



# Mindfulness in the Treatment of Addictive Behaviors

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# Overview

- Relapse: What, Why, How?
- What is Mindfulness?
- Mindfulness-Based Treatments
- Mindfulness and Substance Abuse
- Mindfulness-Based Relapse Prevention
  - Intentions
  - Practices
  - Research
  - Questions

# Savage Chickens

by Doug Savage



# What is Relapse?

Any use = Relapse

- Black-and-White Model:



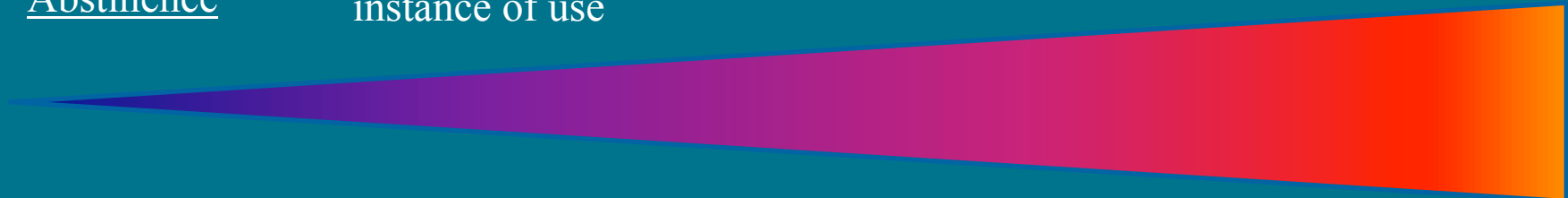
- Cognitive-Behavioral Model:

Abstinence

Lapse: single instance of use

Multiple Lapses

Relapse: falling back to pretreatment levels of use

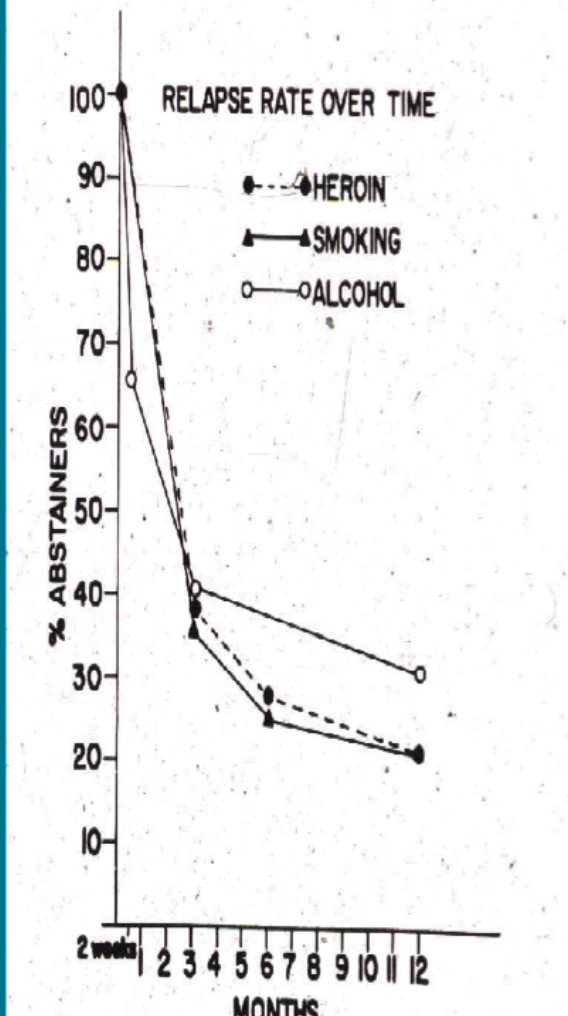




# “Chronic Relapsing Conditions”

WILLIAM A. HUNT, L. WALKER BARNETT AND LAURENCE G. BRANCH

FIG. 1. RELAPSE RATE: OVER TIME FOR HEROIN, SMOKING AND ALCOHOL.



(Hunt, et al., 1971)

Most lapse, most do not return to heavy drinking:

- 65% to 90% have at least one drink, (“lapse”) in the first year following treatment, 50% in first 2 months
- After initial lapse 25% are abstinent at any one time point
- Improved coping skills are related to less frequent drinking at first lapse and lighter drinking thereafter

