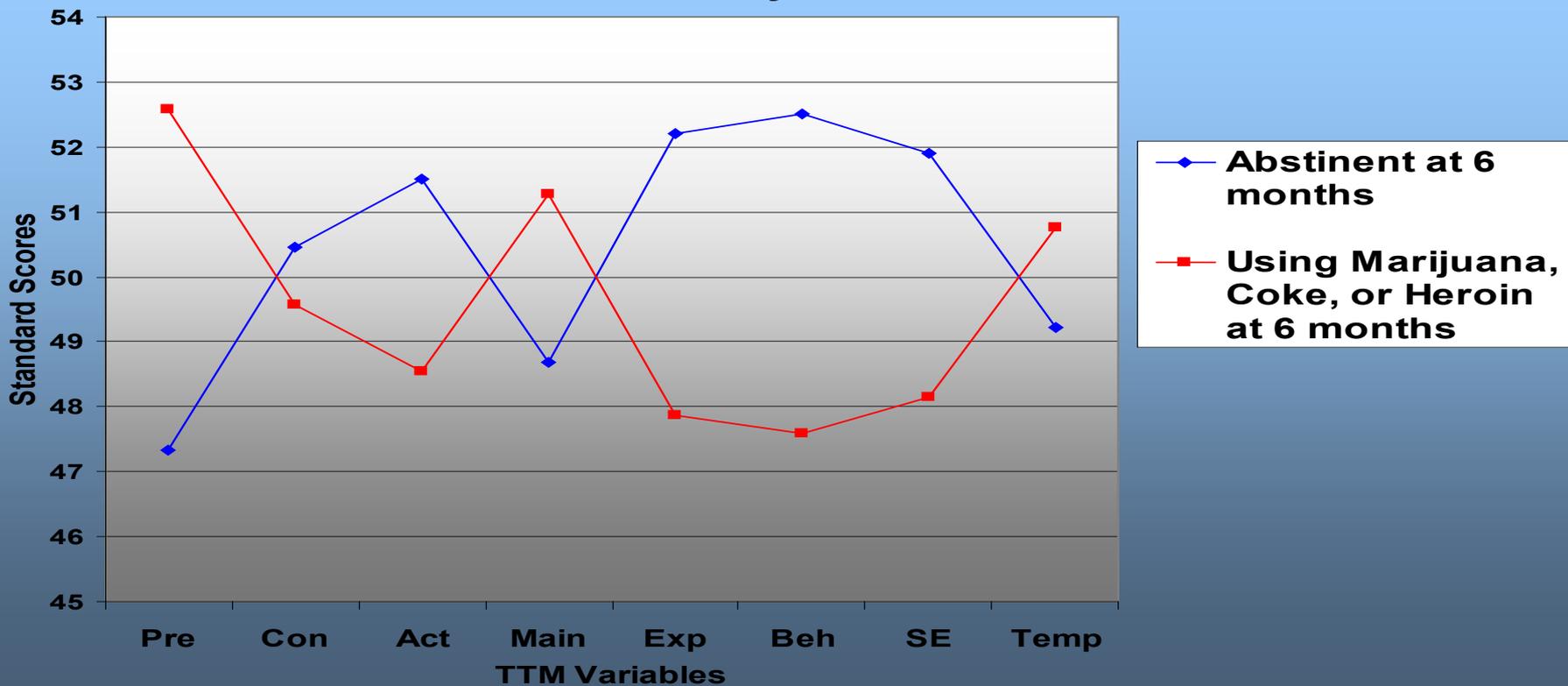
Carbonari & DiClemente. *J Consult Clin Psychol.* 2000;68:810.

# S.T.O.P. Project

- Participants (primarily cocaine, heroin, and marijuana SA) entering treatment in 2 community programs.
- The participants (N=61) divided into 2 groups based on self reported and confirmed abstinence or continued use at 6 months following a three month treatment period.
- Groups were **not** significantly differ at baseline on **drug use, age, level of income, race, education, or gender.**
- Do these two groups differ on Process Profiles at intake and three months into their treatments?



### 3 Months Post Intake TTM by Use at 6 Months



# \* 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.



# \*DISCUSSION

Have you seen these processes in your work and how or what do you do to activate these processes?

Then we will discuss processes in group treatment

# The Critical Challenge: connecting what we do to client processes of change

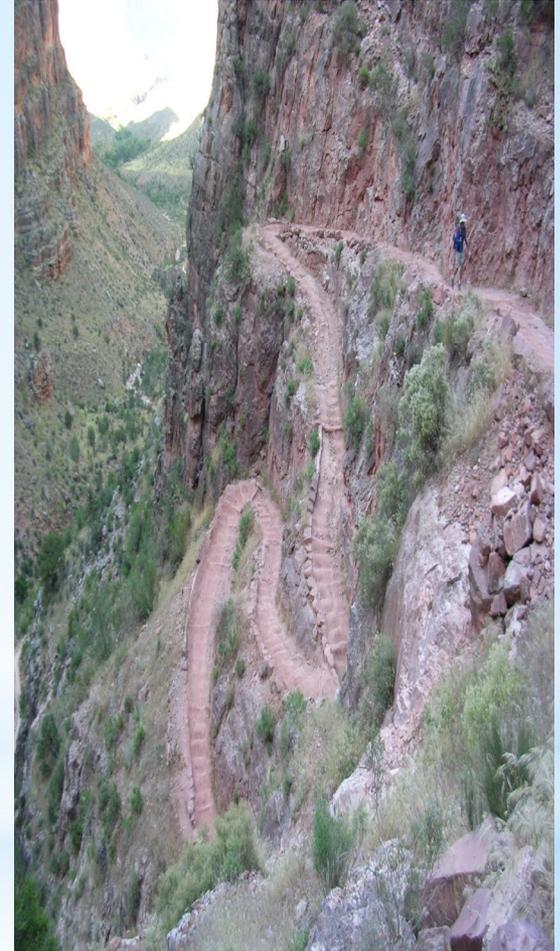
Can we identify or develop exercises or activities and experiences that facilitate process use and facilitate this journey of change?

Are specific intervention strategies better at facilitating use of the various change processes?

For example, MI seems most appropriate for facilitating experiential process use and CBT for behavioral processes.

Can we put these together in a substance abuse intervention that specifically targets use of the TTM processes of change?

Can we facilitate change process use in a group format?



# Group Treatment for Substance Abuse



**SECOND EDITION**

A Stages-of-Change  
Therapy Manual

Mary Marden Velasquez, Cathy Crouch,  
Nanette Stokes Stephens, and Carlo C. DiClemente

# A Transtheoretical Model Group Therapy

Each group session is based on a specific TTM process of change. Motivational Interviewing counseling strategies are used throughout the sessions.



# \* Thinking About Changing Substance Use Precontemplation-Contemplation-Preparation Sequence

- \* P/C/P Session 1: The Stages of Change
- \* Change Process Objective: Consciousness Raising
- \* P/C/P Session 2: A Day in the Life
- \* Change Process Objective: Consciousness Raising
- \* P/C/P Session 3: Physiological Effects of Alcohol
- \* P/C/P Session 5: Expectations
- \* Change Process Objective: Consciousness Raising
- \* P/C/P Session 6: Expressions of Concern
- \* Change Process Objectives: Self- and Emotional-Reevaluation, Emotional Arousal,

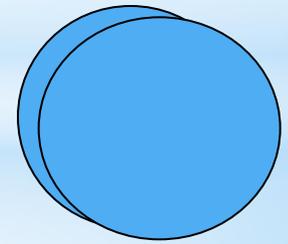
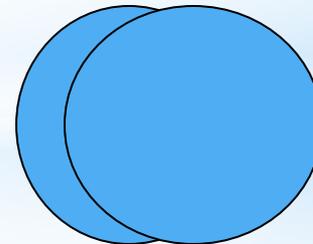
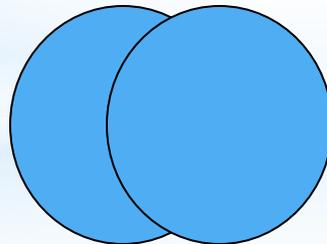
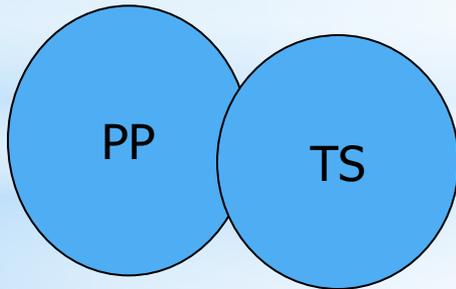
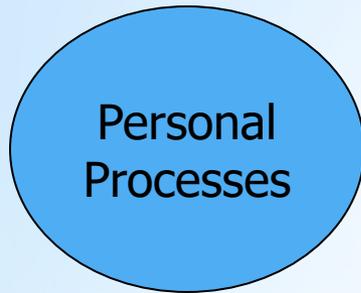
# \* Thinking About Changing Substance Use Precontemplation-Contemplation-Preparation Sequence

- \* P/C/P Session 7: Values
- \* Change Process Objective: Self-Reevaluation
- \* P/C/P Session 8: Pros and Cons and Reevaluation
- \* Change Process Objective: Decisional Balance
- \* P/C/P Session 9: Relationships
- \* Change Process Objective: Environmental Reevaluation
- \* P/C/P Session 10: Roles
- \* Change Process Objective: Environmental Reevaluation
- \* P/C/P Session 11: Confidence and Temptation
- \* Change Process Objective: Self-Efficacy

# \* Taking Action for Changing Substance Use Preparation –Action-Maintenance Sequence

- \* P/A/M Session 1: The Stages of Change
- \* Change Process Objective: Consciousness Raising
- \* P/A/M Session 2: Identifying “Triggers”
- \* Change Process Objective: Stimulus Control
- \* P/A/M Session 3: Managing Stress
- \* Change Process Objective: Counterconditioning
- \* P/A/M Session 4: Rewarding My Successes
- \* Change Process Objective: Reinforcement Management
- \* P/A/M Session 9: Managing Cravings and Urges Change Process Objectives: Stimulus Control, Counterconditioning, Reinforcement Management
- \* A/M Session 10: New Ways to Enjoy Life Change Process Objectives: Stimulus Control, Counterconditioning, Reinforcement

# \* Interactions between Personal Process and Treatment Strategies



# Connecting Empirically Supported Treatments to the Process of Change

Motivational Communication and Skills Development

How many of you have been trained for more than a day long or multiple day training in MI, CBT, DBT, ACT, REBT, others

\*Critical tasks of the early stages are eliciting concern, dealing with ambivalence regarding change, decision-making, creating commitment, careful and comprehensive planning.

