Relapse and Recycling: the Function of Failure in Successful Behavior Change

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- I have no conflicts of interest in this area

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Overview

- Creating Lasting Change: A Stage of Change Perspective
- Obstacles to Sustaining Change
- How do Slips, Lapses, and Relapse (Reoccurrence) Fit into Recovery
- Role of Recycling
- Debriefing and Managing Relapse
- Success Requires a Short and Long Term View for Client and Provider

Unsuccessful Behavior Change:
A Failure to Launch

There are many different obstacles and things that can go wrong
When launching a rocket. It is rocket science and failure is critical
to an ultimately successful launch.

Successful Sustained Behavior Change

- Is often as challenging as a successful rocket launch
- Involves multiple tasks and aspects of human functioning
- Can take a long time to get all the parts working together
- Most often takes multiple unsuccessful attempts and persistent focus and continued effort

HEALTH PROMOTION & DISEASE PREVENTION	REQUIRE	SUCCESSFUL BEHAVIOR CHANGE
CANCER PREVENTION		INITIATION
HEALTH PROMOTION		
SAFETY & INJURY PREVENTION		MODIFICATION
MENTAL HEALTH		
SUBSTANCE ABUSE		CESSATION

Examples of Failure to Change

- Baltimore Sun – Heart Patients not reaping fruits of research
- Medical research has revealed enough about the causes and prevention of heart attacks (avoid smoking and control cholesterol, blood pressure and blood sugar) that they could be nearly eliminated yet 16 million are living with coronary heart disease and nearly half a million die from it each year.
- Opioid Overdose deaths occur even after being revived with Naloxone

What interferes with a successful behavior change launch?

- Misjudge the complexity of the Process of Change
- Unrealistic short term expectations
- Think it should be easy (Just Do It)
- Stigma and Shame if we are not successful
- Discouragement, a growing sense of helplessness, and giving up on trying
- Failed attempts undermine self-efficacy

What if this was the experience of the folks at NASA?

Addiction a Prototype of the Change Process

- A problematic pattern of behavior that becomes well maintained and stable
  - Involves genetic, physiological, brain, cognitive, behavioral and social dimensions
  - Difficult to moderate and change
  - Successful behavior change is part of the solution

- Similar to other chronic conditions that have a behavioral component (Diabetes, Cardiovascular Disease, Obesity, Anxiety and Depression

How Do We Get from Here to There

Consequences

Motivation

Medications

Treatments

Social support

Quit Attempts

The Pathway to Recovery and Wellness

- A journey
  - with a lot of detours and way stations
- A process of change
  - stages and processes of change
- Millions successfully made the recovery journey from Substance Use Disorders & Mental Health Conditions
  - Reality of Recovery and Wellness
  - Often not with a single change or one attempt
- What is the role of relapse or failure to launch?
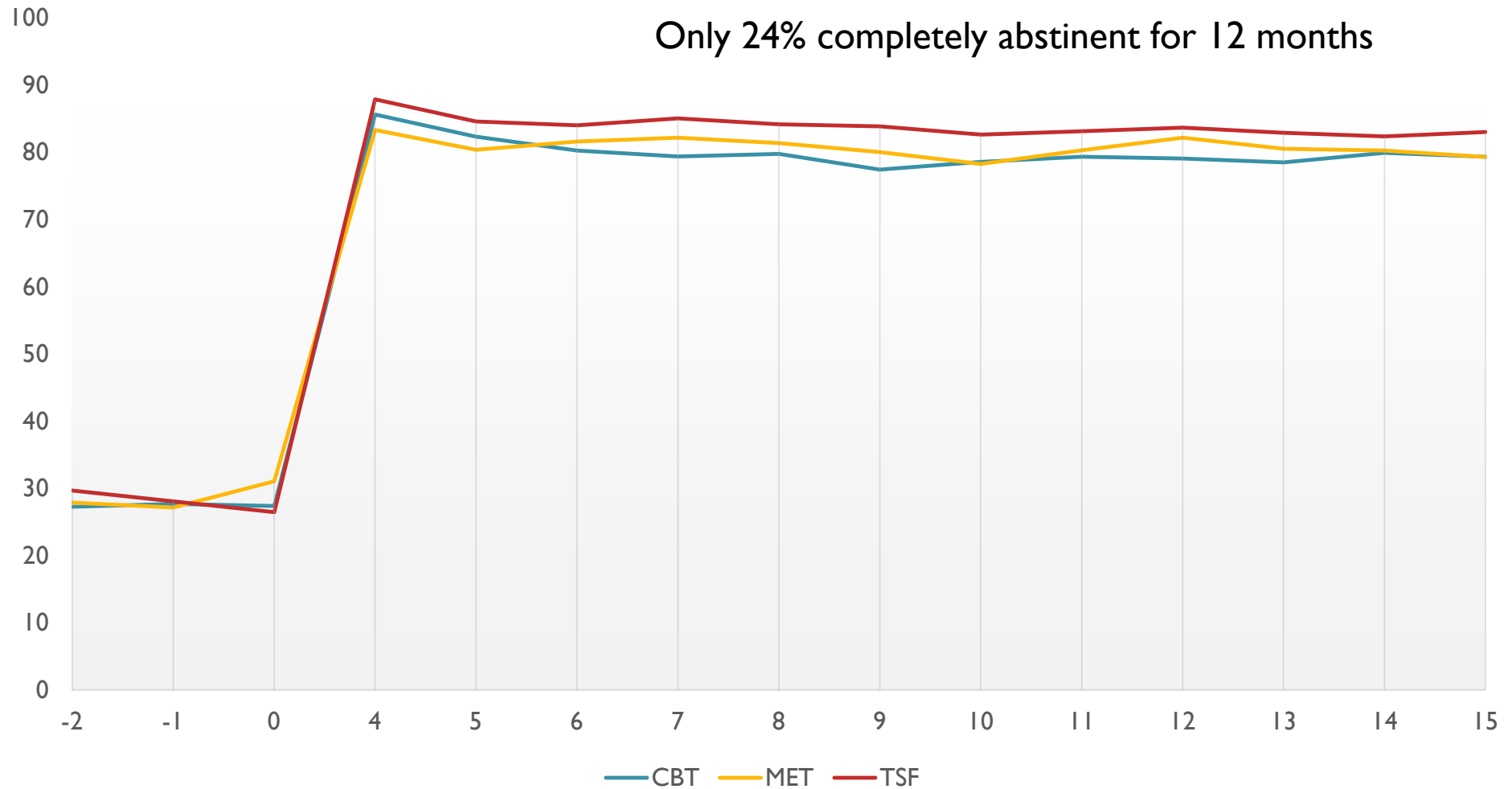
Change ≠ Linear Process: Relapse & Recycling