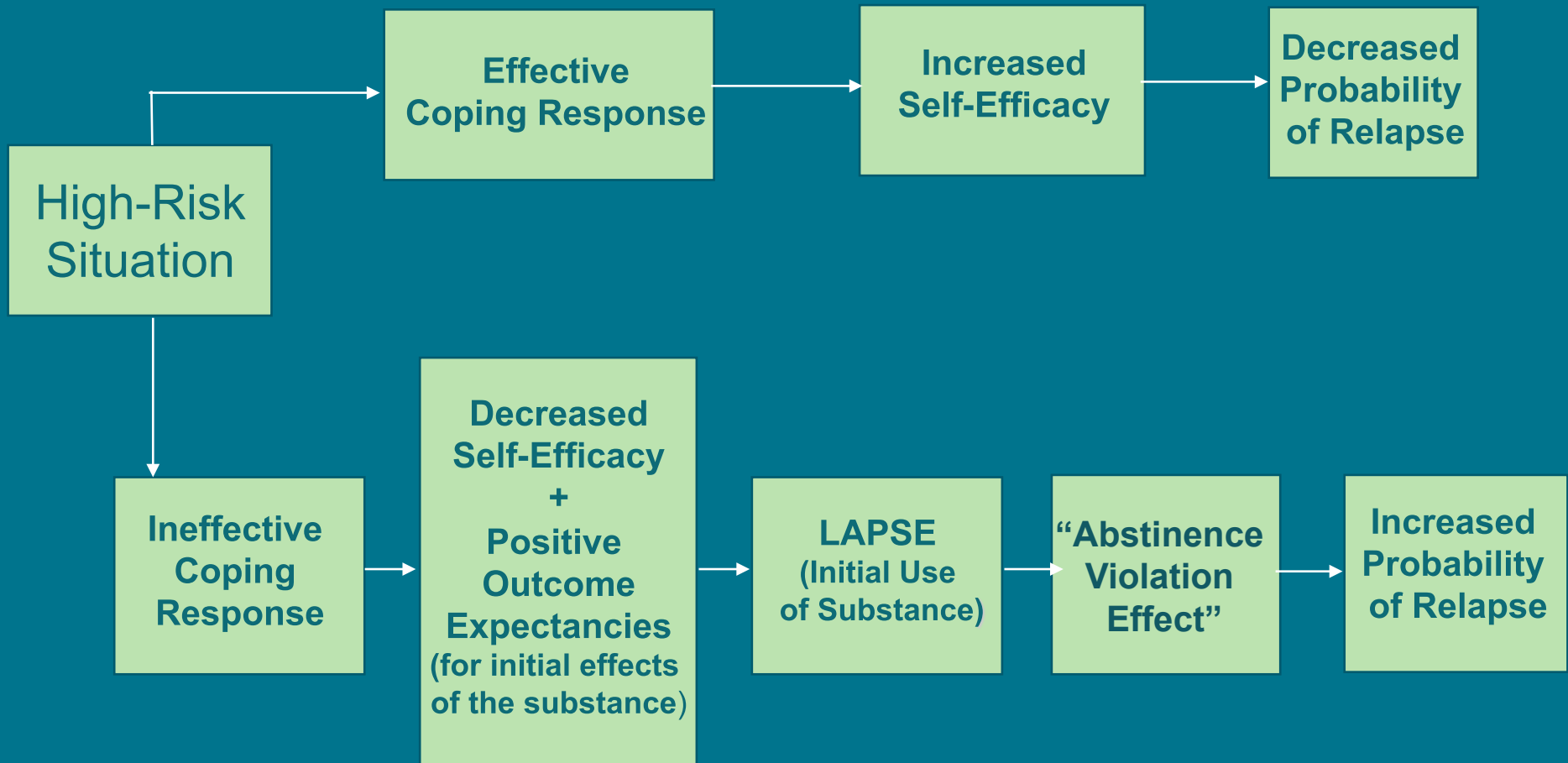
(Maisto et al., 2003; Sutton, 1979; (Witkiewitz & Masyn, 2008)

# When Does Relapse Happen?

RELAPSE SITUATION (Risk Factor)	Alcoholics (N=70)	Smokers (N=35)	Heroin Addicts (N=32)	TOTAL Sample (N=137)
<b>INTRAPERSONAL DETERMINANTS</b>				
<b>Negative Emotional States</b>	<b>38%</b>	<b>43%</b>	<b>28%</b>	<b>37%</b>
Negative Physical States	3%	-	9%	4%
Positive Emotional States	-	8%	16%	6%
Testing Personal Control	9%	-	-	4%
Urges and Temptations	11%	6%	-	8%
<b>TOTAL</b>	<b>61%</b>	<b>57%</b>	<b>53%</b>	<b>59%</b>
<b>INTERPERSONAL DETERMINANTS</b>				
<b>Interpersonal Conflict</b>	<b>18%</b>	<b>12%</b>	<b>13%</b>	<b>15%</b>
<b>Social Pressure</b>	<b>18%</b>	<b>25%</b>	<b>34%</b>	<b>24%</b>
Positive Emotional States	3%	6%	-	3%

# How Does Relapse Happen?

## The Cognitive Behavioral Model





*“Let’s just go in and see what happens.”*

# Research on Relapse Prevention

- Meta-analyses and reviews (Irvin, et al., 1999; Carroll, 1996) support RP as an effective treatment across disorders
  - Alcohol (Dimeff & Marlatt, 1998; Kadden et al., 1992; Larimer & Marlatt, 1990; Monti et al., 2002)
  - Cocaine (Schmitz, et al., 2001)
  - Marijuana (Roffman, et al., 1990)
  - Smoking (Killen, et al., 1984)
- Eating disorders (Mitchell & Carr, 2000)
- Gambling (Echeburua, et al., 2000)
- Sexual Offenses (Laws, 1995)



**SAMHSA's National Registry of  
Evidence-based Programs and Practices**

# Enhancing Relapse Prevention with Mindfulness



I REALIZE I'VE ONLY BEEN AT IT FOR 5 MINUTES, BUT MEDITATION ISN'T BRINGING ME THE PEACE OF MIND I WAS PROMISED.