\***Motivational Interviewing/Enhancement, Decision Making, Persuasion And Cognitive/Experiential** approaches are important strategies to engage and work with clients helping them to engage cognitive/experiential processes of change and to successfully complete these tasks.

\***Motivating Movement through  
the Early Stages of Change**

- ❖ Based on motivational psychology & client-centered counseling
- ❖ “Meeting the [person] where they are.”
- ❖ Recognizes that ambivalence is a key issue in any behavior change
- ❖ A way of being with someone

# \* Motivational Communication

# Motivational Enhancing Communication Assumptions

- ❖ Ambivalence is a **normal** part of considering and making change and is **NOT** avoidable!
- ❖ Your style or way of being with families is a powerful determinant of a person's resistance or motivation.
- ❖ An empathic style is more likely to bring out self-motivational responses and less resistance
- ❖ Each person has powerful potential for change. Your task is to release that potential and facilitate the natural change process that already exists in the individual.

# \*The Spirit/Style

- Collaboration
- Acceptance
- Compassion
- Guidance



# \* Keep the Spirit Flowing

Element of Spirit	Supports to Motivation	Warning Sign	Threats to Motivation
Partnership/Colaboration	<ul style="list-style-type: none"> <li>•Helping relationship based on trust and mutual goals</li> </ul>	<ul style="list-style-type: none"> <li>•Provider motivation is greater than clients</li> <li>•Thinking provider knows best</li> </ul>	<ul style="list-style-type: none"> <li>•Ignores client perspective and goals</li> <li>•Focus is on advice giving not client</li> </ul>
Evocation	<ul style="list-style-type: none"> <li>•Provider draws out clients own ideas</li> </ul>	<ul style="list-style-type: none"> <li>•Provider asks too many close-ended questions</li> <li>•Client replies with one-word answers</li> </ul>	<ul style="list-style-type: none"> <li>•Limited focus on change talk</li> <li>•Limited focus on client's ambivalence</li> </ul>
Acceptance	<ul style="list-style-type: none"> <li>•Provider affirms client's experiences</li> </ul>	<ul style="list-style-type: none"> <li>•Provider focuses on his/her own goals</li> <li>•Limited use of affirmations</li> </ul>	<ul style="list-style-type: none"> <li>•No validation of client autonomy</li> <li>•Minimize client's unique strengths</li> </ul>
Compassion	<ul style="list-style-type: none"> <li>•Provider prioritizes client's needs</li> </ul>	<ul style="list-style-type: none"> <li>•Provider is frustrated with client</li> </ul>	<ul style="list-style-type: none"> <li>•Limited prioritization of individual needs</li> <li>•Less empathy for client</li> </ul>

# \*OARS: Basic Techniques of Motivational Communication



- Open-Ended Questions
- Affirming the Person
- Reflective Listening
- Summarize

# \*What to Reflect?

- \*How do you know which statements or pieces of the conversation to reflect?
- \*Any reflection can promote the conversation but.....
  - \*The most effective reflection isn't random!
- \*Reflections are a crucial tool to enhance motivation, particularly when you reflect the person's **change talk and not the sustain talk**

# \*Change Talk: Two Types

## Preparing to Change

- DARN Language
- Desire
  - Want, wish, hope
- Ability
  - Can, able to, could do it
- Reasons
  - Specific benefits, values
- Needs
  - Urgency, have to, must, can't continue

## Committing to Change

- \* CATs Language
- \* Commitment
  - \* Going to, will, promise to
- \* Activation
  - \* Prepared to, ready, starting to
- \* Taking Steps
  - \* Initial actions, preparatory actions

At what stages would you expect to see each type of change language? Connect Change talk with Processes

# \* → Sustain Talk

- Comments and utterances that reflect considerations that argue **against** change
- Reflect desires, inability, needs, reasons **not** to make a change
- Comments would state a commitment, activation, or taking steps to avoid change
- Arguing to continue current behavior

Link to Process of change: in this case these processes foster sustaining status quo

- \* Listening closely to thoughts, feelings and language
- \* Asking Evocative Questions that elicit DARN language
- \* Avoiding questions and reflections that are likely to evoke sustain talk

## \* Evoking Change Talk

## \* Facilitating Factors

- \* Accurate, empathic feedback
- \* Good Self-Evaluation skills
- \* Important values, goals and self-standards
- \* Understandable consequences and reasons
- \* Good Affect Regulation

## \* Hindering Factors

- \* Obsessive style
- \* Environments and experiences that protect against consequences
- \* Ambivalence
- \* Impulsiveness and poor ECF skills
- \* Depression

\* **Contemplation: risk reward analysis leading to a decision**

## \*Facilitating Factors

- \*Support Systems
- \*Choice
- \*Public Commitment
- \*Ability to defer gratification
- \*Ability to take a long-term perspective

## \*Hindering Factors

- \*Poor planning ability
- \*Multiple Problems
- \*Distracting Activities and Events
- \*Stress
- \*Multiple Tasks
- \*Depleted Self-Control Strength

\*Preparation: Creating  
Commitment, Planning,  
and Prioritizing

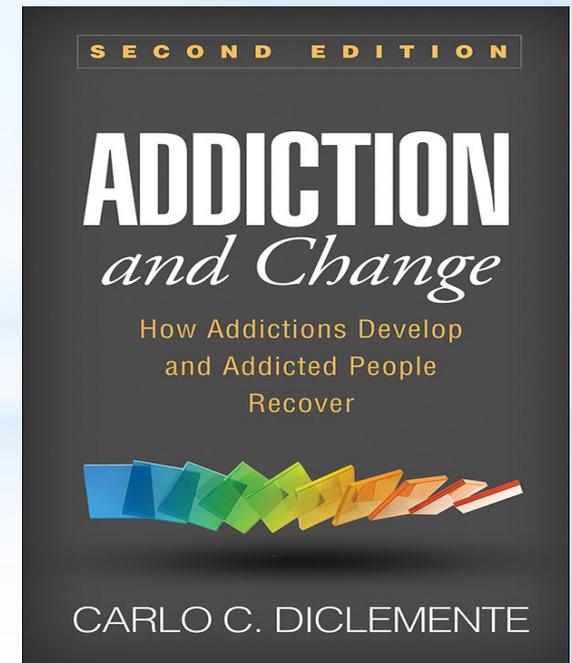
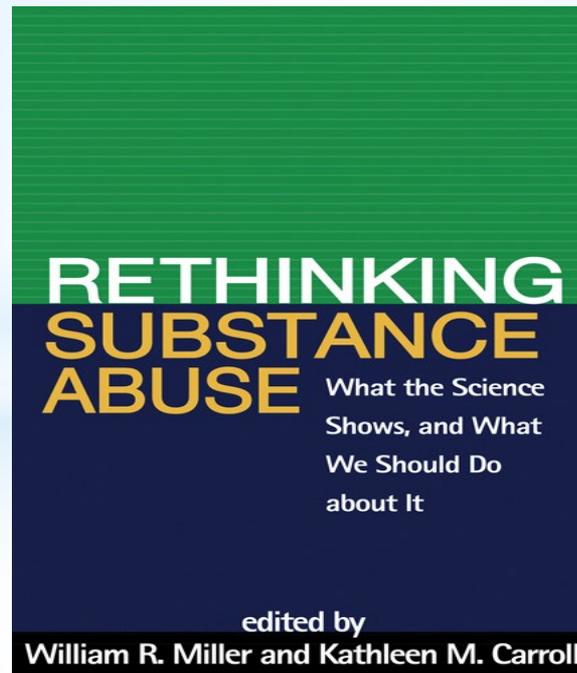
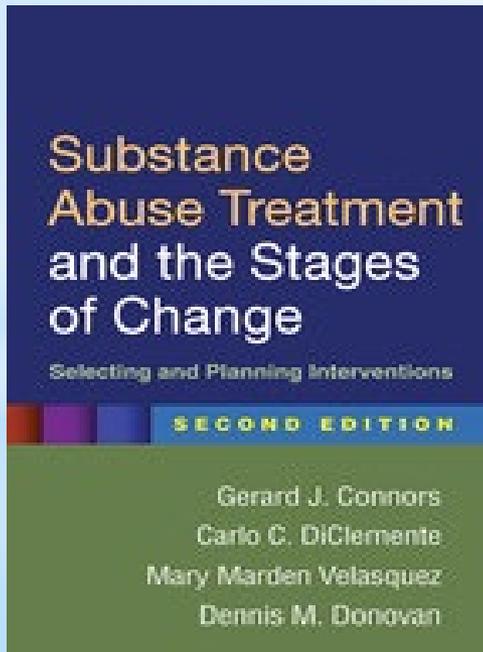
- \* Critical tasks of the later stages involve commitment, effective planning, sustained implementation, using behavioral skills, sustaining change despite obstacles, coping with slips and relapse.
- \* Cognitive/Behavioral approaches (CBT, ACT, DBT) and engaging support systems are important strategies to help clients successfully complete these tasks and develop skills and strategies to manage the change
- \* Family and systems approaches can also aid in promoting helping relationships and support

**\* Motivating Movement through the  
Later Stages of Change**

- \* Skills
- \* Self Control Strength
- \* Environment
- \* Social Networks
- \* Support Systems (Helping Relationships)
- \* Self-Efficacy

\* Critical to Later Stage  
Success

# Questions?



# \*The Role of Relapse in Recovery

If it happens so often, there must be a purpose  
and some meaning or function of  
Relapse and Recycling in Recovery

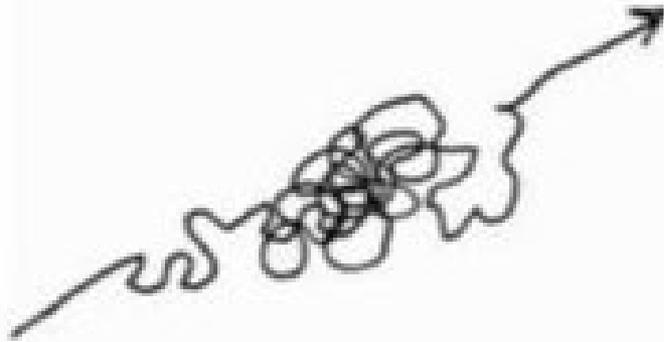
# \* Change ≠ Linear Process: Relapse & Repeating