Success

what people think
it looks like

Success

what it really
looks like
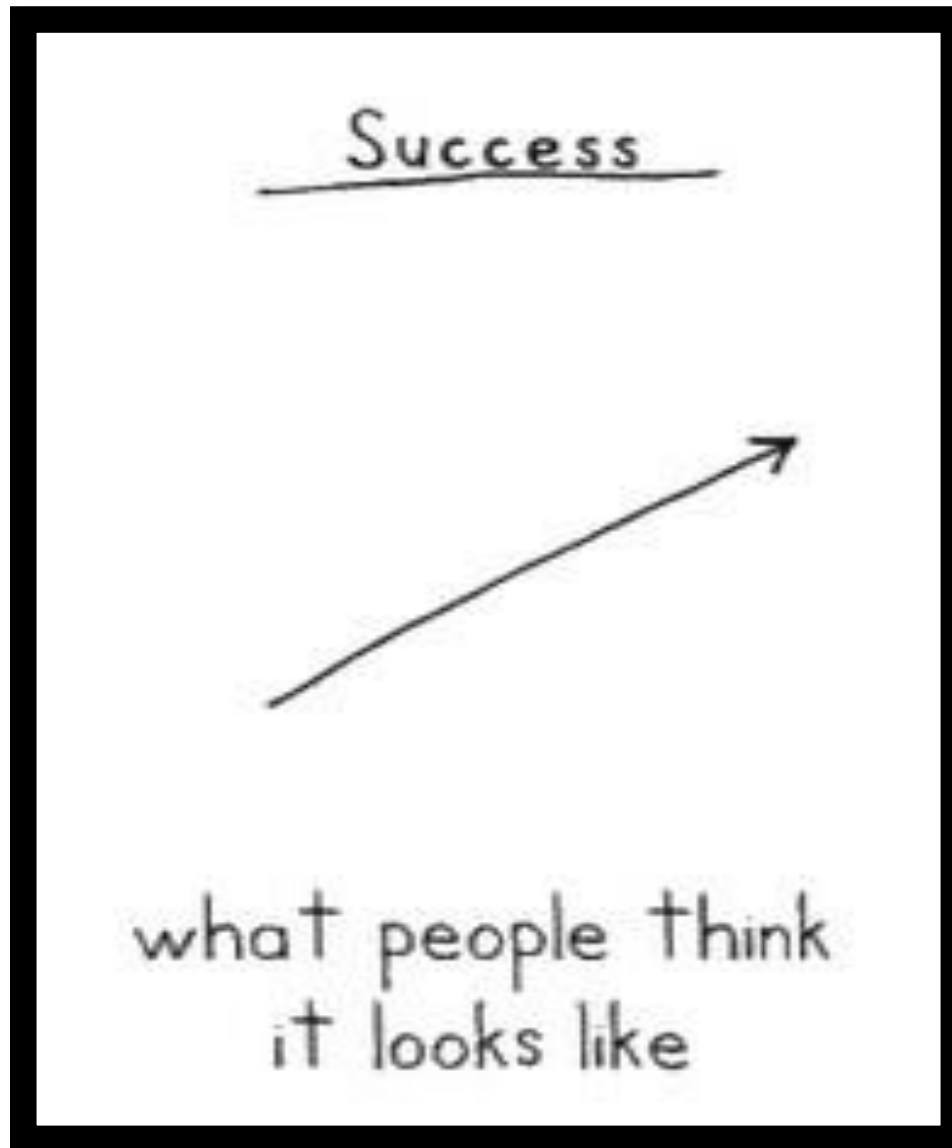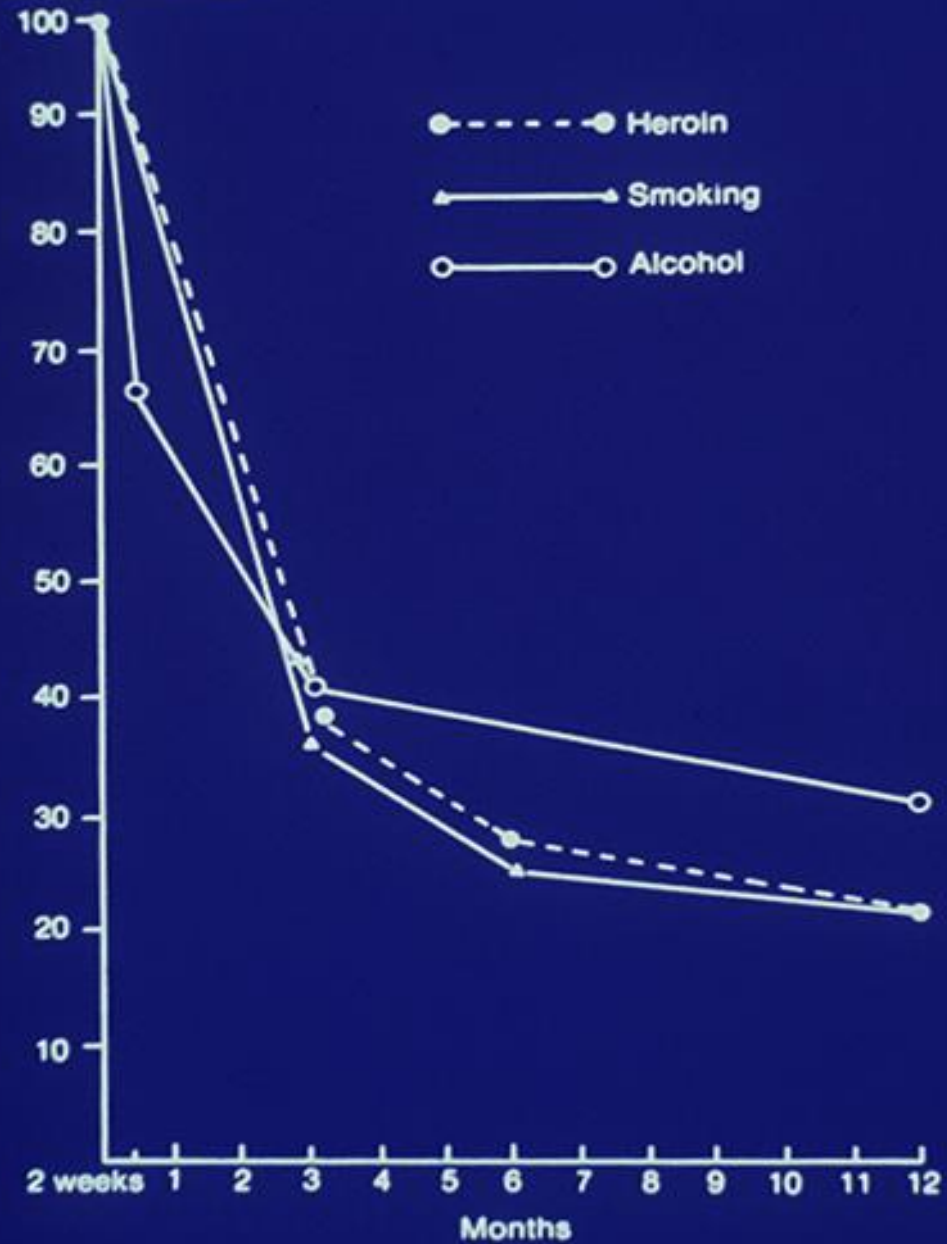
Hunt, Barnett, & Branch, 1971

Project MATCH: Mean Percent Days Abstinent as a Function of Time (Outpatient)