# Mindfulness exercise

(breath meditation)

# What is Mindfulness?

“Awareness that emerges through **paying attention** on purpose, in the **present moment**, and **non-judgmentally** to the unfolding of experience moment by moment”

(Kabat-Zinn, 2003)

# Practicing Mindfulness

**Paying  
Attention**

**Nonjudgmentally**

Mind on  
chosen target

Attention  
Wanders

Observe  
wandering,  
begin again

**Present  
Moment**

*“If your attention wanders a hundred times, simply bring it back a hundred times.”*



*Altering our relationship to emotions, thoughts and physical sensations.*



*Increasing ability to “be with” distress or discomfort without “automatically” reacting*



*Freedom to choose behavior in the face of any experience*

# Mindfulness

- Mindfulness has been incorporated into a number of treatment approaches (e.g., MBSR, MBCT)
- Associated with positive outcomes for a variety of population and conditions (e.g., chronic pain, anxiety, depressive relapse)
- Associated with changes in brain areas related to reductions in anxiety and negative affect

# Mindfulness & Substance Use

## ○ Paying Attention

- Greater awareness of triggers and emotional and cognitive responses, interrupting previously automatic behavior (Breslin et al., 2002)

## ○ Present Moment

- Substance use as means of avoiding present moment
- Mindfulness encourages acceptance of present experience

## ○ Non-Judgmental

- Detach from attributions and automatic thoughts that often lead to relapse





# PROJECT CHOICES





QUIET PLEASE  
**MEDITATION**  
IN PROGRESS



# Results: Vipassana vs. TAU

## 3-Months Post-Release

- N = 173
- Significant reductions in substance use
  - Marijuana
  - Crack cocaine
  - Alcohol
  - Alcohol-related negative consequences
- Significant changes in psychosocial outcomes
  - Decreased psychiatric symptoms
  - Increased internal drinking-related locus of control
  - Increased optimism

(Bowen et al., 2006)

# Therapies w/ Mindfulness Practices

- Dialectical Behavior Therapy

(DBT; Linehan 1987; 1993)

- Acceptance and Commitment Therapy

(ACT: Hayes, Strosahl & Wilson, 1999)

- Standard behavioral and cognitive techniques, with training in mindfulness skills
- Individual and group formats
- Mindfulness is one component among several
- Guided exercises vs. formal meditation



# “Mindfulness-Based” Therapies w/ Formal Meditation Practice

## Mindfulness-Based Stress Reduction (MBSR)

(Kabat-Zinn, 1986; 1992)

## Mindfulness-Based Cognitive Therapy (MBCT)

(Segal, Teasdale & Williams, 2000)

## Mindfulness-Based Relapse Prevention (MBRP)

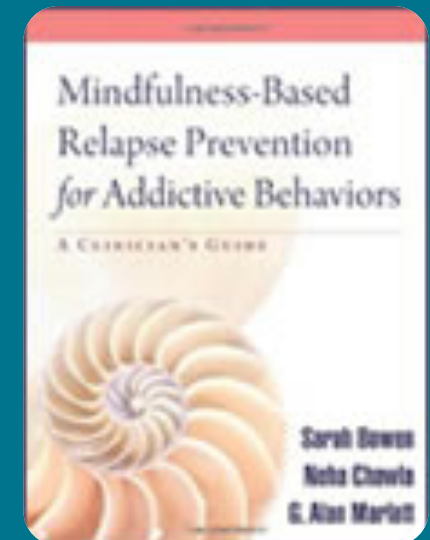
(Bowen, Chawla, & Marlatt, 2009)





# Mindfulness-Based Relapse Prevention (MBRP)

- Integrates mindfulness practices with Relapse Prevention
- Patterned after MBSR (Kabat-Zinn) and MBCT (Segal et al.)
  - 8 weekly 2 hour sessions; daily home practice
- Components of MBRP
  - Formal mindfulness practice
  - Informal practice
  - Coping strategies



(Witkiewitz, Marlatt & Walker, 2005; Bowen, Chawla & Marlatt, 2008)

# MBRP Session Themes

*Session 1:* Automatic Pilot and Relapse

*Session 2:* Awareness of Triggers and Craving

*Session 3:* Mindfulness in Daily Life

*Session 4:* Mindfulness in High-Risk Situations

*Session 5:* Acceptance and Skillful Action

*Session 6:* Seeing Thoughts as Thoughts

*Session 7:* Self-Care and Lifestyle Balance

*Session 8:* Social Support and Continuing Practice



Awareness,  
Presence

Mindfulness  
and Relapse

Bigger Picture:  
A Balanced Life

# “Formal” Practices



Body Scan



Sitting Meditation

“Lovingkindness” or “metta”