Success



what people think  
it looks like

Success



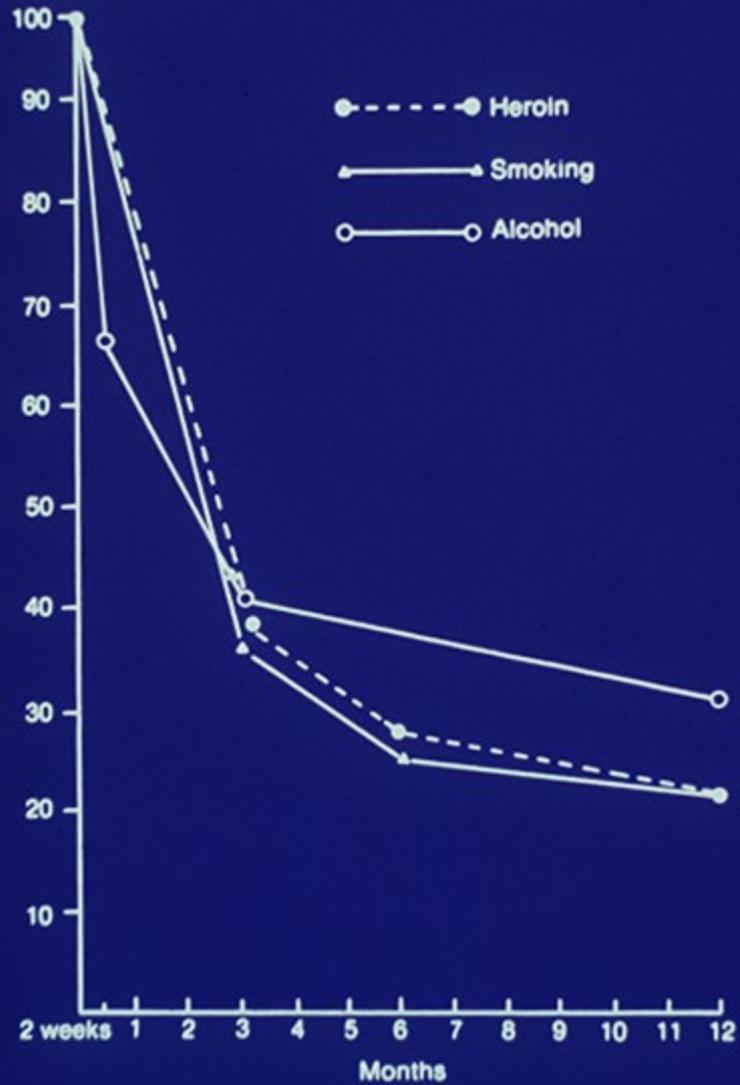
what it really  
looks like

# \* Relapse and Recycling

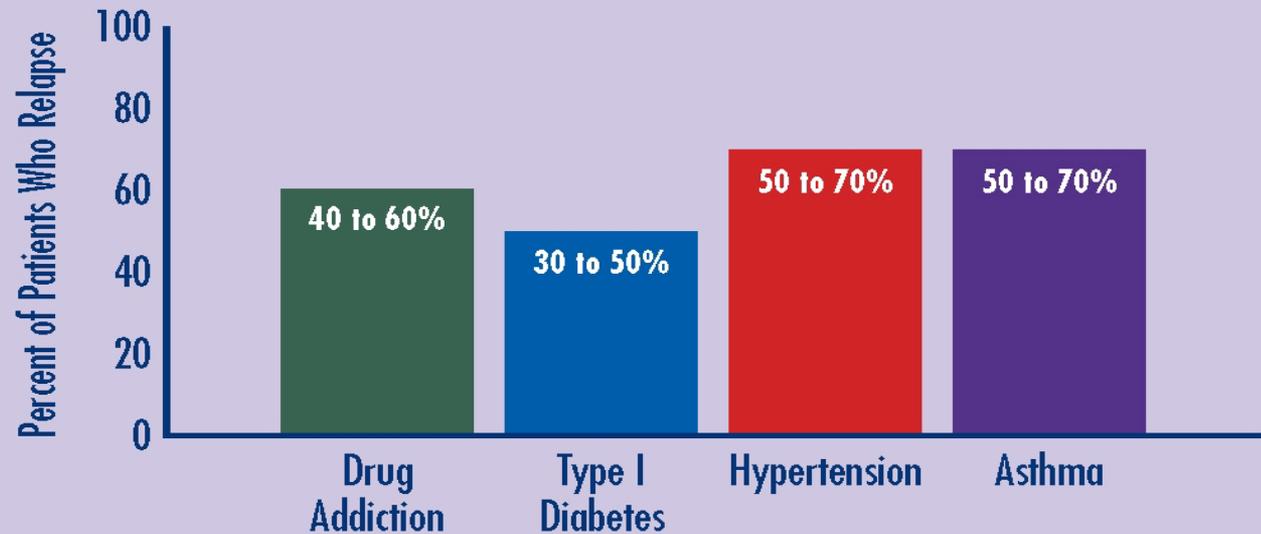


- \* Movement through the stages is not inexorably linear: consists of stasis, progression and regression, slips/lapses; relapse and recycling
- \* Relapse is not a stage of change
- \* Recycling through the process is a reality
- \* Need a learning perspective: Successive approximation learning not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

# \* Recycling and Recovery

\* What is a “relapse”?

\* When the individual **gives up** on the attempt to change

\* Not a total failure but a learning opportunity

\* Individuals who give up on this change attempt **return to a pre-action stage**

\* To achieve recovery must **try again** to successfully move through the stages

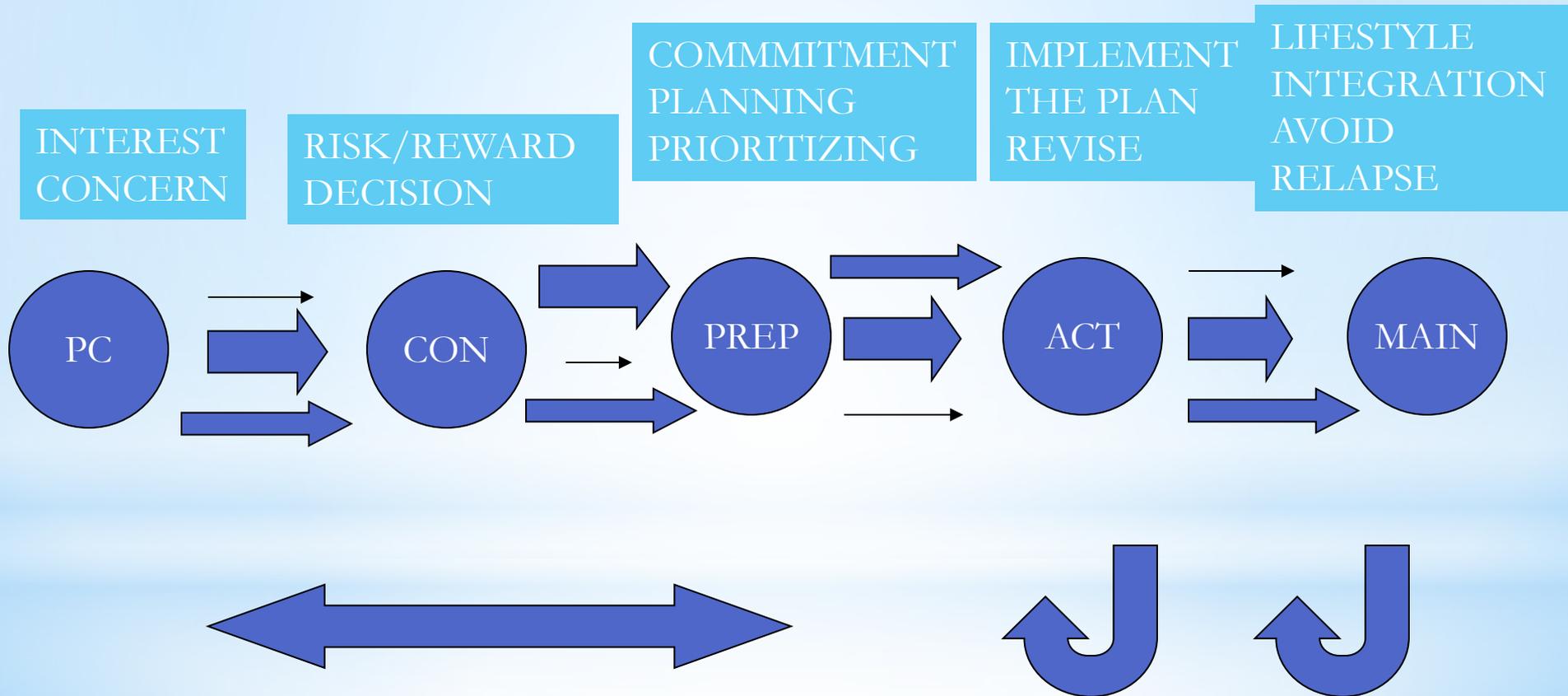
\* Role of recycling is to learn how to **adequately accomplish** the tasks and engage the mechanisms needed for recovery