Only 24% completely abstinent for 12 months

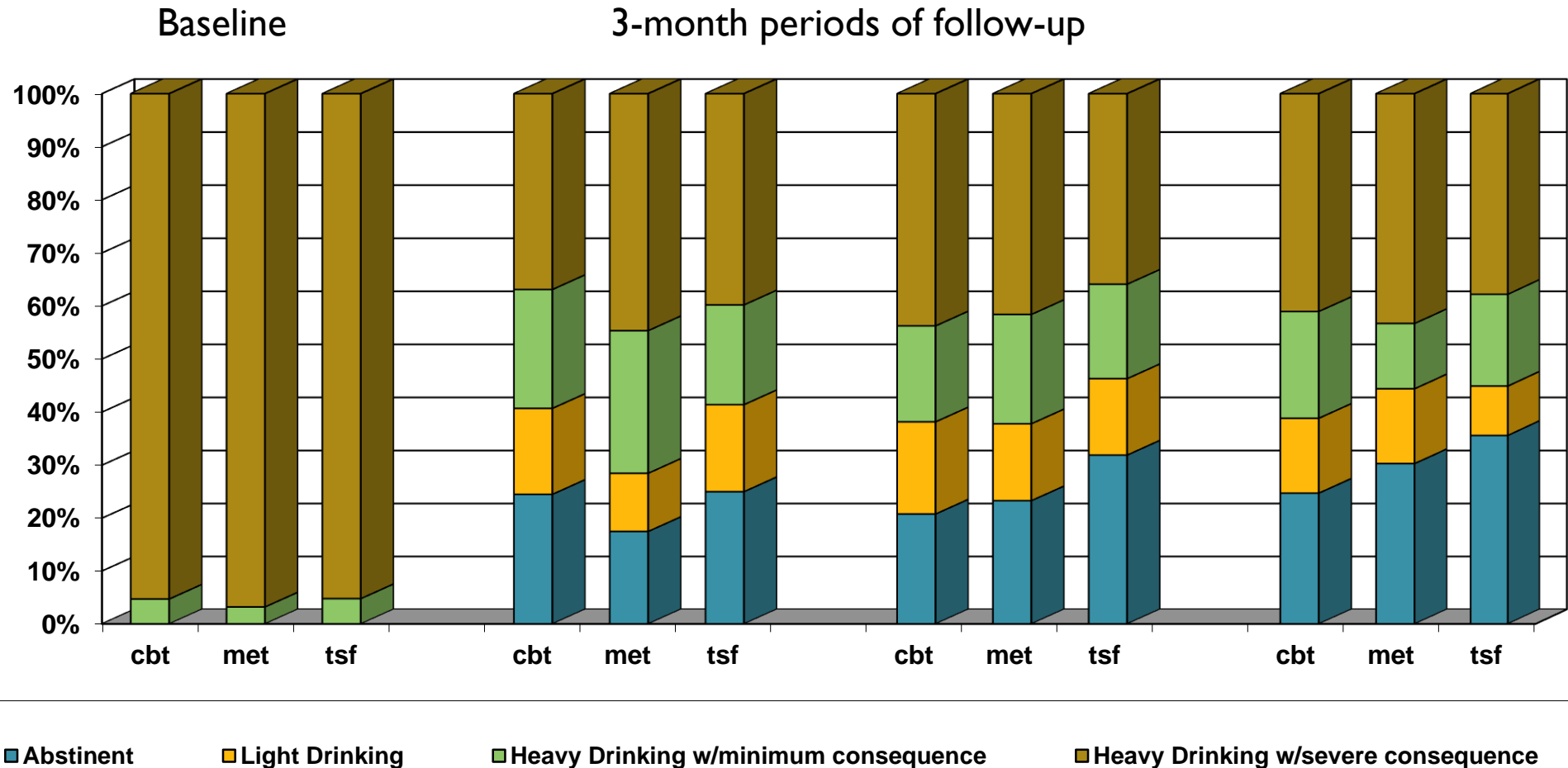Legend: CBT — MET — TSF

PMRG, 1997

Project MATCH Mean Drinks per Drinking Day as a Function of Time (Outpatient)
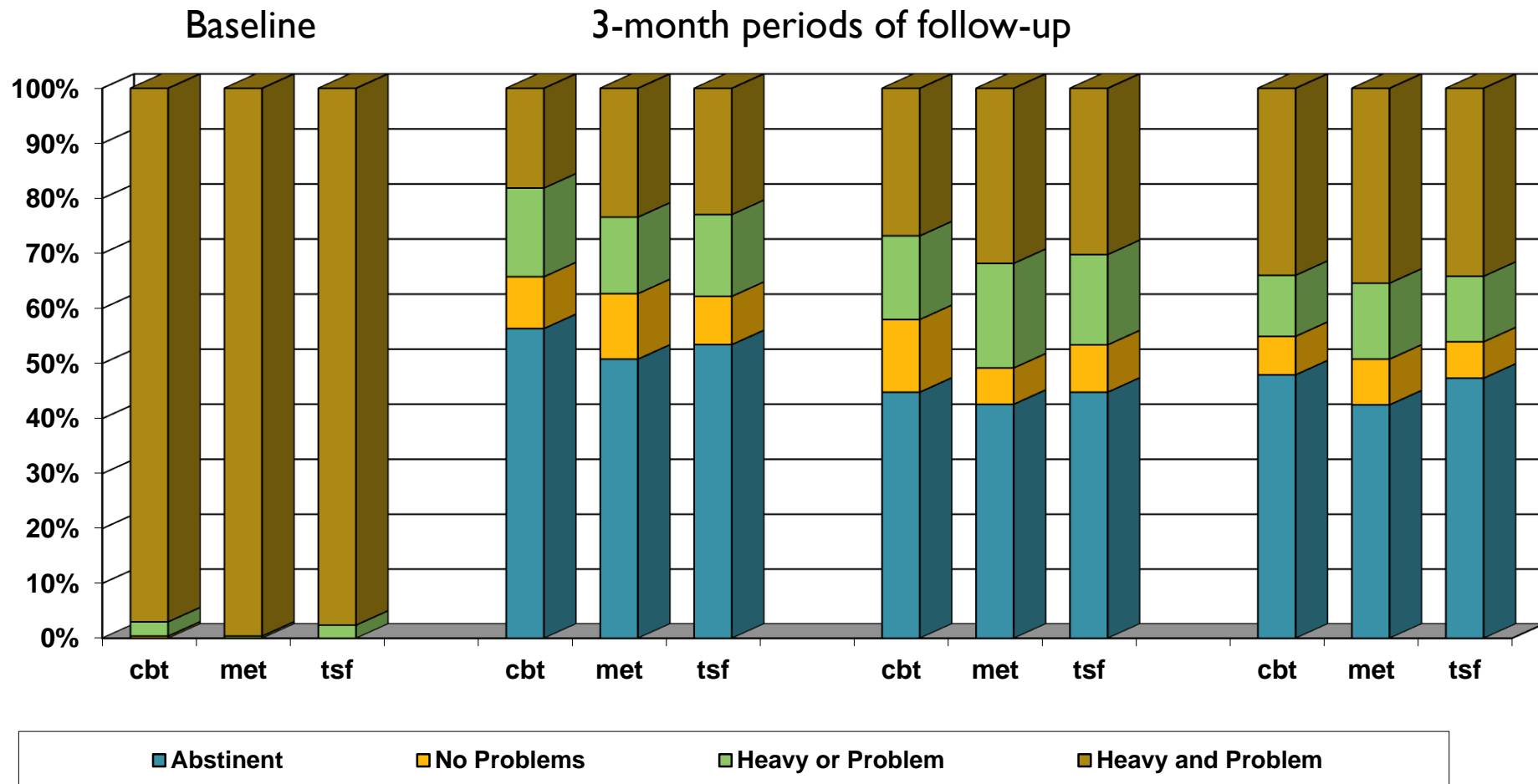
PMRG, 1997
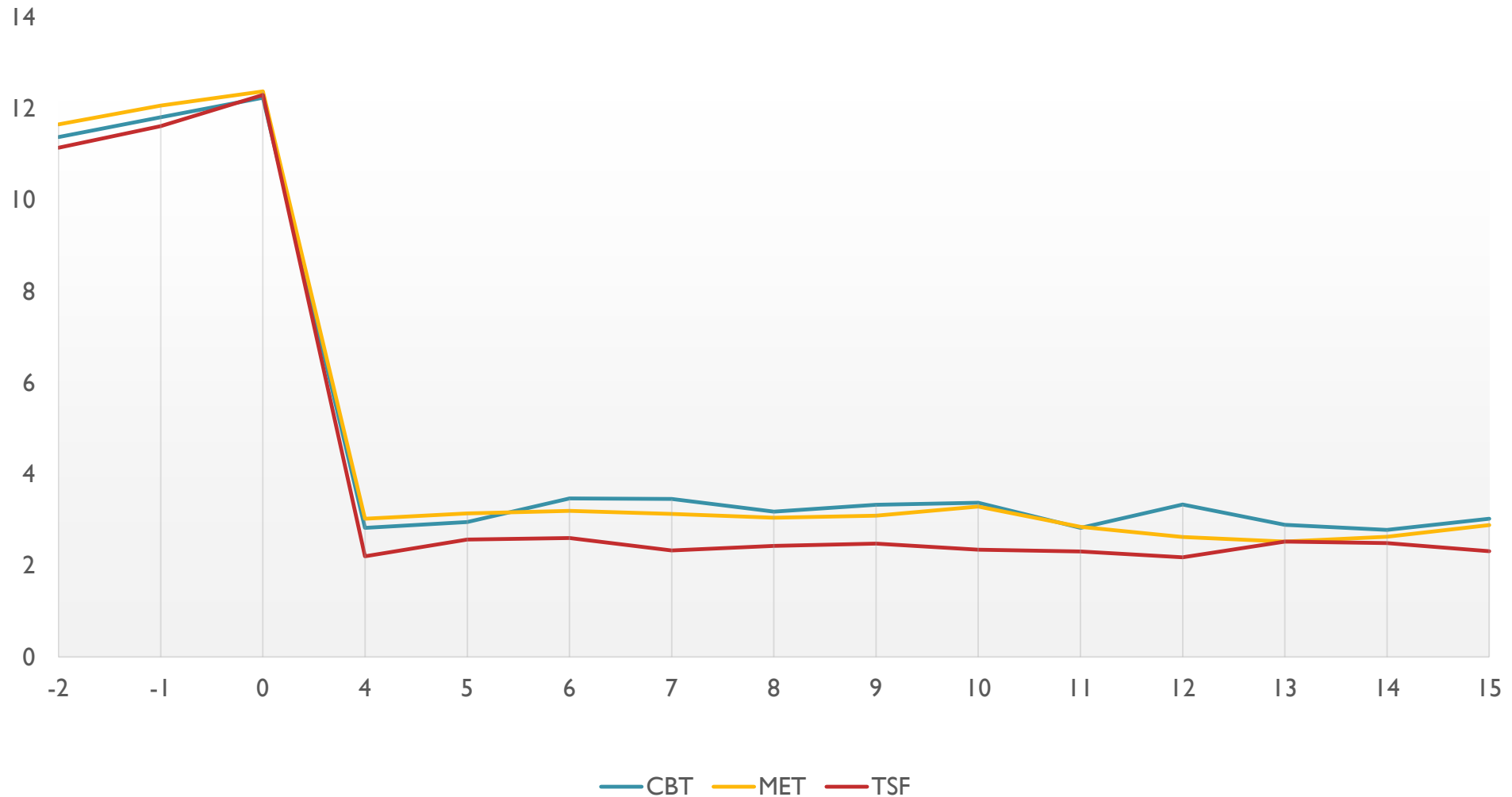
Drinking and Problem Status by Treatment Condition (Outpatient)

Cisler & Zweben, 1999

Drinking and Problem Status by Treatment Condition (Aftercare)

Cisler & Zweben 1999

Baseline   3-month periods of follow-up

Legend: ■ Abstinent ■ No Problems ■ Heavy or Problem ■ Heavy and Problem

MODELS OF RELAPSE

HOW DO WE UNDERSTAND THE DIFICULTY TO SUSTAIN CHANGE?

Models of Relapse: Medical Model

- Recurrence due to some pathogen or brain neuroadaptation that makes change difficult if not impossible without some intervention (aided by a medication if possible)

- Chronic relapsing disease

- Relapse to be expected

- Repeat or change treatment

The Science of Drug Use and Addiction: The Basics

- Addiction is defined as a chronic, relapsing disorder characterized by compulsive drug seeking, continued use despite harmful consequences, and long-lasting changes in the brain. It is considered both a complex brain disorder and a mental illness. Addiction is the most severe form of a full spectrum of substance use disorders, and is a medical illness caused by repeated misuse of a substance or substances.

NIDA. 2020, June 25. The Science of Drug Use and Addiction: The Basics.
Retrieved from https://www.drugabuse.gov/publications/media-guide/science-drug-use-addiction-basics
on 2020, September 11

Models of Relapse: Cognitive Behavioral Model

" I already messed up… I might as well keep drinking."

- Marlatt & Gordon (1985)– Cues, coping, cognitions, & lifestyle balance
- Focus originally on Maintenance - how to continue change and what gets in the way
- Focused shifted to relapse and how to prevent failure
- Remediating cognitive distortions & using coping skills

