Addiction and Change: Understanding Initiation and Promoting Recovery

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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
Traditional Models for Understanding Addictions

- Social/Environmental Models
- Genetic/Physiological Models
- Personality/Intra-psychic Models
- Coping/Social Learning Models
- Conditioning/Reinforcement Models
- Compulsive/Excessive Behavior Models
- Integrative Bio-Psycho-Social Models
Etiology of Addictions

All of these factors can have arrows to initial experience and then to any or all of the three patterns of use. Most could have arrows that demonstrate linear or reciprocal causality as well.
Change the Integrating Principle

- No single developmental model or singular historical path can explain acquisition of and recovery from addictions
- A focus on the Process of Change and how individuals change offers a developmental, task oriented, learning based view that can be useful to clinicians and researchers using a variety of traditional etiological and cessation models
BECOMING ADDICTED

- Happens over a Period of Time
- Has a Variable Course
- Involves a Variety of Predictors that can be both Risk and Protective Factors
- Involves a Process of Change
SUCCESSFUL RECOVERY FROM ADDICTIONS

- Occurs over long periods of time
- Often involves multiple attempts and treatments
- Consists of self change and/or treatment
- Involves changes in other areas of psychosocial functioning
Addiction and Change

- Both acquisition of and recovery from an addiction require a personal journey through an intentional change process.
- Journey influenced at various points by many of the factors identified in the previously reviewed etiological models.
A LIFE COURSE PERSPECTIVE ON ADDICTION

- Cross sectional views and brief follow up studies offer confusing data about predictors and outcomes of prevention and cessation of addiction.
- Multiple biological, social, individual, environmental factors influence transitions into and out of protective and problematic health behaviors.
- Understanding initiation and cessation of these behaviors requires a life course and a process of change perspective.
Motivation

- Motivation can be considered the tipping point for making change happen
- Not a simple or single construct or best thought of as an “on-off” switch
- Most of the time it is defined post hoc: if you are successful, you were motivated
Motivation

- There are various models to explain motivation
  - “Push” Models of internal dynamic forces or drives
  - “Pull” Models of reinforcement, goals, values
  - “Persuasion” Models of influence, social forces
  - “Process” Models of readiness and tasks

- The Process Model changes the conversation from the “what” of motivation to the “how” of motivation
Motivation and the Change Process

- Clients are not unmotivated! They either
  - are just motivated to engage in behaviors that others consider harmful and problematic or
  - are not ready to begin behaviors that we think would be helpful.
- People who seem to have everything to gain from changing a behavior or doing some activity to relieve negative feelings or consequences do not do these things
- Excellent and effective self-management techniques are not used even after they are taught to people who come voluntarily for help.

Motivation is Personal

- Motivation belongs to clients and their process of change.
- However, motivation can be enhanced or hindered by interactions with others (including providers) and events in the life context of the clients.
- Motivation is best viewed as the client’s readiness to engage in and complete the various tasks outlined in the Stages of Change for a specific behavior change.
Motivation Is Critical for Successful Change

- Both brief interventions and alcoholism and substance abuse treatment research indicate a key role for patient motivation.
- In many drinking reduction studies, motivation predicts decreases (Delta study of Shock Trauma patients).
- Project MATCH client initial motivation measured by multidimensional stage measures predicted drinking out to 3 years post-treatment for outpatients.

WHY ARE PEOPLE NOT MOTIVATED TO CHANGE?

- NOT CONVINCED OF THE PROBLEM OR THE NEED FOR CHANGE – **UNMOTIVATED**
- NOT COMMITTED TO MAKING A CHANGE – **UNWILLING**
- ACTUAL OR PERCEIVED ABILITY TO MAKE A CHANGE – **UNABLE**
- DIFFERENT PARTS OF A PROCESS
The Transtheoretical Model of Intentional Behavior Change

STAGES OF CHANGE

PRECONTEMPLATION → CONTEMPLATION → PREPARATION → ACTION → MAINTENANCE

PROCESSES OF CHANGE

COGNITIVE/EXPERIENTIAL  BEHAVIORAL

Consciousness Raising
Self-Revaluation
Environmental Reevaluation
Emotional Arousal/Dramatic Relief
Social Liberation
Self-Liberation
Counter-conditioning
Stimulus Control
Reinforcement Management
Helping Relationships

CONTEXT OF CHANGE

1. Current Life Situation
2. Beliefs and Attitudes
3. Interpersonal Relationships
4. Social Systems
5. Enduring Personal Characteristics

MARKERS OF CHANGE

Decisional Balance  Self-Efficacy/Temptation
How Do People Change?