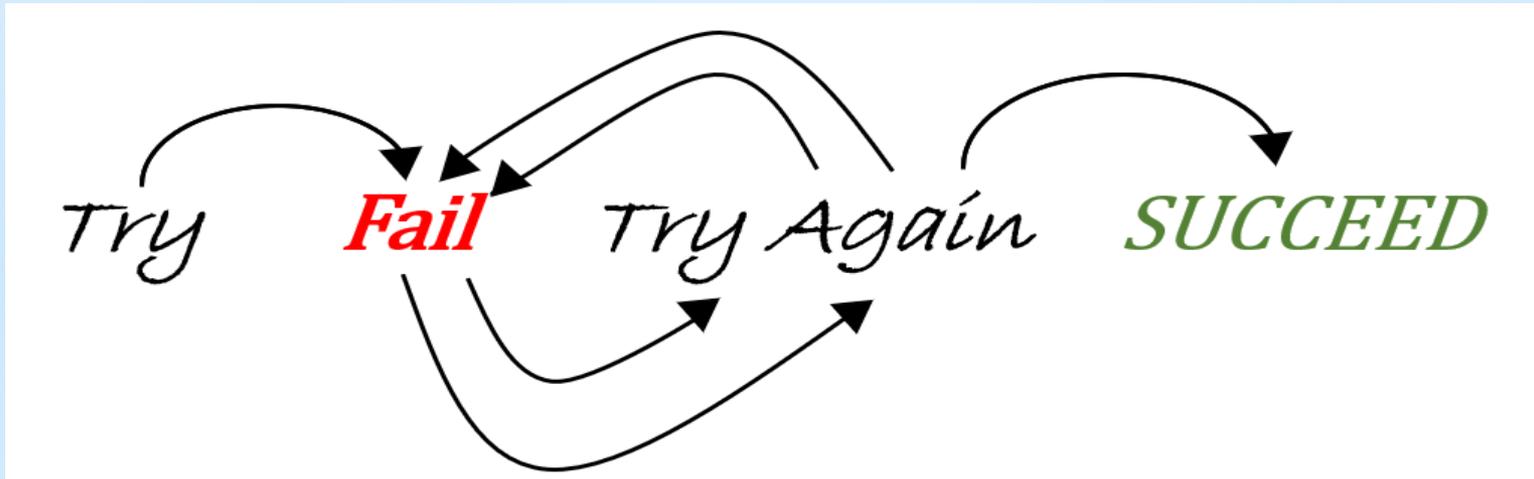
# \* Relapse & Recycling

- \* Relapse shouldn't be seen as a problem of substance abuse or addictions—Relapse & Recycling are a **natural part of the process** of behavior change.
  - \* Relapse in mental health conditions involves some biological processes but can also be seen through this lens if it involves noncompliance with behavioral activities
- 
- Most successful changers make **repeated efforts** to get it right that are part of a learning process to correct for inadequate completion of stage tasks.



# \*TASK COMPLETION AND MOVEMENT BETWEEN STAGES





*\* "If at first you don't succeed, try, try, try again."*

*~ William Edward  
Hickson*

Multiple unsuccessful attempts, however, may mean problems in context or co-occurring conditions must be addressed

\* Failure is sometime the only way  
to learn progress and become  
more creative - the hallmark of  
science

James Dyson created 5,127 prototypes before he found  
the marketable vacuum.

Most scientific experiments fail before leading to a  
breakthrough



\* Relapse is  
**NOT** the  
opposite of  
recovery.

NOT trying is

# \* Black Boxes and Investigating Failure

- \* In health care there is a culture of evasion: failure is an anomaly, an unfortunate event, doing the best we could, just happened, cannot explain it
- \* In the airline Industry there is a “system where failure is *data rich*” and where “mistakes are not stigmatized, but regarded as learning opportunities” (Syed, p. 25)
  - \* Two black boxes; one for the electronic systems on board and the other the cockpit voice recorder
  - \* Independent objective investigation. Results available to everyone. Share results with all pilots
- \* “Learn from the mistakes of others. You can’t live long enough to make them all yourselves”
  - \* Eleanor Roosevelt in Syed, p. 25.

# \* Blame Gets in the Way of Successful Recycling

- \* Who is responsible? Why did it happen? Who or what is to blame?
- \* Blame undermines accurate reporting, acknowledging errors, learning about ourselves and undermines information critical to be successful
- \* Blame and finger pointing (the program did not work; you did not work the program) is not helpful

- \* Self-Stigma is often worse than social stigma
- \* Self-compassion may be particularly powerful in mitigating self-stigma and shame
- \* Self Compassion
  - \* Mindfulness (non judgmental, accept present reality)
  - \* Common humanity (all are human, make mistakes, suffer and at times fail)
  - \* Self-kindness (treating oneself with kindness and respect in face of pain and failure)

**\* Addressing Stigma**

# \* Why Can't Individuals get it right the first time?

- \* Learning how to manage and overcome obstacles and accomplish stage tasks takes time, energy and focus
- \* Many ways recovery and sustained change can become compromised
- \* IT'S A COMPLICATED PROCESS
- \* RECOVERY AND BUILDING A NEW PATTERN OF BEHAVIOR IS MORE OF A MARATHON THAN A SPRINT
- \* There are also critical mechanisms that make it hard to change
  - \* With addiction it is neuroadaptation, impaired self-regulation and importance/salience
  - \* With changes in lifestyle behaviors often context, social and environmental factors, weakened self-control, and entropy (tendency to revert back and lose energy and focus)

- \* George M. - “Never, Never, Never give up”
- \* Jane R. “Never stop trying, If one thing does not work, try something else”
- \* “Instead of dwelling on past failures, it’s more productive to learn from your past, treating past recovery attempts as a rich library of experiences to shape your future”
- \* (Anne M.. Fletcher, 2001, p.70)

**\* One Clear Message from  
People in Recovery**

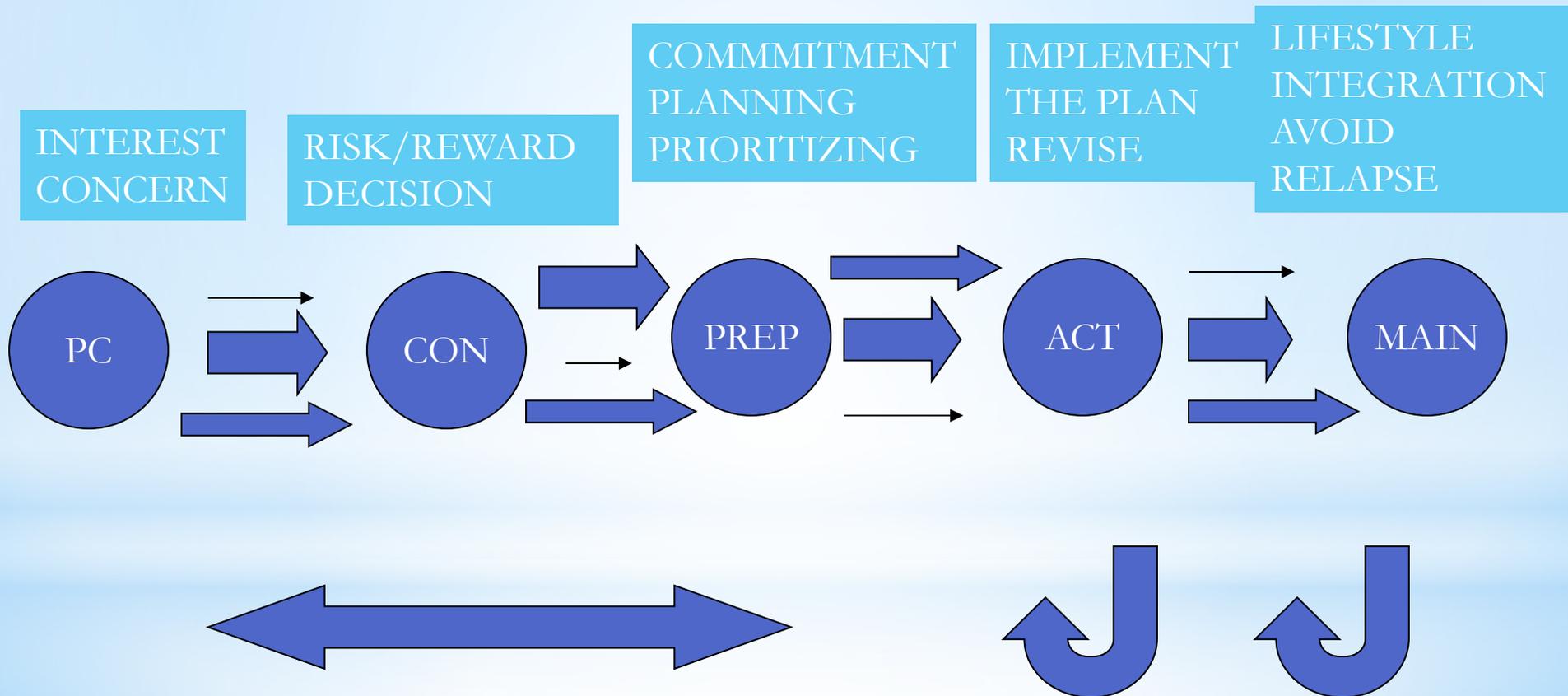
- \* It is stigmatizing, blaming, and contributes to a fatalistic/failure identity
- \* Recycling on the Road to Recovery
  - \* A setback in sustaining change, a mistake that can be corrected, an opportunity to learn
  - \* Long-term multidimensional perspective
  - \* Getting Well and Getting Better
- \* Let's retire the term "Relapse"

# \* Keys to Successful Recycling

- \* Blame and guilt undermine motivation for change
- \* Support re-engagement in the process of change
  - \* Persistent efforts
  - \* Repeated attempts
  - \* Helping individuals take the *next step* - Matching strategy to stage of change.
  - \* Talk to the person in an encouraging way that increases their motivation to give it another shot.