How Does Relapse Happen? The Cognitive Behavioral Model
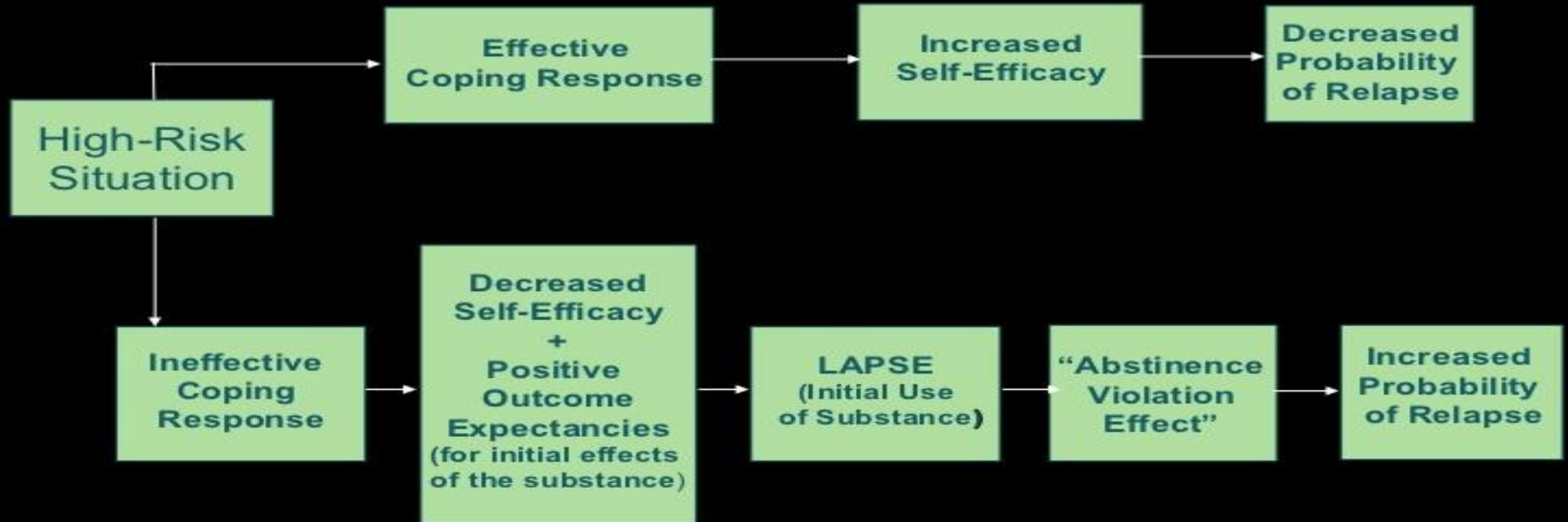
Slides: Bowen et al. 2011

Marlatt & Gordon, 1985

Relapse Precipitants

- Cravings, Urges, Temptations

- Social Cues & Situations

- Pleasure & Positive Reinforcement

- Testing Control

- Significant Others

- Stress, Negative Affect

- **LIFE**

Relapse Replication Study Conclusions

- *"Exposure to high risk situations does not in itself trigger relapse. In fact, relapse, trigger and precipitant may be **misleading constructs**."*

- *" Exposure to adversity was virtually universal in our sample… It was **client's coping skills** for dealing with the environment and not mere exposure to risk and stress that determined whether relapse would occur."*

- *"All must face adversity. The key is how one responds and copes when it comes".*

Connor et al, 1996

Models of Relapse: Learning Model

- Successive Approximation Learning

- Social Learning Perspective

- Transtheoretical Model →
  - ◦ Adequately completing Stages of Change Tasks

Try *Fail* *Try Again* *SUCCEED*

Bandura 1977; DiClemente, 2008, 2018
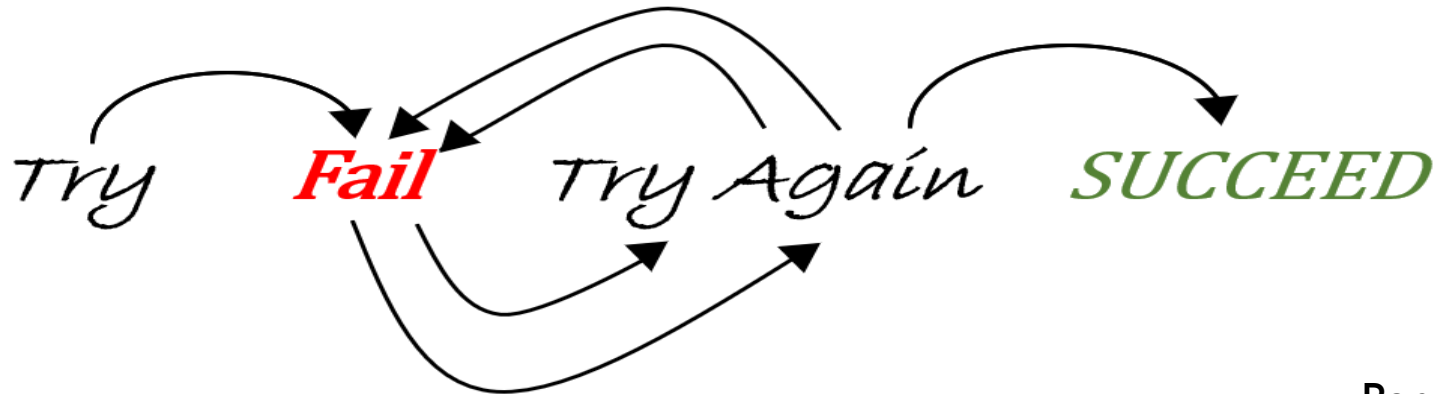
Relapse is NOT a Substance Abuse Problem

Relapse is...

- A problem of starting & sustaining **any** behavior change.

- A problem of **not** completing the critical tasks of the stages of change **adequately.**
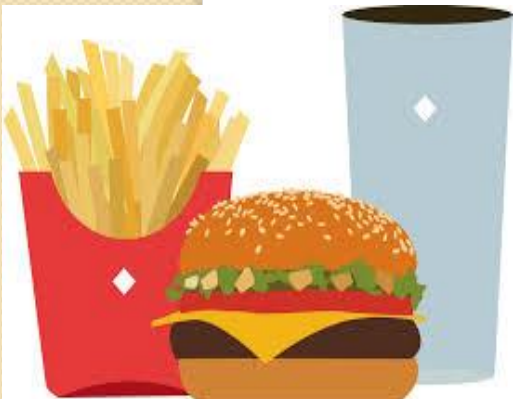
COMPARISON OF RELAPSE RATES BETWEEN DRUG ADDICTION AND OTHER CHRONIC ILLNESSES
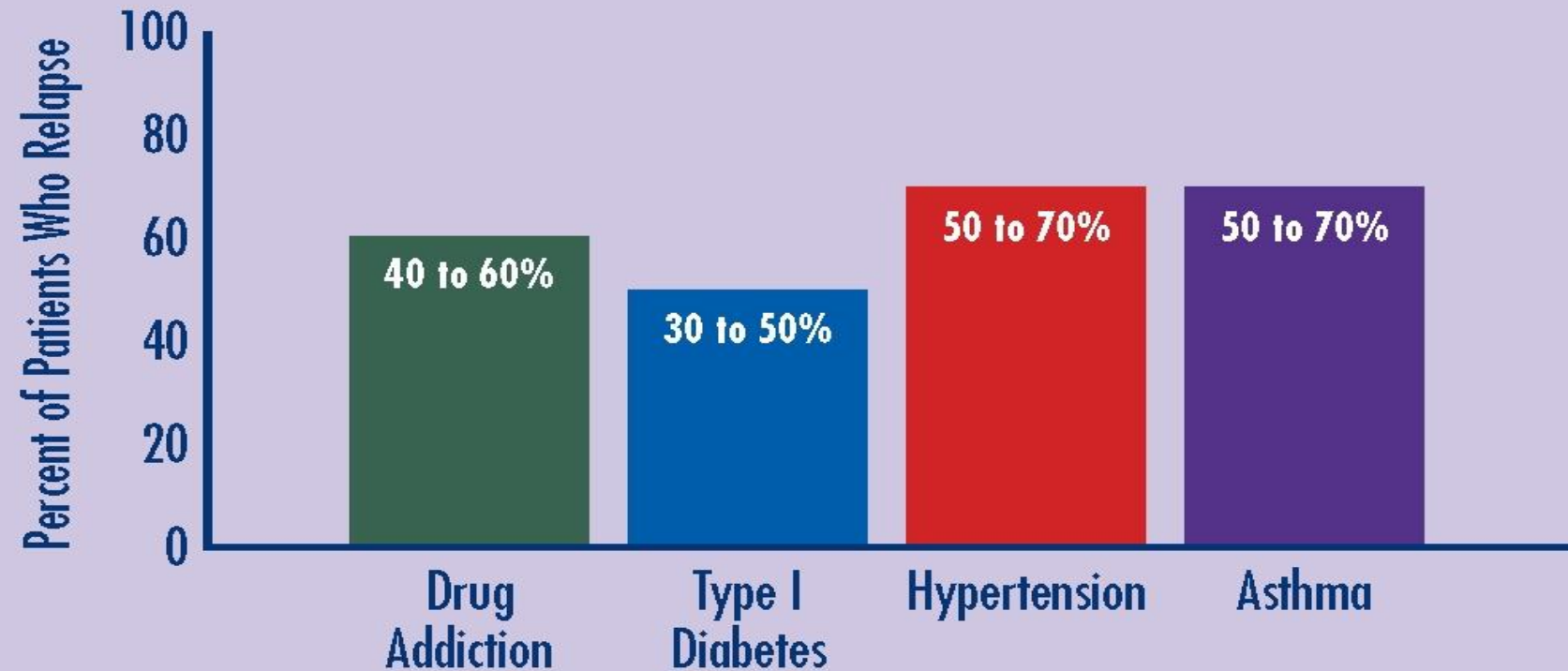
Relapse rates for drug-addicted patients are compared with those suffering from diabetes, hypertension, and asthma. Relapse is common and similar across these illnesses (as is adherence to medication). Thus, drug addiction should be treated like any other chronic illness, with relapse serving as a trigger for renewed intervention.