Mindful Movement

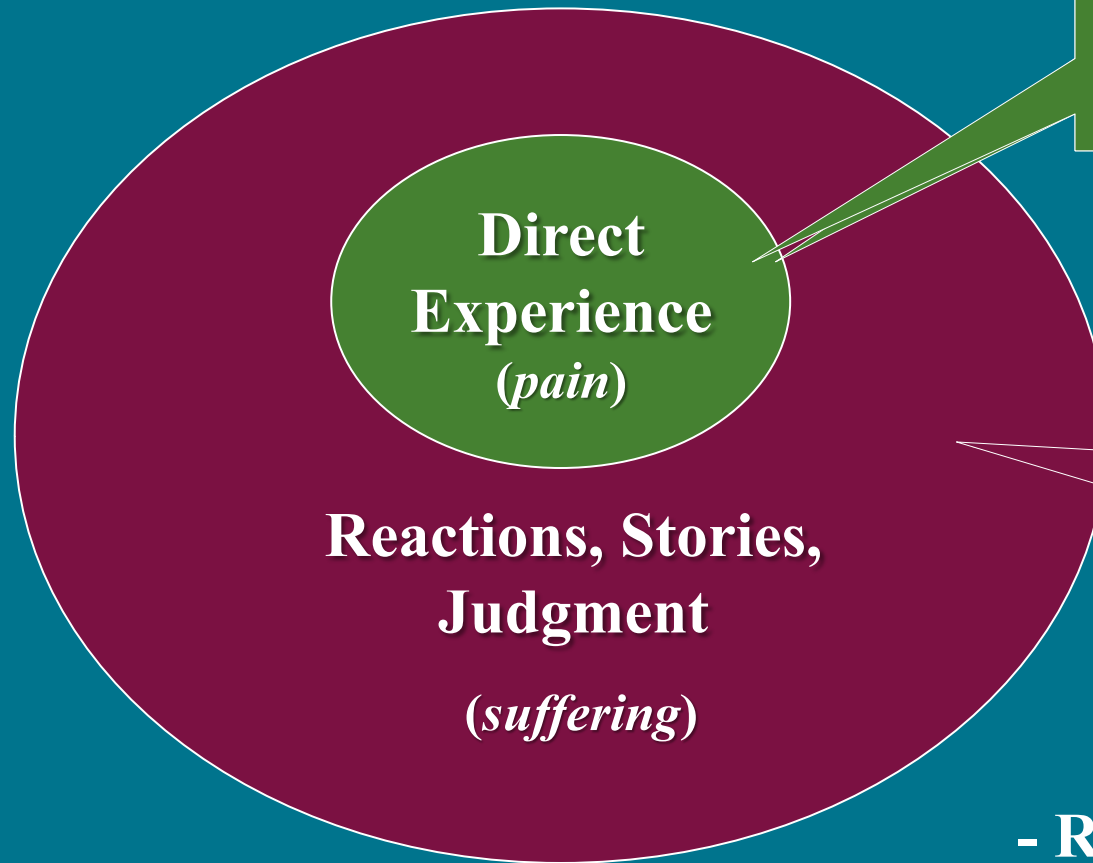


Walking Meditation

Mountain Meditation



# Inquiry



Emotional discomfort  
(depression, anxiety)

“I can’t handle this. I need an escape. I need a drink.”

- Familiar?
- Relationship to Relapse and Recovery?
- Not personal

# “Informal” Practices

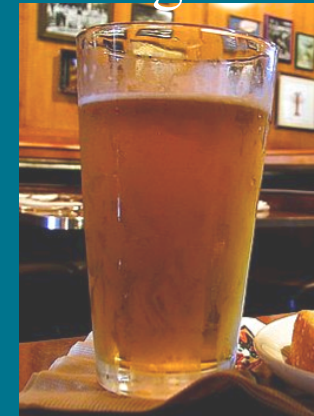
Mindfulness of  
daily activities



“SOBER” breathing space



Urge surfing



# “SOBER” Breathing Space

**Stop**

**Observe**

**Breath**

**Expand**

**Respond**



# Urge Surfing



*Staying with the urge (wave) as it grows, riding it to its peak, using the breath to stay steady, trusting it will naturally subside without any action.*

## Awareness of Triggers

<b>Situation/ Trigger</b>	<b>What sensations did you experience?</b>	<b>What moods, feelings or emotions did you notice?</b>	<b>What thoughts arose?</b>	<b>What did you do?</b>
<i>An argument with my girlfriend.</i>	<i>Tightness in chest, sweaty palms, heart beating fast, shaky all over</i>	<i>Anxiety, hurt, anger</i>	<i>“I can’t do this.”  “I need a drink.”  “Forget it. I don’t care anymore”</i>	<i>Yelled, slammed door, went for a walk</i>