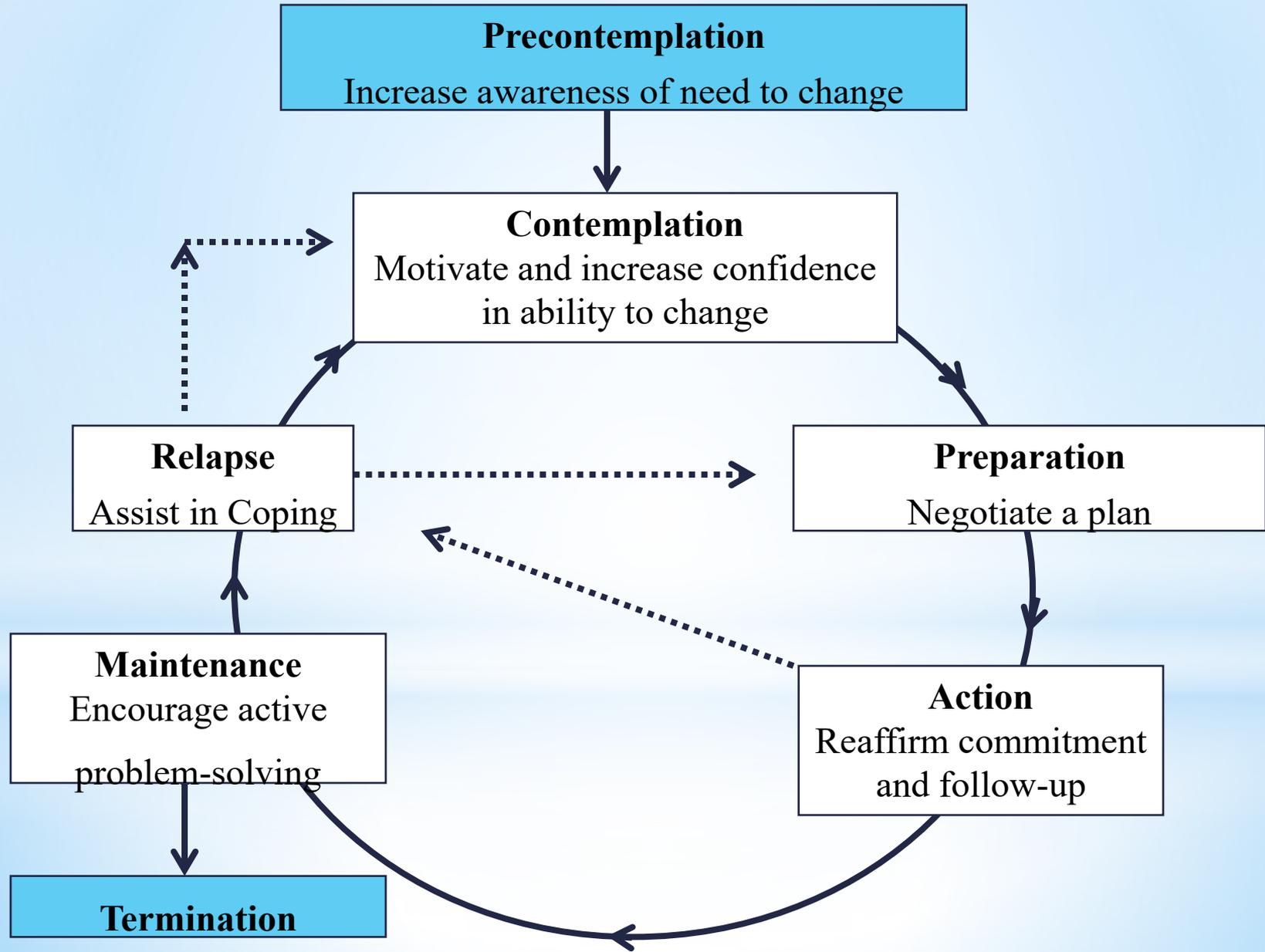


# \*TASK COMPLETION AND MOVEMENT BETWEEN STAGES



See handout on Adequate Completion of Stage Tasks

# Stages of Change Model



# \* Cyclical Model for Successfully Sustained Change

- \* Keys to successful recycling
  - \* Persistent efforts
  - \* Repeated attempts
  - \* Learning from the past
  - \* Overcoming habit and neuroadaptation
  - \* Find support for impaired self-regulation (scaffolding)
  - \* Begin building a new meaningful life that includes the new behavior or absence of former behavior
  - \* Never Give Up
- \* “Stick and Stay”



# \* Getting into and Staying in Recovery

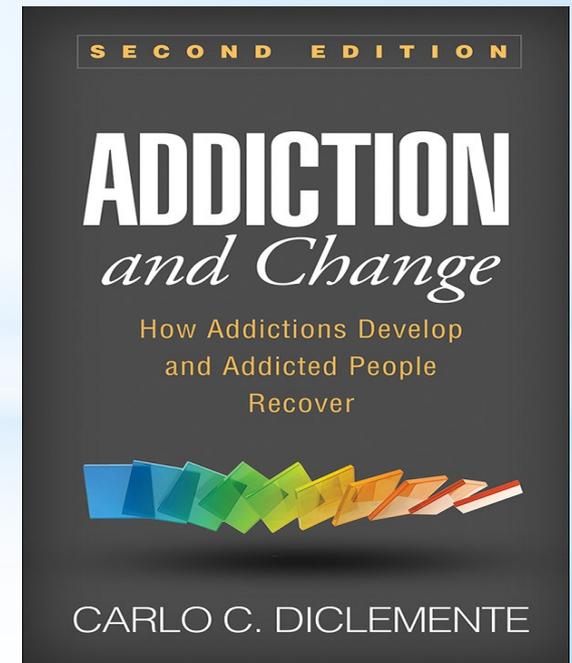
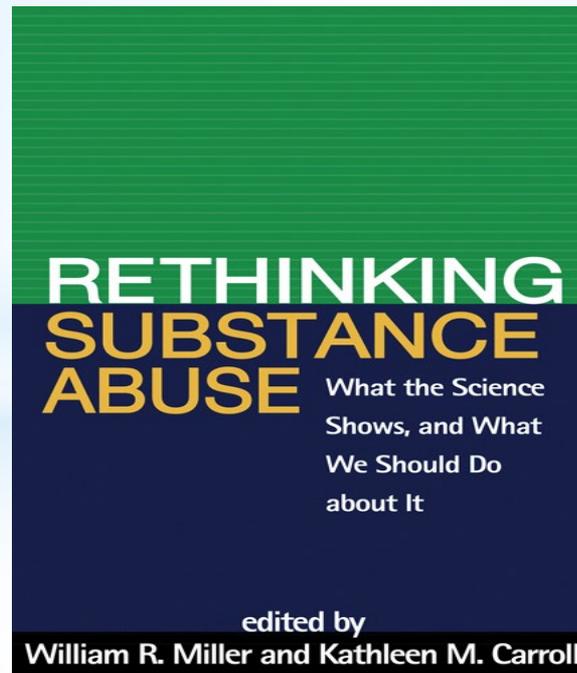
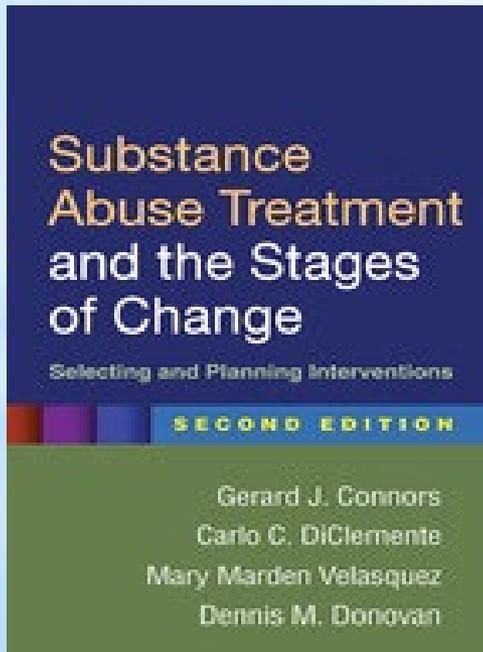
- \* Requires completion of the stage tasks in a manner that is sufficient to support long term recovery
- \* Using Processes of Change that can promote and deepen completion of these tasks
- \* Building confidence, avoiding overconfidence, being realistic about risks; building a healthy and rewarding life
- \* Keep Trying; Working smarter not harder

# \* How Can We Promote Recycling and Recovery and Sustained Change?

- \* More than what happened in the moment
- \* When debriefing a relapse or failure to sustain a behavior change:
  - \* Examine whether there was personal and strong interest and concern (not spouse, family, court)
  - \* Decision - how strong, good reasons, solid risk benefit analysis, supported by important values?
  - \* How good was the plan (accessible, acceptable, feasible, effective)? Did you revise parts not working?
  - \* Was your commitment sufficient to manage withdrawal and all the fall out from change?
  - \* Did you find some valuable alternatives or reinforcements and supports?