Source: McLellan et al., JAMA, 2000.

Non adherence

- Over 50% who start a physical exercise regimen are not doing it 6 months later
- Diets are notoriously unsuccessful with relapse rates in the 90%
- About two-thirds of Americans have a prescription medication, approximately 50% do not take their medications as prescribed.
- Today, medication non-adherence leads to 125,000 preventable deaths each year, and about $300 billion in avoidable healthcare costs. (https://www.pillsy.com/articles/medication-adherence-stats)

Relapse: Not an Alcohol or Substance Use Problem

- Relapse is probable with any health behavior change
- Often at same rates as addictive behaviors
- A problem of instigating and sustaining behavior change
- A problem of adequately completing the critical tasks of the stages of change

What do we Know

- Reality is it is difficult to sustain substantial change over time for substance use and other health behaviors
- Outcomes of change attempts are varied and difficult to categorize
- Outcomes vary by timeframe and are not stable
- Sustained Abstinence is often the most stable outcome for SUD

Dawson et al., 2007

WHAT IS A RELAPSE?

DEFINING WHEN SOMEONE HAS RELAPSED HAS BEEN AN ELUSIVE UNDERTAKING

Defining Relapse for AUD

- **"Relapse" is *NOT*...**

  ◦ A categorical outcome: Success vs. Failure

  ◦ Definable by number of drinks *(Maisto et al., 2016)*

  ◦ The opposite of recovery

  ◦ Maybe necessary for change but not essential since sustainte recovery occurs for many

Defining AUD Relapse (Maisto et al., 2016)

- Numbers of drinks or consequences did not predict relapse well

- Need a better way than counting drinks or consequences

- Drinking during treatment predicted drinking after treatment:
  - This is not relapse
  - It is a failure to instigate or make a change

Defining Relapse in other behaviors

❖ Depends on the Action criteria
  ❖ going to the gym 4 times a week
  ❖ Eating a low fat diet
  ❖ Cutting down on cigarettes from 20 to 10 per day
  ❖ Taking medication daily
  ❖ Meditating 3 times a week

❖ What constitutes a slip or Lapse
  ❖ A brief return to former behavior
  ❖ But still trying to continue to change the behavior

Who Decides When Someone Relapsed?

- Biochemistry (positive urinalysis; biochemical marker; glucose levels)
- Consequences (DUI, weight gain)
- Arbitrary number of drinks or QF
  - Percent Days Abstinent or Heavy Drinking DAYS
  - # of Drinks per Drinking Day
  - Exercising only once a week
- Provider
- **Changer – When Individuals "give up" on continuing efforts to make the change**

Defining Relapse for AUD

- **"Relapse" is...**

  ◦ A multidimensional process *(RREP studies, Addiction Supplement, 1996)*

  ◦ Influenced by:
    - Individual, contextual, and social factors and Interactions among these factors

  ◦ A Learning Process for Achieving Successfully Sustained Change and Recovery

  ◦ Defined best by the client as abandonment of the current attempt to change

DiClemente & Crisafulli, 2016

How to Understand Relapse

- If it occurs so frequently and with so many behaviors we need to examine
  - not just "why" do people relapse but
  - What is the function of relapse in the process of change.
- If it is a chronic relapsing condition how do so many finally get into recovery using many different paths?
- Why does relapse happen across lots of health behaviors and not just addictions

Error free learning? – Errors are Valuable

- Experimental investigations indicate that errorful learning followed by corrective feedback is beneficial to learning (Metcalfe, 2017)

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

~ William Edward Hickson

Not just harder but smarter!   Prochaska et al., 1994

# Failure (Firestein, 2016)

- The Lifeblood of Scientific Inquiry
- There are "Good" Failures if the goal is Success
- A continuum of failure
- Types of failure: a taxonomy
  - Mistakes
  - Life Lessons
  - Unexpected Learning
  - Opportunities for Future Discovery

Never a failure, always a lesson

WHAT DO WE KNOW ABOUT THE BEHAVIOR CHANGE AND RECOVERY PROCESS

What Predicts Successful Change?