# Facilitating MBRP



Motivational Interviewing style

Acceptance, open curiosity, kindness,  
authenticity



Personal practice

Embodiment of these qualities

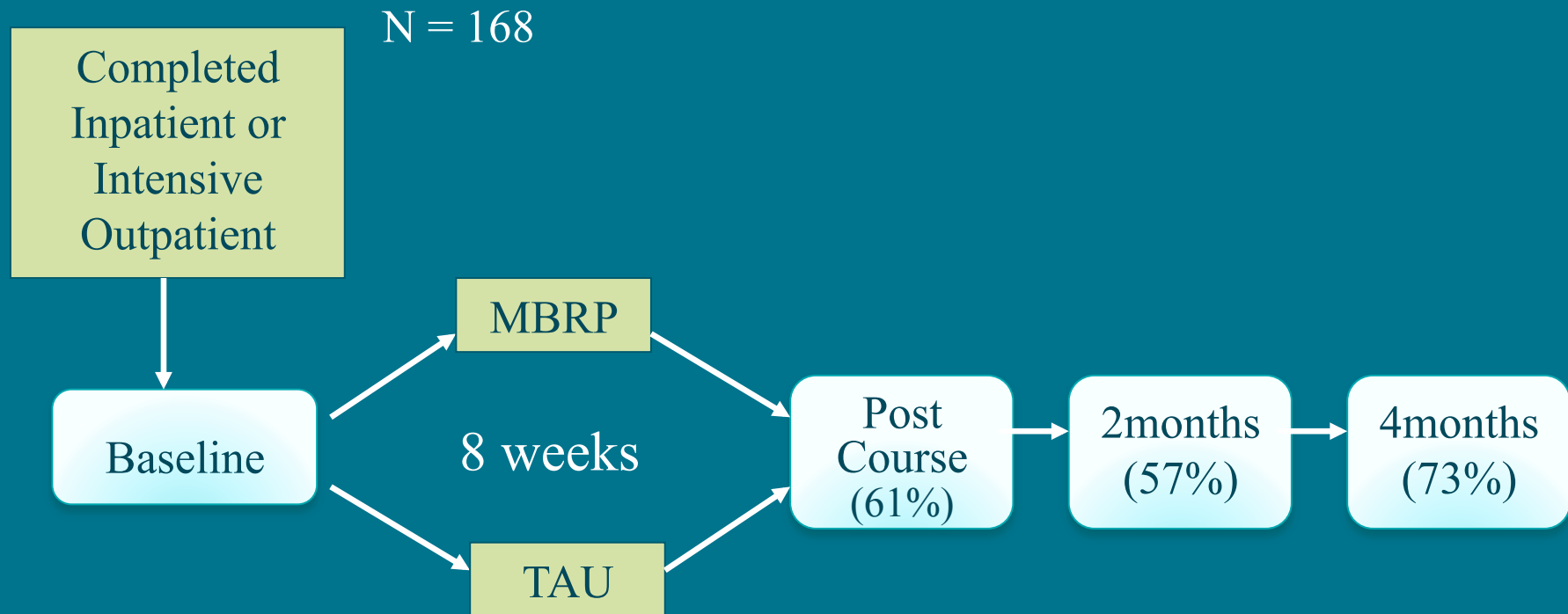


Spontaneity and creativity

# Mindfulness and Substance Use Disorders: The Research



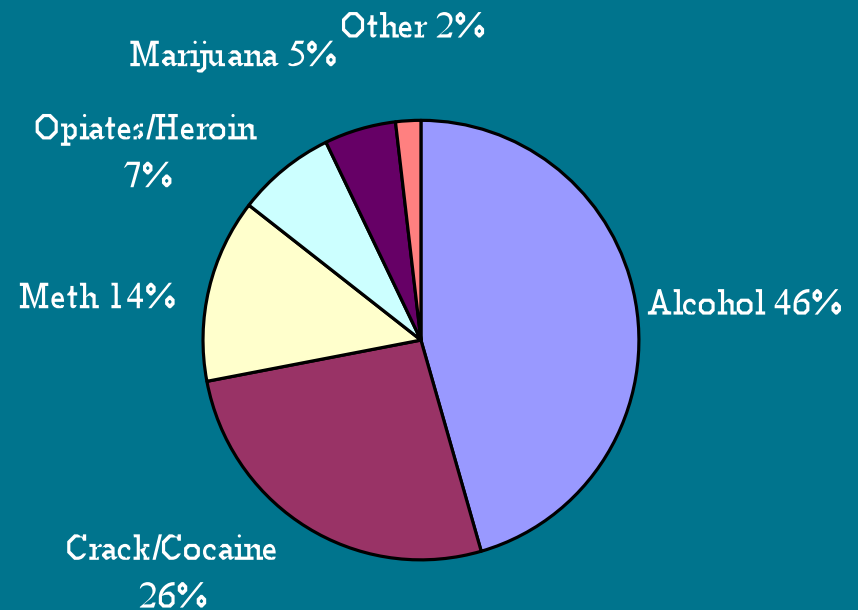
# MBRP Study I (2007-2009)



Funded by National Institute on Drug Abuse Grant  
R21 DAO 10562-01A1; PI: G. Alan Marlatt

# Participants

- Age 40.5 (10.3); 64% male
- 50% Caucasian
- 28% African American
- 15% Multiracial
- 7% Native American
- 72% completed high-school
- 41% unemployed
- 33% public assistance
- 62% less than \$4,999 / year
- Homeless/unstably housed