See learning from past handout

# Questions?



# **A Client Focused Model of Intentional Behavior Change**

## **STAGES OF CHANGE**

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

## **PROCESSES OF CHANGE**

### **COGNITIVE/EXPERIENTIAL**

**Consciousness Raising  
Self-Reevaluation  
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**

**\*Decisional Balance**

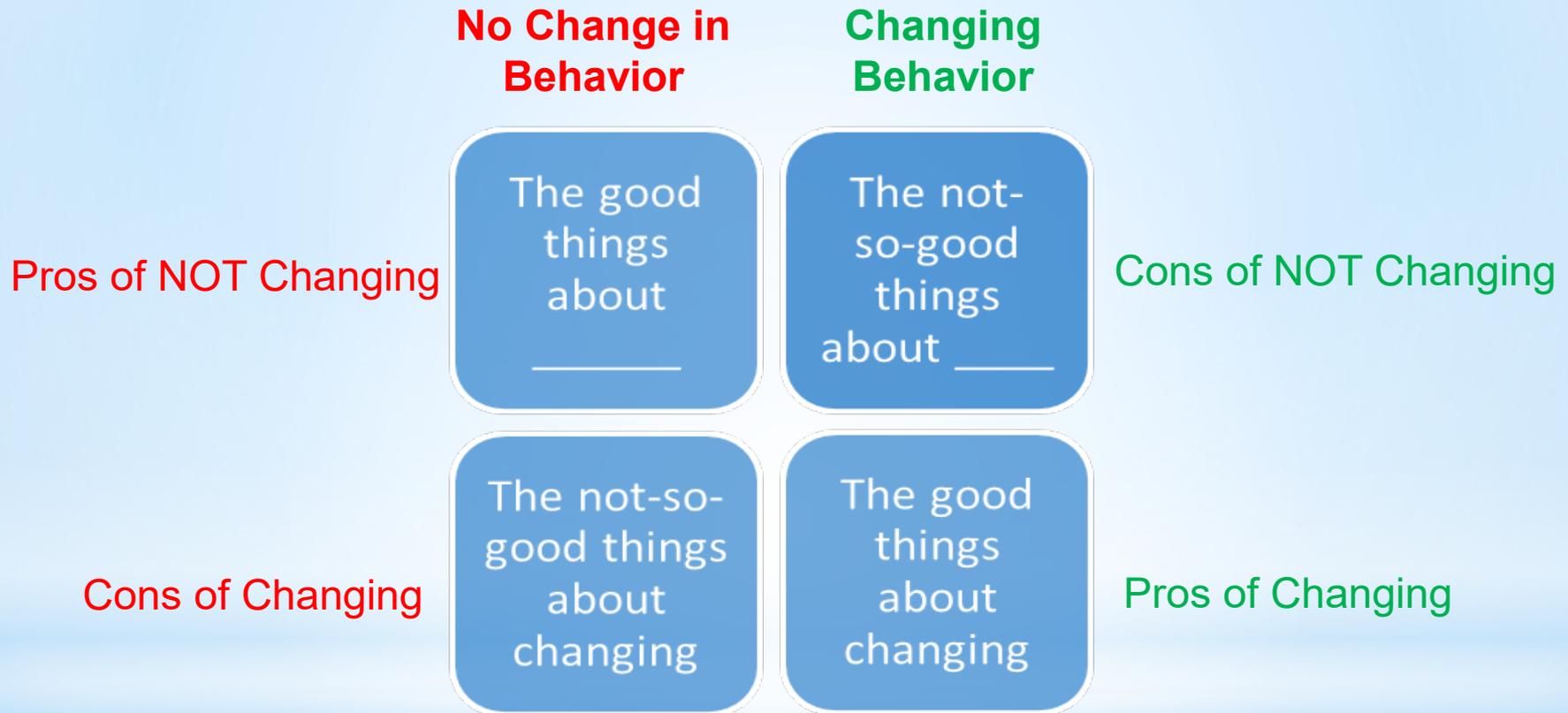
**Self-Efficacy**

**Markers of change**

- \* Contemplation stage tasks consist of an evaluation of the costs and benefits
- \* The end result of this analysis can be
  - \* Ambivalence - not enough tip in balance one way or other (on the one hand - on the other hand)
  - \* Regression to Precontemplation (not worth it - at least not now)
  - \* Progression to Preparation (determined to do it)
  - \* Inadequate decision making and sometimes impulsive or precipitous rush to action

## \* Decision Making

# \* Decisional Balance (Pros & Cons)



- **Precontemplation:** Pros of Changing < Cons of Changing
- **Contemplation:** Pros & Cons often carry equal weight = Ambivalence
- **Preparation:** Pros of Changing > Cons of Changing

- \* Albert Bandura's concept that distinguished
  - \* **Outcome Expectations** - What do I think will happen if I do this
  - \* **Efficacy Expectations** - Can I perform this behavior at this time
- \* The individual's confidence that they can perform this particular behavior under these conditions
- \* How great is my confidence that I can exercise regularly when (lots of work, family demands, want to play video games, it is raining, etc.)
- \* Often measured using a ruler - on a scale of 1 to 10 how confident are you that you can .....
- \* Sometimes accompanied by a measure of temptation or vulnerability to situational cues

\* **Self Efficacy**

# \* Role of Self-Efficacy in Recovery

\* **Self-Efficacy** = Degree of confidence individuals have in their ability to perform a specific behavior.

## \* **Precontemplation & Contemplation:**

\* Self-efficacy is lower than temptation to engage in the problem behavior.

## \* **Movement from Preparation to Action:**

\* Gap between temptation & confidence closes, & behavior changes.

## \* **Action to Maintenance:**

\* Self-efficacy = Key predictor of Action & of long-term success

\* Confidence in ability to abstain despite being faced with temptation to use.

\* **Multiple Targets and  
Untreated Problems  
Complicate the Process of  
Change**

The Context of Change:  
A Figure Ground Perspective



How do these further complicate the change  
process?

- \* Any single pattern of behavior occurs in the context of an individual's life.
- \* In order to fully understand the process of intentional behavior change, it is important to consider the following contextual factors:
  - \* Current Life Situation
  - \* Beliefs and Attitudes
  - \* Interpersonal Relationships
  - \* Social Systems
  - \* Enduring Personal Characteristics
- \* Issues or resources in any of these areas can help or hinder successful behavioral change.

\* **Considering the Context of  
Change**

# **\* CONTEXT OF CHANGE**

## **Where to look for complicating problems**

**I. SITUATIONAL RESOURCES AND PROBLEMS**

**II. COGNITIONS AND BELIEFS**

**III. INTERPERSONAL RESOURCES/PROBLEMS**

**IV. FAMILY & SYSTEMS**

**V. ENDURING PERSONAL CHARACTERISTICS**

Multiple problems also exhaust self-control and impair self-regulation

- \* Symptom/Situation
  - \* Psychiatric
  - \* Financial/housing
- \* Beliefs and Attitudes (explicit and implicit)
  - \* Religious views
  - \* Cultural beliefs and family myths
- \* Interpersonal (dyadic)
  - \* Marital/Significant Other Issues
- \* Systemic and Ecological/Environmental
  - \* Employment
  - \* Family/Children dynamics
- \* Intrapersonal
  - \* Self-Esteem
  - \* Sexual Identity

\* **Typical Complications**

Cocaine  
Use

Family  
Problems

Excessive  
Drinking

Housing

HIV Risks

Legal  
Problems

Job Issues

# \*Prioritizing Exercise

????

????

- \* SEQUENTIAL - start with initial symptom or situation and try to resolve that and work way down.
- \* KEY AREA OR CONTEXT - Find problem or area where you may have the most leverage, client is most motivated, or seems critical first problem. Start here?
- \* MULTI-LEVEL OR MULTI-PROBLEM -Work back and forth across the context identifying and addressing client stage and processes of change for each separate problem

# \* Intervention Strategies

- \* Housing and Financial Problems need specific social services
- \* Belief systems may require consultation with specialists and cognitive therapy skills
- \* Interpersonal and Systems Problems need special expertise
- \* Legal problems need criminal justice involvement
- \* Personality disorders and deep seated problems need long term treatment

**\* Multiple Problems Require  
Multidimensional Solutions**

- \* We need to treat people not diagnoses
  - \* The whole person not a single problems
- \* Every change of a targeted problem really involves multiple changes and often is complicated by problems and changes needed in multiple life domains
- \* Healthcare providers are facing this reality that 70% of the 56.4 million global deaths in 2015 were due to NCDs - Non Communicable Diseases (CVD, COPD, Diabetes, Addictions) (WHO report 2016)

**\* Why Integrated Care?**

## Case Management

- \* A manager of problems or services
- \* Tries to link patient and various providers
- \* Often affiliated with a single provider and trying to connect to others
- \* Inadequate resources to meet needs

## Integrated Care

- \* A coordinated approach to addressing the person in light of multiple complicating problems
- \* A team of providers working together linked by client needs
- \* Reciprocal Communication and Referral flow

# \* Differences between Case Management and Integrated Care

- \* Case Managers act as triage and connectors to providers
- \* Patient Navigators
- \* Key Provider (Family practitioner; MST Therapist)
- \* Managed Care
- \* Federally Qualified Healthcare Homes

\* Some Current  
Examples

- \*Targets Substance Use, Mental Health, and Infectious Disease Testing and Treatment
- \*Involves Maryland Department of Health and Mental Hygiene and their Drug Abuse, Mental Health, Prevention and Health Promotion administrations and academic partners
- \*Funded by SAMHSA
- \*Create a system of care where whatever door the client enters, he or she will be screened, assessed and treated for problems in all three areas

**\*NO WRONG DOOR  
PROJECT**

## Needs

- \* A Process Model to guide decision making
- \* Interdisciplinary and multidisciplinary resources
- \* Time sensitive communication system
- \* Client oriented, empowerment approaches
- \* Flexible allocation of Resources

## Barriers

- \* Lack of adequate actionable assessment
- \* Specialist Model of Care
- \* Lack of collaboration among providers and programs
- \* Lack of integrated medical record accessible to all healthcare providers
- \* Lack of incentives and lack of trust among providers

# \* Needs and Barriers for Patient Centered and Integrated Care

# \*Self-Regulation and Self Control

The Often-Underestimated Change  
Regulating Mechanism in Addiction  
and Behavior Change

# \* Self Regulation is closely connected to the Personal Process of Change

- \* Most self regulation models include self-observation, self-evaluation, decision making, willingness to consider change, and planning (Miller & Brown, 1991, Bandura, 1986; Kanfer, 1986)
- \* Self Regulation Components (skills, abilities) include:
  - \* Executive Cognitive Functioning
  - \* Affect Regulation
- \* Self Control and self regulation are essential in both initiation and modification of addictions
- \* Both are also critical to beginning and completing the tasks of the stages of change

\*“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

## \*Self-Control Strength

# \* 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



# \* Scaffolding: A strategy for Managing Self Control Strength

- \* Recognize that impaired self regulation disrupts the client's process of change
- \* Provide “scaffolding” - external support systems that can support the change process
- \* Provide a way the client can build and rebuild self-control muscle
- \* Make sure the building is well built before you take down the “scaffolding”

## \* What Can We Do About Impaired Self Regulation

- \* All have won and deserve the prize?
- \* How can we adapt our treatment strategies to the client journey of behavior change?
- \* How could we change our treatment plans and approaches to incorporate more fully the process of change?