- People change voluntarily only when
  - They become *interested and concerned* about the need for change
  - They become *convinced* the change is in their best interest or will benefit them more than cost them
  - They organize a *plan of action* that they are *committed* to implementing
  - They *take the actions* necessary to make the change and sustain the change
Stage of Change Labels and Tasks

- **Precontemplation**
  - Not interested

- **Contemplation**
  - Considering

- **Preparation**
  - Preparing

- **Action**
  - Initial change

- **Maintenance**
  - Sustained change

- **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**

A Client/Consumer perspective

- A Consumer Perspective to Care necessitates a shift in emphasis from a concentrating only on our treatments to focusing on our consumers and their motivation and mechanisms of change.
- Most treatment services provide good, effective action-oriented treatments.
- Many of our consumers are unmotivated, overwhelmed with multiple problems, feeling hopeless, or simply not interested or engaged by our services.

Motivation is Multidimensional

- Motivation is best understood as the **readiness and ability** to accomplish the **tasks** needed to move individuals successfully through the stages of change.
- These tasks require **self-regulation skills** that enable the person to engage in the processes of change needed to accomplish the tasks and move the markers of change.
- There are facilitating and hindering personal and environmental factors that affect movement through each of the stages.
Understanding Motivation and Movement through the Stages of Change

- **UNMOTIVATED**
- **UNWILLING**
- **UNABLE**

Precontemplation → Contemplation → Preparation → Action → Maintenance

This Process is as relevant for organizations and service providers as it is for Individuals with mental health and addiction problems.
Tasks and Goals for each of the Stages of Change

- **PRECONTEMPLATION** - The state in which there is little or no consideration of change of the current pattern of behavior in the foreseeable future.

- **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
WHAT INDIVIDUALS or ORGANIZATIONS MUST REALIZE

- MY BEHAVIOR IS PROBLEMATIC OR EXCESSIVE
- MY DRUG USE IS CAUSING PROBLEMS IN MY LIFE
- I HAVE OR AM AT RISK FOR SERIOUS PROBLEMS
- MY BEHAVIOR IS INCONSISTENT WITH SOME IMPORTANT VALUES
- MY LIFE IS OUT OF CONTROL

- WHAT WE ARE DOING IS NOT EFFECTIVE IN MEETING THE NEEDS OF OUR CLIENTS
- OUR APPROACH IS COSTING TOO MUCH FOR THE OUTCOMES WE ARE GETTING
- THERE ARE SERIOUS PROBLEMS IN OUR PROCEDURES, PROGRAMMING, OR PRODUCT
Key Issues and Intervention Considerations

- Coercion or Courts cannot do it alone
- Confrontation breeds Resistance
- Motivation not simply Education is needed
- Intrinsic and Extrinsic Motivations
- Proactive versus Reactive Approaches
- Smaller versus Larger goals and Motivation
Tasks and goals for each of the Stages of Change

- **CONTEMPLATION** – The stage where the individual or society examines the current pattern of behavior and the potential for change in a risk–reward analysis.

- **TASKS**: Analysis of the pros and cons of the current behavior pattern and of the costs and benefits of change. Decision-making.

- **GOAL**: A considered evaluation that leads to a decision to change.
<table>
<thead>
<tr>
<th>NO CHANGE</th>
<th>CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROS (Status Quo)</td>
<td>CONS (Status Quo)</td>
</tr>
<tr>
<td>CONS (Change)</td>
<td>PROS (Change)</td>
</tr>
</tbody>
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Key Issues and Intervention Considerations

- Decisional Considerations are Personal
- Increase the Costs of the Status Quo and the Benefits of Change
- Challenge and Work with Ambivalence
- Envision the Change
- Engender Culturally Relevant Considerations that are Motivational
- See how families and larger organizations can influence change by providing incentives or putting up barriers
- Multiple problems or issues interfere and complicate
MOTIVATED TO CHANGE

- 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
- But this is only the first two steps toward making a change happen
Francis, the Mothers Club is offering a 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 each of the Stages of Change

- **PREPARATION** – The stage in which the individual or organization 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.
Key Issues and Intervention Considerations

- Effective, Acceptable and Accessible Plans
- Setting Timelines for Implementation
- Building Commitment and Confidence
- Creating Incentives
- Developing and Refining Skills Needed to Implement the Plans
- Treatment Plan and Change Plan
WILLING TO MAKE CHANGE

- COMMITMENT TO TAKE ACTION
- SPECIFIC ACCEPTABLE ACTION PLAN
- TIMELINE FOR IMPLEMENTING PLAN
- ANTICIPATION OF BARRIERS
- BUT YOU STILL HAVEN’T DONE IT YET
Tasks and goals for each of the Stages of Change

- **ACTION** – The stage in which the individual or organization implements the plan and takes steps to change the current behavior pattern and to begin creating a new behavior pattern.