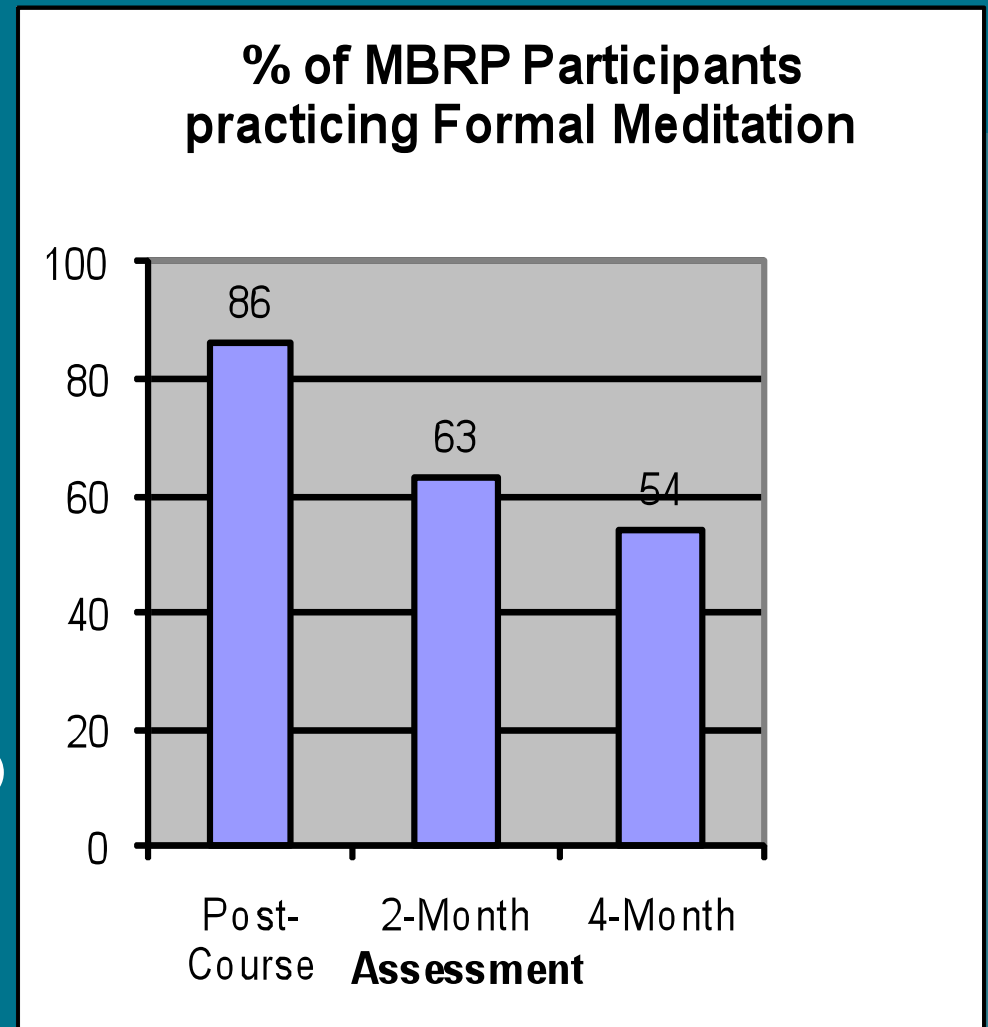
# Results: Feasibility

- Attendance

65% of sessions  
( $M = 5.18$ ,  $SD = 2.41$ )

- Formal Practice

4.74 days/week ( $SD = 4.0$ )  
29.94 minutes/day ( $SD = 19.5$ )



(Bowen et al., 2009)



# Results: Mindfulness & Acceptance

Across 4-month follow-up, significant differences between groups:

- Mindfulness (awareness) ( $p = .01$ )
- Acceptance ( $p = .045$ )
- Craving ( $p = .02$ )
- Substance Use ( $p = .02$ )

# Comorbidity

40% (in the U.S.) with depressive/anxiety disorders have co-occurring substance use disorders

(NCS; Kessler, Nelson, McGonagle, Liu, et al., 1996)