Theoretical and Practical Considerations Related to Movement Through the Stages of Change
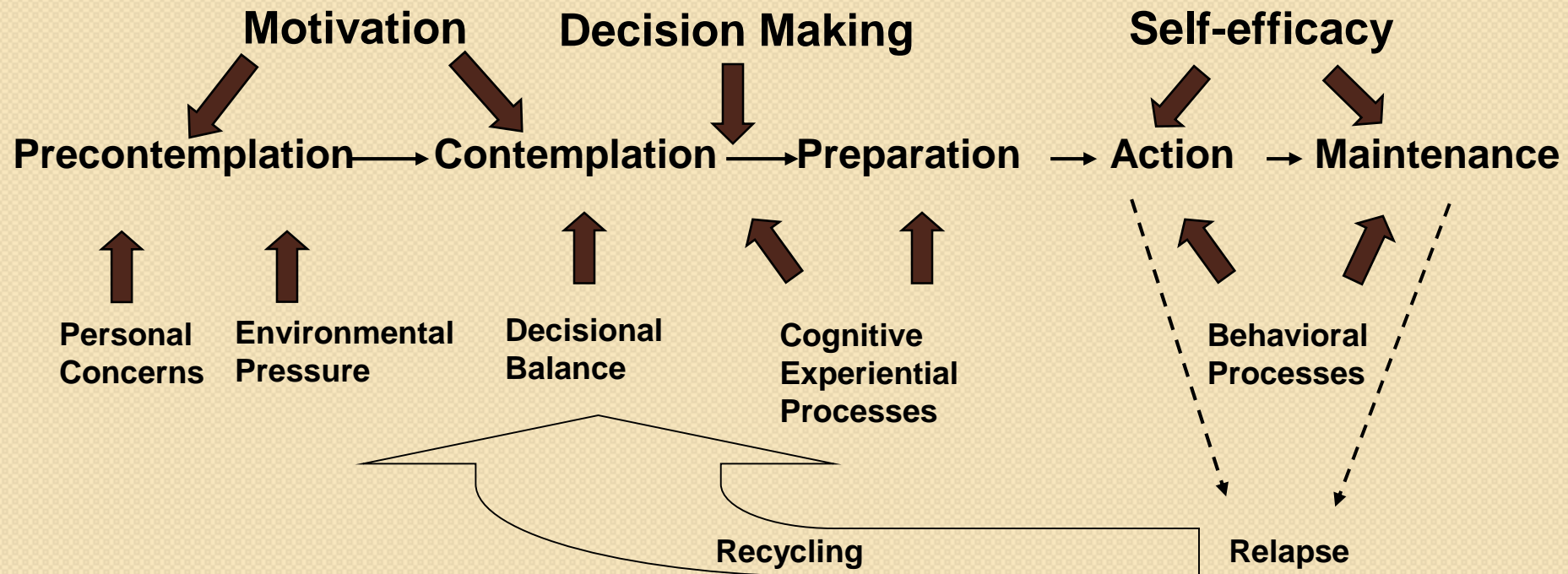
What would help or hinder completion of the tasks of each of the stages and what contextual issues and influences deplete the self-control strength needed to engage in the processes of change needed to complete the tasks?

# Who are these long term successes?

- Often individuals who have tried to change multiple times before (~45% of OP had prior inpatient treatment in project match)

- Were more ready in terms of stages of change on entry to treatment

- Had been able to decrease levels of temptation and increase confidence or self-Efficacy

- Used appropriate processes of change and support resources to a greater extent

Relapse: An "Unfolding Process"

- To understand person in context need a complex, multidimensional model (Witkeiwicz & Marlatt, 2007)
- Need a dynamic not static system perspective
  - Not like just restarting the car
  - Not like an "on-off" switch
  - A "chaotic" system with lots of moving parts
- Need to understand macro and micro processes (stage tasks, change mechanisms, contextual forces and events that influence recovery)

Witkiewitz & Marlatt, 2007; Brandon et al., 2007

Stages of Change Model
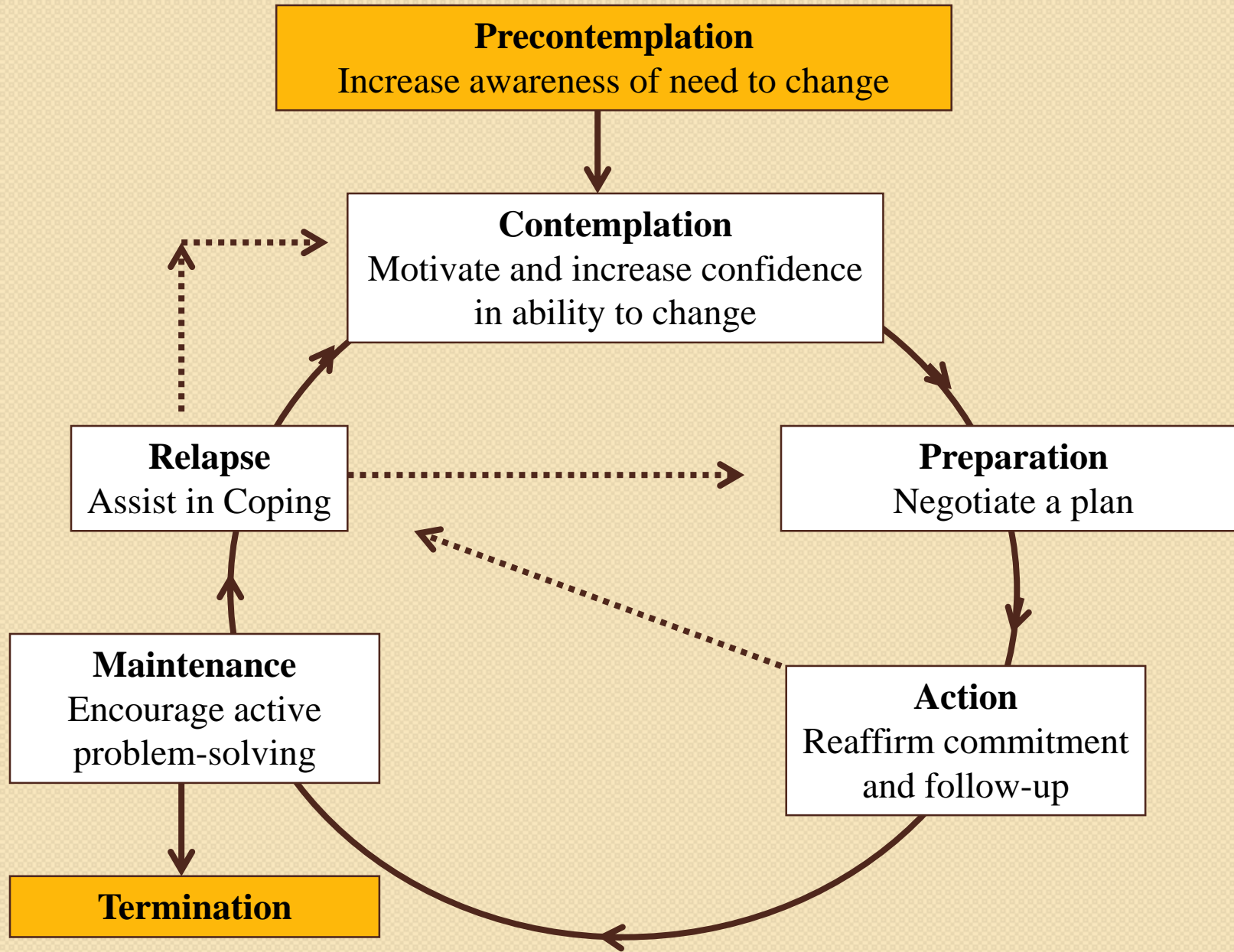
TASK COMPLETION & MOVEMENT BETWEEN STAGES
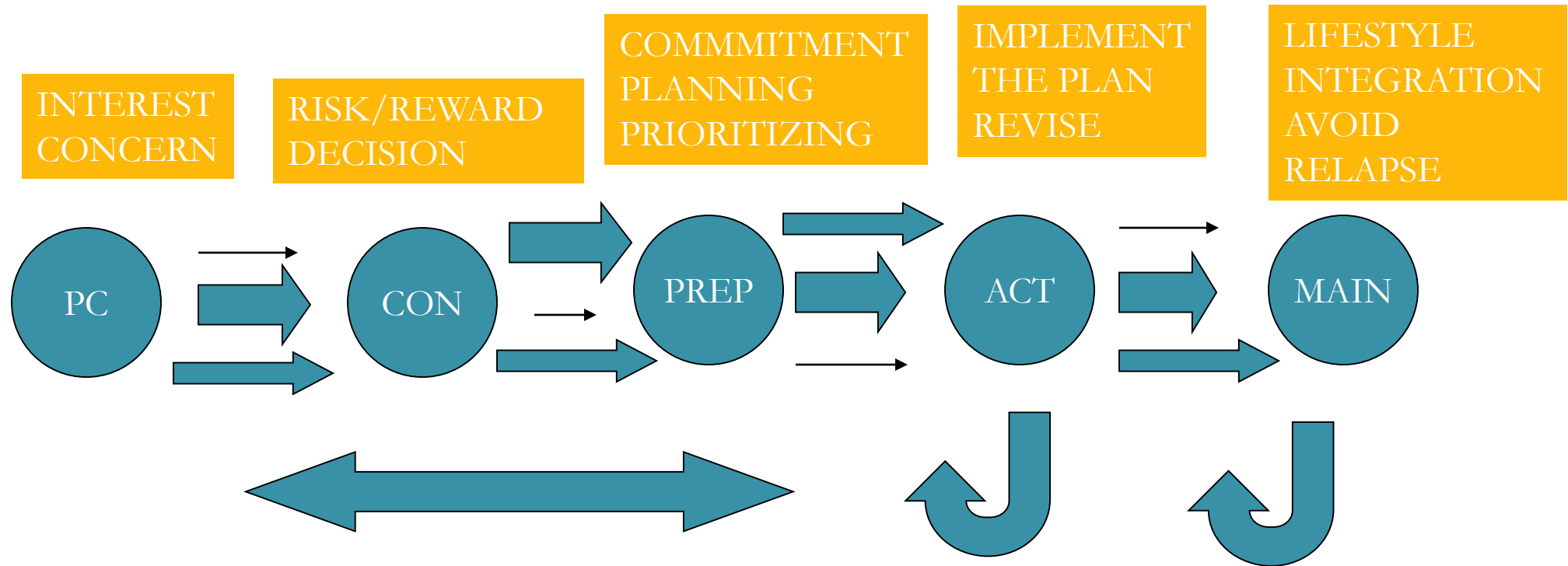
If we use a learning perspective, we need to learn how to accomplish each task well enough to support sustained change