- **TASKS**: Implementing strategies for change; revising plan as needed; sustaining commitment in face of difficulties

- **GOAL**: Successful action to change current pattern. New pattern established for a significant period of time (3 to 6 months).
Key Issues and Intervention Considerations

- Flexible and Responsive Problem Solving
- Support for Change
- Reward Progress
- Create Consequences for Failure to Implement
- Continue Development and Refining Skills Needed to Implement the Plan
Tasks and goals for each of the Stages of Change

- **MAINTENANCE** – The stage where the new behavior pattern is sustained for an extended period of time and is consolidated into the lifestyle of the individual and society.

- **TASKS**: Sustaining change over time and across a wide range of situations. Avoiding going back to the old pattern of behavior.

- **GOAL**: Long-term sustained change of the old pattern and establishment of a new pattern of behavior.
Key Issues and Intervention Considerations

- It is Not Over Till Its Over
- Support and Reinforcement
- Availability of Services or Resources to Address Other Issues In Contextual Areas of Functioning
- Offering Valued Alternative Sources of Reinforcement
- Institutionalization of change
ABLE TO CHANGE

- Continued Commitment
- Skills to Implement the Plan
- Self Control Strength that is not exhausted by other problems
- Long-term Follow Through
- Integrating New Behaviors into Lifestyle or Organization
- Creating a New Behavioral Norm
- Now you are getting there
Relapse rate over time for heroin, smoking, and alcohol

- **Heroin**
- **Smoking**
- **Alcohol**

**X-axis:** Months
- 2 weeks
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

**Y-axis:**
- 100
- 90
- 80
- 70
- 60
- 50
- 40
- 30
- 20
- 10
- 0
Relapse and Recycling - Slipping Back to Previous Behavior and Trying to Resume Change

**Characteristics:**

- The person or organizations has failed to implement the plan or is re-engaged in the previous behavior
- After failing to implement or reverting to previous behavior, there is re-entry to precontemplation, contemplation, preparation stages
- Sense of failure and discouragement about motivation or ability to change
Regression, Relapse and Recycling through the Stages

- **Regression** represents movement backward through the stages.
- **Slips** are brief returns to the prior behavior that represent some problems in the action plan.
- **Relapse** is a return or re-engaging to a significant degree in the previous behavior after some initial change.
- After returning to the prior behavior, individuals **Recycle** back into pre-action stages (pre-contemplation, contemplation, or preparation).
Key Issues and Intervention Considerations

- Blame and Guilt Undermine Motivation for Change
- Determination despite delays and defeats
- Support Re-engagement in the Processes of Change
- Recycling or just Spinning Wheels
- Hope and a Learning Perspective is Needed
Theoretical and practical considerations related to movement through the Stages of Change
**Stages of Change Model**

**Precontemplation**
Increase awareness of need to change

**Contemplation**
Motivate and increase confidence in ability to change

**Relapse**
Assist in Coping

**Preparation**
Negotiate a plan

**Action**
Reaffirm commitment and follow-up

**Maintenance**
Encourage active problem-solving

**Termination**
Addiction and Change

How Addictions Develop and Addicted People Recover

Carlo C. DiClemente
THE STAGES OF CHANGE FOR ADDICTION AND RECOVERY

Dependence

PROCESSES, CONTEXT AND MARKERS OF CHANGE

Dependence

Sustained Cessation

RECOVERY
Theoretical and practical considerations related to Prevention and Stages of INITIATION

- Expectancies/Beliefs
  - Precontemplation
  - Contemplation
  - Preparation
  - Action
  - Maintenance

- Decision-Making
  - Personal Concerns
  - Environmental Pressure
  - Decisional Balance (Pros & Cons)
  - Cognitive/Experiential Processes
  - Behavioral Processes

- Self-efficacy
  - Experimentation
  - Casual use
  - Regular Use
  - Dependence
PREVENTION OF INITIATION OF ADDICTION