Depression has particularly strong relationship with craving and relapse

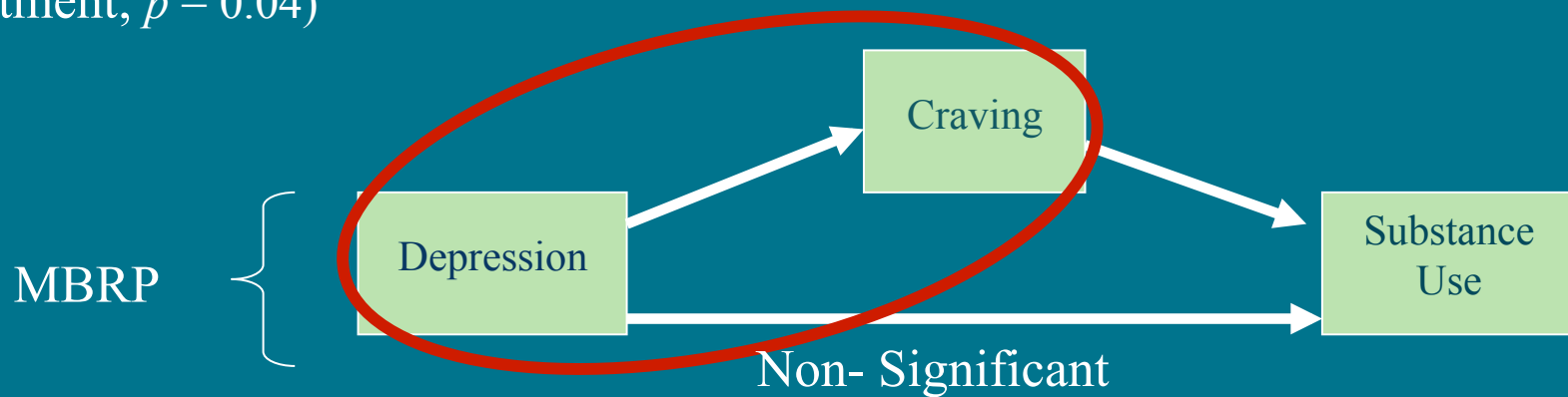
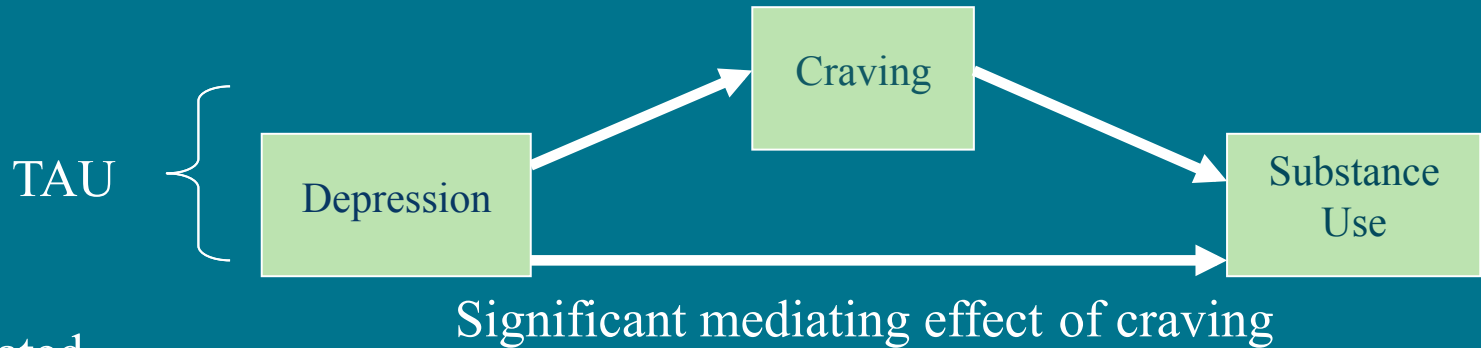
(Gordon et al., 2006; Zilberman et al., 2007; Curran et al., 2000 ; Levy, 2008)

Worse substance use treatment outcomes

(e.g., Hodgins, el Guebaly, & Armstrong, 1995; Witkiewitz & Villarroel, in press)