# \* What is the Role of Treatment and Interventions

# \*Where Do We Come In?

STAGES	PROVIDER TASKS
<b>Precontemplation</b> <ul style="list-style-type: none"><li>◦ Not interested in change</li></ul>	<b>Raise doubt about continuing problematic behavior; Increase client's awareness of risks and problems</b>
<b>Contemplation</b> <ul style="list-style-type: none"><li>◦ Thinking about change</li></ul>	<b>Encourage client to voice reasons for change &amp; risks of not changing; help tip the balance of pros and cons</b>
<b>Preparation</b> <ul style="list-style-type: none"><li>◦ Preparing for change</li></ul>	<b>Help develop a personalized change plan: effective, acceptable, accessible</b>
<b>Action</b> <ul style="list-style-type: none"><li>◦ Initial change</li></ul>	<b>Adjust change plan as needed; Help the client develop relapse prevention strategies;</b>
<b>Maintenance</b> <ul style="list-style-type: none"><li>◦ Long-term change</li></ul>	<b>Help client identify strengths and healthy lifestyle for long-term change; Provide support</b>



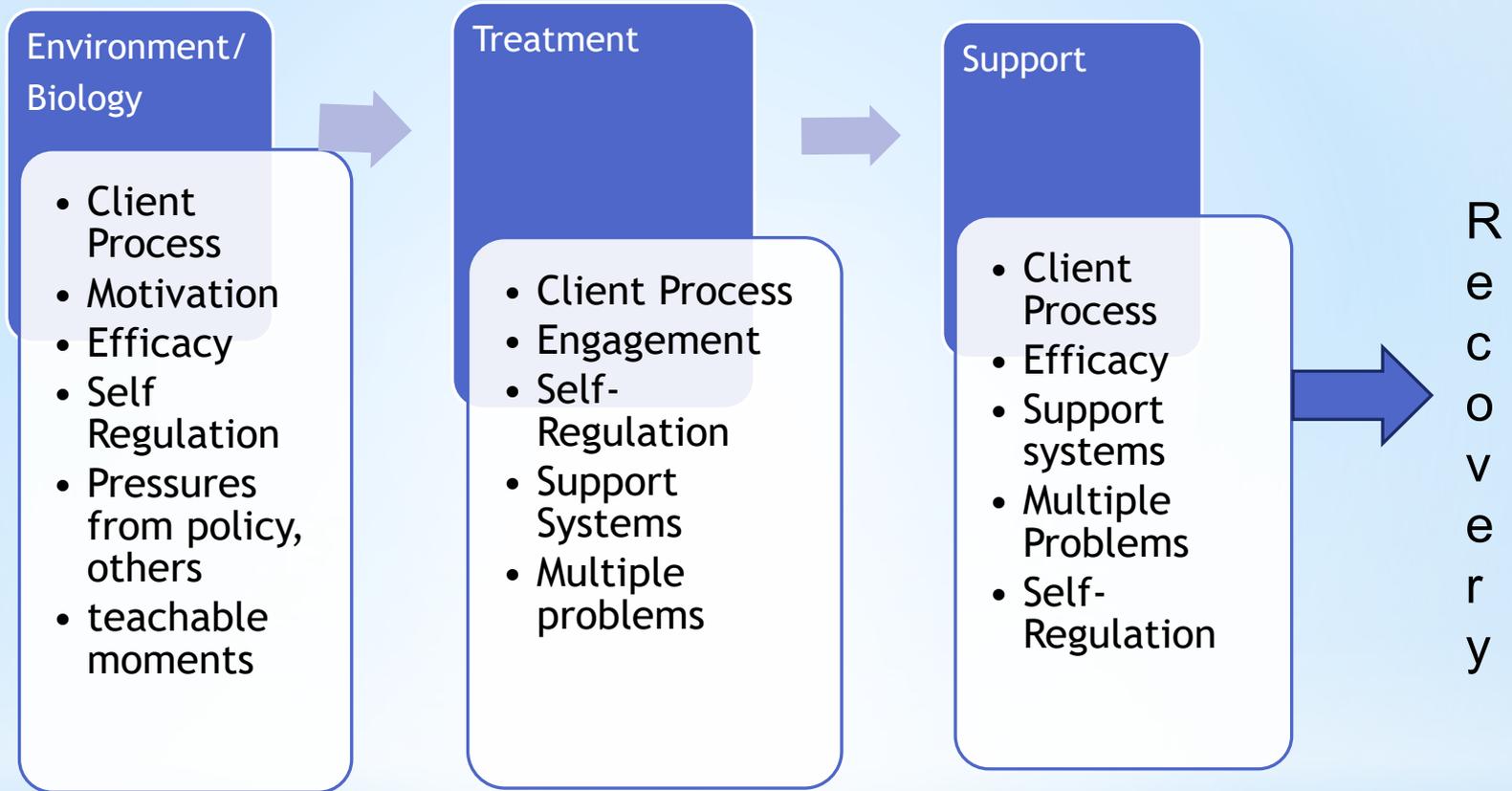
Relationship  
Empathy  
Working Alliance

Active Ingredients

Relapse Prevention

\* **How Does Treatment  
Work?**

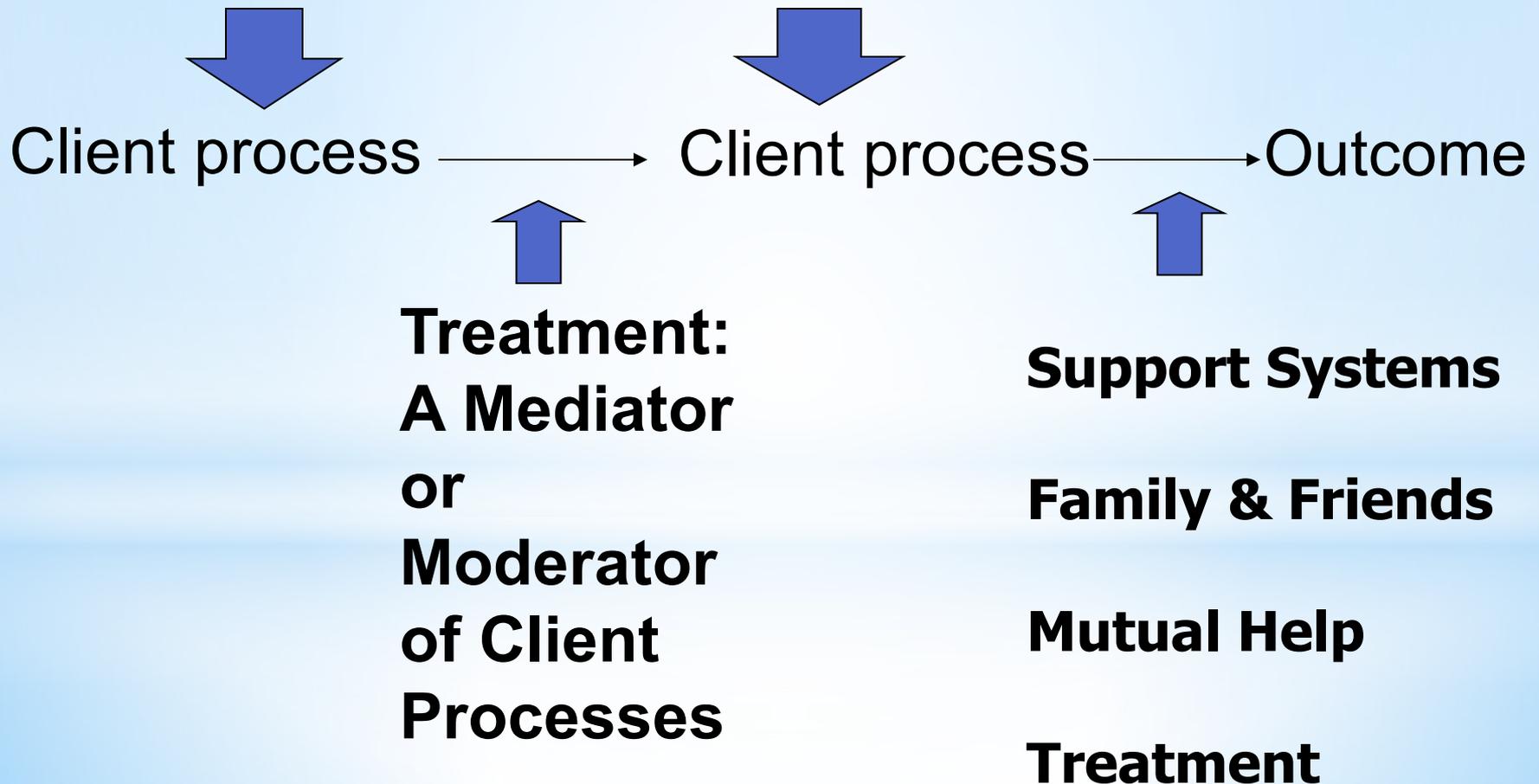
## Treatment: A Mediator or Moderator of Client Processes



**\*What about looking at it another way?**

# \*How Do Treatment and Mutual Help Fit In

## Self Regulation



PROCESS OF

**FORMAL**

**INTER**

**VENTIONS**

CHANGE

- \* How do we deal with individuals who are in Precontemplation and not interested in changing?
- \* Should treatment providers also be interested and involved in public health and policy initiatives?
- \* How do we influence the process of change with contextual and societal approaches?

## \* Treatment and a Public Health Perspective

- \* People who need behavioral health services are not always ready to access care
- \* However, these individuals often access various public and private services seeking some help
- \* SBIRT one way to develop early intervention strategies whenever an individual touches one of these services
- \* Collaborations with unlikely partners (police, courts, primary care, urgent care)
- \* Harm reduction efforts to meet some needs that may be concerns for individuals

**\* How can we gain access to  
People who need services?**

# \* Current Landscape for People Who Use Drugs



# \* Reimagined Landscape for People Who Use Drugs



Public Health: Harm Reduction



Public Health:  
Prevention

Law Enforcement  
Assisted Diversion  
(LEAD)

Public Health:  
Treatment

# \* Meeting People Where They Are

Wherever they are we are not helpless and can offer some help and support

<b>Stages of Change</b>				
<b>Pre-Contemplation</b>	<b>Contemplation</b>	<b>Preparation</b>	<b>Action</b>	<b>Maintenance</b>
<b>OVERDOSE REVERSAL WITH NALOXONE</b>	<b>SYRINGE SERVICES PROGRAMS</b> <b>OVERDOSE REVERSAL WITH NALOXONE</b>		<b>TREATMENT ENTRY: MAT, DETOX, INTENSIVE OUTPATIENT, OP</b>	<b>MAT, RECOVERY SUPPORTS, AA, NA, OTHER GROUPS</b>

**P E E R S**

- \* Getting the change you can, while promoting the change you are hoping for or want.
- \* Myths of Harm Reduction
  - \* Promotes Heroin Use (Promotes concern about HIV; promotes interest and concern for change)
  - \* Interferes with MI and SUD Recovery and Abstinence (opens a door to recovery)
- \* We promote harm reduction all the time
  - \* (prom promise, using uber when drinking, screening and brief interventions, pill returns, gun buy backs, crisis lines, housing first, gambling limits)
- \* Harm Reduction is a public health philosophy operationalized as a set of interventions designed to reduce the harms associated with drug use, mental health, and other health problems

**\* Harm Reduction**

- Overdose Education and Naloxone Distribution
- Syringe Services Programs (sterile syringes and injection equipment)
- Law Enforcement Assisted Diversion (LEAD)
- Harm Reduction Peer Work
- Mobile, Low Barrier Wound Care Services
- Mobile MAT
- Lower Barrier Buprenorphine
- HCV Testing and Treatment for PWUD
- Targeted Case Management
- Peer interventions and support groups (NA, AA, SMART Recovery)
- Housing First
- ACT (Aggressive Community Treatment) Teams