PC - C  C - PA  PA - A  A - M

POPULATION PREVENTION

AT- RISK PREVENTION

ALREADY AFFLICTED
## A Stage by Addictive Behavior Perspective on Allen

<table>
<thead>
<tr>
<th>Type of Behavior</th>
<th>Stage of Initiation</th>
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<tbody>
<tr>
<td></td>
<td>PC</td>
</tr>
<tr>
<td>ALCOHOL</td>
<td></td>
</tr>
<tr>
<td>NICOTINE</td>
<td></td>
</tr>
<tr>
<td>MARIJUANA</td>
<td></td>
</tr>
<tr>
<td>HEROIN</td>
<td>X</td>
</tr>
<tr>
<td>COCAINE</td>
<td>X</td>
</tr>
<tr>
<td>AMPHETAMINES</td>
<td></td>
</tr>
<tr>
<td>LSD</td>
<td></td>
</tr>
<tr>
<td>GAMBLING</td>
<td>X</td>
</tr>
<tr>
<td>EATING DISORDER</td>
<td></td>
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Stage Based Epidemiology
Implications for Acquisition and Prevention

- If there is a common but unique pathway, we can better understand where individuals are in this process of change for each addictive behavior
- We can distinguish between prevention and treatment better
- We can target interventions to the process of change
<table>
<thead>
<tr>
<th>Stage</th>
<th>Therapist’s Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precontemplation</td>
<td>Raise doubt—Increase the client’s perception of risks and problems with current behavior</td>
</tr>
<tr>
<td>Contemplation</td>
<td>Tip the decisional balance—Evoke reasons for change, risks of not changing; strengthen client’s self-efficacy for behavior change</td>
</tr>
<tr>
<td>Preparation</td>
<td>Help the client determine the best course of action to take in seeking change; develop a plan</td>
</tr>
<tr>
<td>Action</td>
<td>Help the client implement the plan; use skills; problem solve; support self-efficacy</td>
</tr>
<tr>
<td>Maintenance</td>
<td>Help the client identify and use strategies to prevent relapse; resolve associated problems</td>
</tr>
<tr>
<td>Relapse</td>
<td>Help the client recycle through stages of contemplation, preparation, and action, without becoming stuck or demoralized because of relapse</td>
</tr>
</tbody>
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How Do Interventions Work?

Static Interaction Model

INDIVIDUAL

INTERVENTION
How Do Interventions Work?

Dynamic Model: Stepping into a Flowing Stream
How Do Interventions Work?

Individual’s Status on Developmental and Change Process Factors During Course of Drinking

- 18 yo college student weekend binge drinking
- 23 yo graduate experimenting with recreational drugs while binge drinking
- 34 yo, new father occasional heavy drinking following 7 years of sobriety
- 46 yo executive, recently divorced, Depressed, 4-5 drinks a night

Intervention

Intervention
Project MATCH

- Tested 3 distinct alcohol treatments
  - Cognitive Behavioral Treatment (CBT) (12/12 wks)
  - Twelve Step Facilitation (TSF) (12/12 wks)
  - Motivational Enhancement Therapy (MET) (4/12 wks)

- Examined 21 hypothesized matching effects and over 30 baseline predictors of drinking

- Comprised 9 centers with over 20 sites and 75 therapists

- Included 952 outpatients and 774 aftercare patients

Percentage Days Abstinent: Baseline to 36-Month Follow-up Across MATCH Therapies (Outpatient Sites)

Timeline relative to treatment window

Success Profiles From Project MATCH

- TSF, CBT, and MET treatments produced similar drinking outcomes.

- However, the dimensions of the process of change were important in discriminating between the various outcomes in Project MATCH.

- What happens to them during treatment?

- How do they relate to long-term drinking outcomes?

End-of-Treatment-Process Profiles Predict Outcomes

- Client status during follow-up period:
  - Abstinent
  - Moderate drinking
  - Heavier drinking

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

TTM Profile: Outpatient PDA Baseline

TTM = Transtheoretical model
TTM Profile:
Outpatient PDA Post-treatment

PDA = percent days abstinent
TTM Profile: Aftercare PDA Baseline

TTM Profile: Aftercare PDA Post-treatment

PROCESS OF INTENTIONAL BEHAVIOR CHANGE

CLIENT

THERAPIST

TREATMENT
Where Do We Go From Here?

- Stepped care approaches
- Matching techniques of treatment to client problem and process of change dimensions
- Integrating formal and self-help approaches as well as different treatment approaches
- Client-titrated treatment
- Treatment shifts from being reactive and regimented to becoming proactive and personalized