Keys to Successful Recovery

- Most addicted individuals will recycle through multiple quit attempts and multiple interventions

- However successful recovery occurs for a large number of addicted individuals over time (42 million former smokers; millions in recovery)

- They need to get the process right or done well enough to support sustained change and enter into recovery

DiClemente, 2007

What predicts Success: Multiple Studies

- Coping Skills
- Self-Efficacy
- Decision making
- Planning
- Implementing and Revising Plan
- Reduction in Temptation/Craving

- Adequate Completion of Stage Tasks

DiClemente, et al., 2019

Making, Breaking or Modifying Behavior is Difficult

- Good habits are hard to develop (physical activity, healthy diet)
- Bad habits are difficult to change (ask your spouse or partner)
- Behavior change is a complex process involving multiple dimensions not simply motivation or "just do it".
- Behavior change involves beliefs, biases, feelings and thoughts, commitment and planning, values and meaning

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 can become compromised
- IT'S A COMPLICATED PROCESS
- RECOVERY IS A MARATHON NOT A SPRINT
- There are also critical mechanisms that make it hard to change
  - **neuroadaptation, impaired self-regulation** and **importance/salience** are especially important for addictions

DiClemente, 2018

Recovery and Change

- SAMHSA's working definition of recovery from mental health & substance use disorders:

"A process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential" (SAMHSA, 2012).

WHAT DO WE KNOW ABOUT THE RELAPSE, RECYCLING AND RECOVERY

The important role of failure

SUCCESS IS ADVANCING FROM FAILURE TO FAILURE WITHOUT LOSING ENTHUSIASM

Ever Tried. Ever Failed. No Matter. Try Again, Fail Again. Fail Better
(Samuel Beckett)

Failure, Stuart Firestein

MISTAKES and ERRORS

- "A mistake is a mistake whether we make it for a dumb reason or a smart one, whether it has a bad outcome or a good one.

- If we decree that mistakes aren't really mistakes when they arise from a positive process (doing our best) or result in a positive outcome (learning something) we reinforce the notion that wrongness is intrinsically negative."

- For Every species, then, error is a mechanism of survival and change.

Being Wrong by Katherine Schultz 2010 p 288

Examining Failure - Promoting Success

- Black Box Thinking: Why most people never learn from their mistakes-but some do (Matthew Syed, 2015)

- Examining failures and mistakes to figure out how to learn from them

- Airline Industry Black Box Thinking
  - Examine the data – but looking for the right data
  - Reconstruct the event – entire not just moment
  - Simulate the event to ensure you understand what went wrong – thinking, feeling, and behavior

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.

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

Matthew Syed page265-266

One Clear Message from People in Recovery

- 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)

How Can We Promote Recycling and Recovery?

- More than what happened in the moment
- When debriefing a relapse:
  - 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?

Prospective Hindsight Exercise

- Also in medical settings called a pre-mortem
- Consider how a plan has gone wrong before it has been put into action
- NOT just what *might* go wrong but consider the failure as happened and ask what went wrong
- Making the failure concrete rather than abstract, it changes the way the mind thinks about the problem
- You relapsed or went back to using – what went wrong
- Have each person generate one or two reasons and read aloud in group?

See Daniel Kahneman and Syed, page 292

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

Addressing Stigma

- 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)

Relapse is NOT the opposite of recovery.

NOT Trying is

Cyclical Model for Successfully Sustained Change

- Keys to successful recycling
  - Persistent efforts
  - Repeated attempts
  - Learning from the past
  - Recovering from neuroadaptation
  - Find support for impaired self-regulation (scaffolding)
  - Begin building a new meaningful life without the addictive behavior
  - Never Give Up

  - "Stick and Stay"
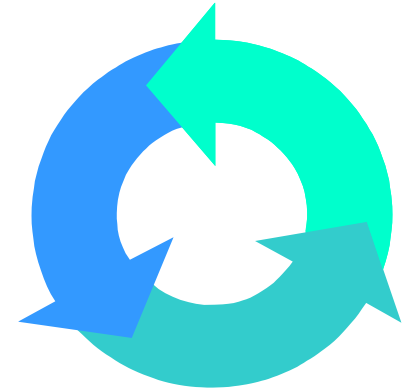
The Role of Treatment in the Process of Change

- Treatment interacts with the process of self-change and seems to be a time limited event in the course of a larger self-change process

- The role of treatment is to facilitate self-change just as the role of medicine is facilitate the natural healing process

- Trial and failure and success are part of the successive approximation learning that is part of all of our lives.

Build on the
Experiences of
The Past

PROCESS OF

Be Part of the
Larger Picture

FORMAL	INTER	VENTIONS

CHANGE

Don't Be
Myopic

Respect the
Entire
Change Process

Let's retire the term "Relapse"

- **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

Recycling on the Road to Recovery

- Is reoccurrence and recycling necessary for understanding human behavior change?
- Reoccurrence happens often with all chronic conditions (why they are "chronic") and with most health behaviors
- Focusing on how individuals can benefit from the experience of a failure to initiate or sustain change can change the perspective of research and clinical practice in health and addictive behaviors

THANK YOU

Questions?

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