 **Interventions**  
**for Substance Use**

- \* Focus on **chronic conditions** which always involve some behavior change and management of psychological/emotional dimensions of the person
- \* **Multidisciplinary** - Medical, Pharmacological, Psychological, Behavioral, Environmental, Community, **Systems Sciences** must be blended together to achieve goals of Healthcare Reform
- \* **Collaborations** in terms of where services will be given and integration of information
- \* Use of **new technologies** to reach out and extend services to where patients are

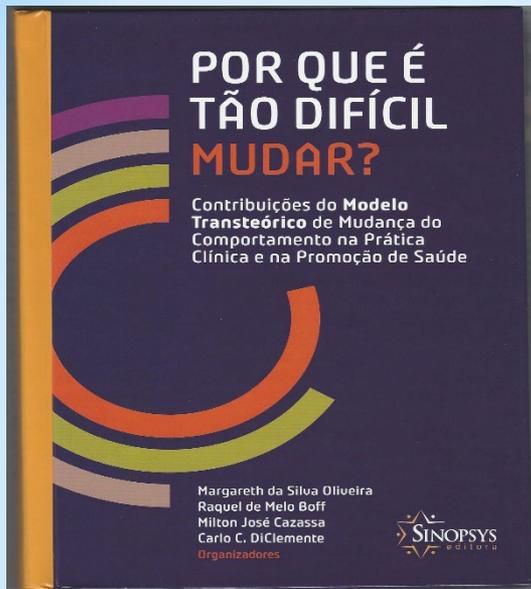
## \* **Integration in the New Health Care System**

- \* Use a model that focus on patient needs and desires, motivation, and self-regulation
- \* Create systems of care not treatment programs
- \* Build Integrated Care training capacity not just cross training or just learning about what other specialists do
- \* Create a system of communication among professionals that focuses on client and used to coordinate interventions and treatment (patient oriented medical record?)
- \* A role for AI?

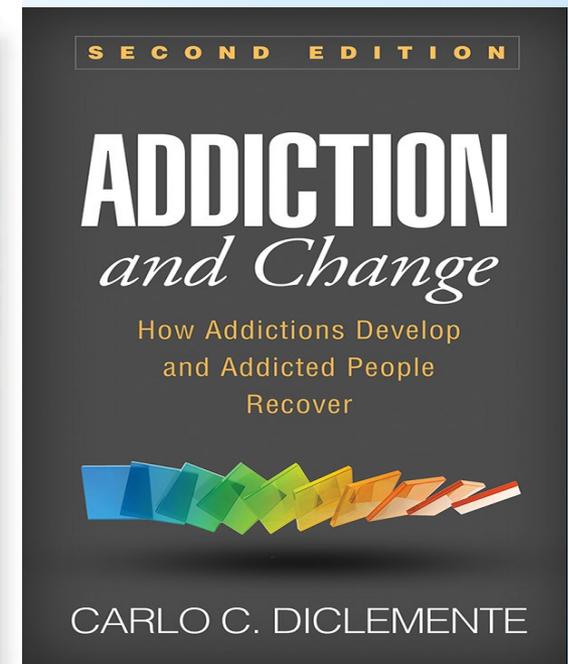
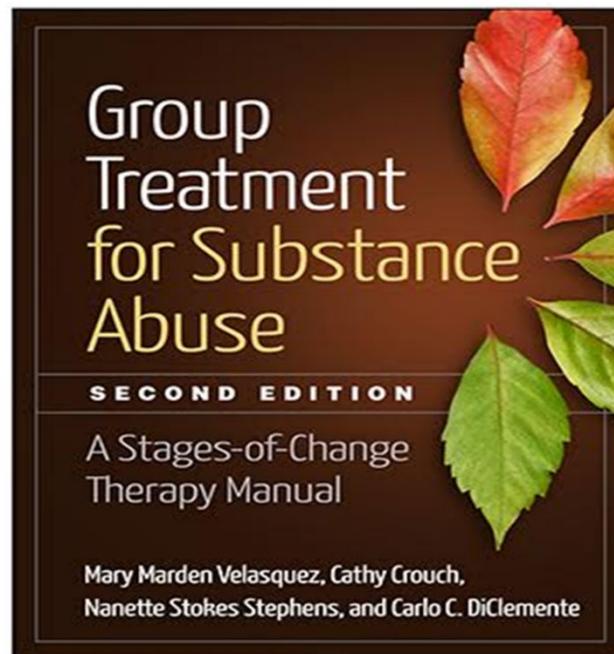
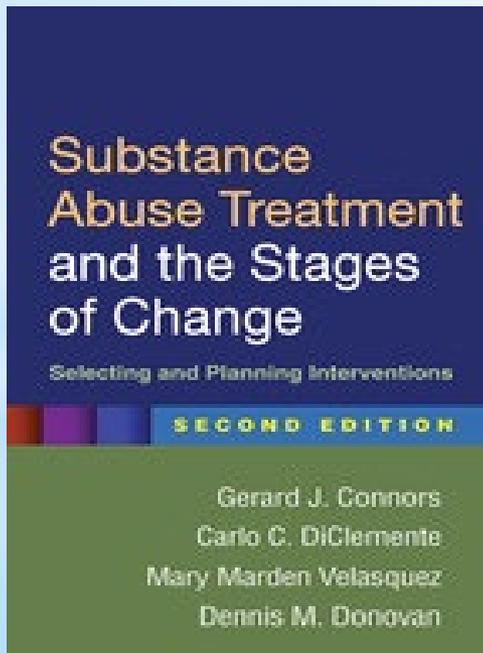
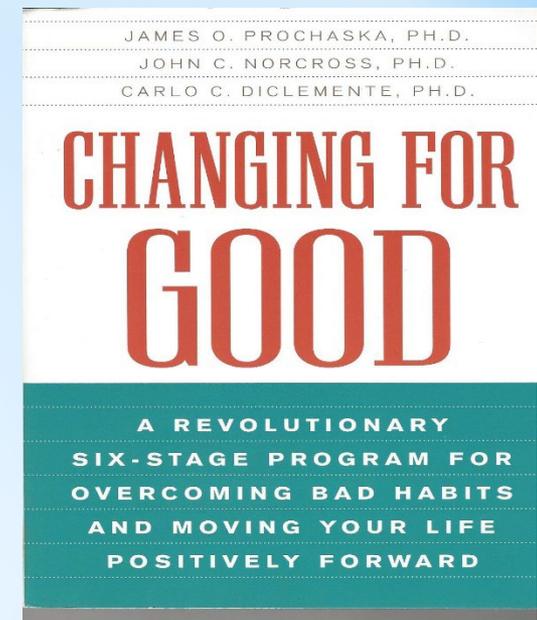
## \* Some Solution Focused Suggestions

- \* 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

- Carbonari, J. P., & DiClemente, C. C. (2000). Using Transtheoretical model profiles to differentiate levels of alcohol abstinence success. *Journal of Consulting and Clinical Psychology, 68*(5), 810-817.
- Connors, G., Donovan, D., & DiClemente, CC. (2013) *Substance Abuse Treatment and the Stages of Change* (Second Edition). New York: Guilford Press.
- Connors, G. J., Longabaugh, R., & Miller, W. R. (1996). Looking forward and back to relapse: Implications for research and practice. *Addiction, 91*, S191–S196.
- Dawson, D. A., Goldstein, R. B., & Grant, B. F. (2007). Rates and correlates of relapse among individuals in remission from DSM-IV alcohol dependence: A 3-year follow-up. *Alcoholism: Clinical & Experimental Research, 31*(12), 2036-2045.
- DiClemente, C. C., Holmgren, M. A., & Rounsaville, D. (2020). 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. (2007). Mechanisms, determinants and process of change in the modification of drinking behavior. *Alcoholism: Clinical and Experimental Research, 31*(S3), 13S-20S.
- 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., Crisafulli, M.A. Relapse on the Road to Recovery: Learning the Lessons of Failure on the Way to Successful Behavior Change. *J Health Services Psychol 48, 59-68* (2022). <https://doi.org/10.1007/s42843-022-00058-5>

## References (continued)

- DiClemente, C.C. & Crisafulli, M (2016) Counting Drinks Needs a Broader View of Alcohol Relapse and Change. *Alcoholism Clinical and Experimental Research*, 41, 2, 266-269
- 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.
- DiClemente, C. C. (2007). Mechanisms, determinants and process of change in the modification of drinking behavior. *Alcoholism: Clinical and Experimental Research*, 31(S3), 13S-20S.
- Firestein, S (2016) *Failure: Why Science is so Successful*. Oxford University Press, NY.
- Hunt, W. A., Barnett, L. W., & Branch, L. G. (1971) Relapse rates in addiction programs. *Journal of Clinical Psychology*, 90, 586–600.
- Marlatt, G. A., & Gordon, J. R. (Eds.). (1985). *Relapse prevention*. New York: Guilford Press
- Maisto, S. A., Roos, C. R., Hallgren, K. A., Moskal, D., Wilson, A. D., & Witkiewitz, K. (2016). Do Alcohol Relapse Episodes During Treatment Predict Long-Term Outcomes? Investigating the Validity of Existing Definitions of Alcohol Use Disorder Relapse. *Alcoholism, clinical and experimental research*, 40(10), 2180–2189. doi:10.1111/acer.13173
- Miller, W. R., Zweben, A., DiClemente, C. C., & Rychtarik, R. G. (1992). *Motivational Enhancement Therapy manual: A clinical research guide for therapists*. Rockville, MD: NIAAA.
- Prochaska, J.O., Norcross, J.C. & DiClemente, C.C. (1994) *Changing for Good*. New York: Avon books.
- Shaw, M. A. & DiClemente, C.C. (2016) Relapse Vulnerability Measure of the Alcohol Abstinence Self-Efficacy Scale Predicting Time to first Drink and Amount of Drinking. *Journal of Studies on Alcohol and Drugs*. 77(3), 521-525. doi: 10.15288/jsad.2016.77.521
- Syed, M (2015). *Black Box Thinking: Why Most People Never Learn from their Mistakes-but Some Do*. Penguin, New York.
- 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.
- Witkiewitz, K., & Marlatt, G. A. (2007). Modeling the complexity of post-treatment drinking: It's a rocky road to relapse. *Clinical Psychology Review*, 27(6), 724-738.