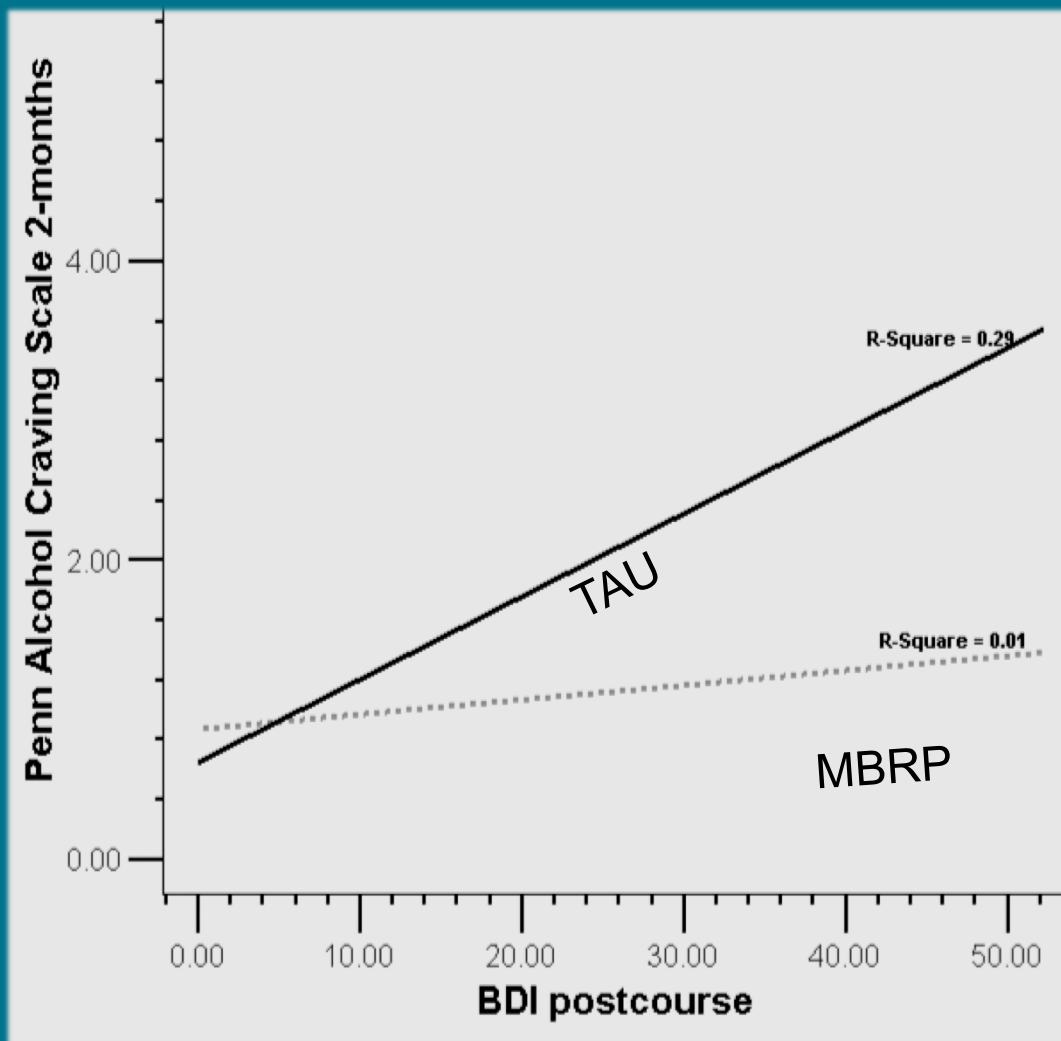


# Results: Depression and Craving



(Witkiewitz & Bowen, in press)

# Results: Depression and Craving



Substance Use

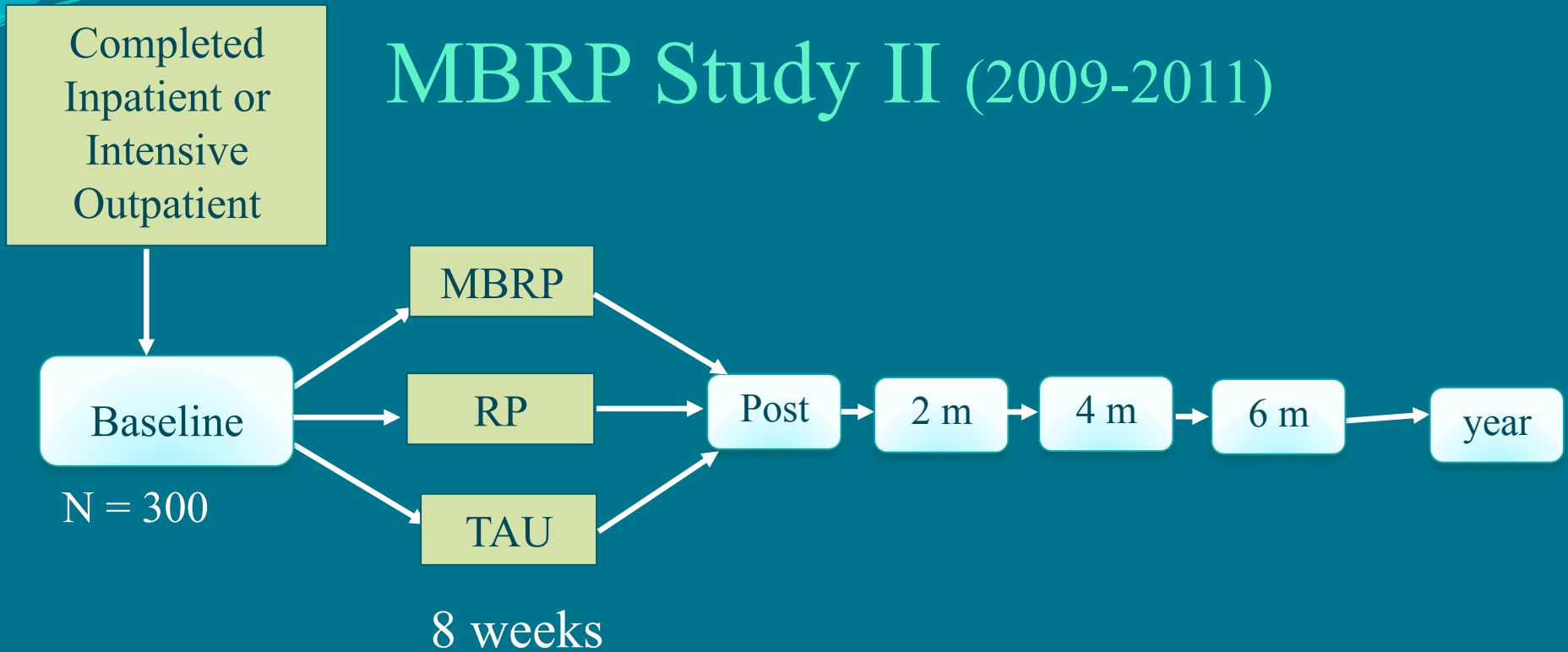
# Summary of Results

- Increased awareness and acceptance
- Reduction in craving
- Decreased rates of substance use
- Weaker relationship between depressive symptoms and substance
  - Thereby weakened relationship between depression and substance use

# Implications

- Findings consistent with intention and hypothesized mechanisms
  - Increasing awareness and acceptance
  - Experiencing discomfort without “automatically” reacting
  - Decreasing craving in the presence of internal (e.g., depression) and external (e.g., environment) cues.
- Consistent with findings from other mindfulness-based interventions  
(Dahl et al., 2004; Bowen & Marlatt, 2009; Gifford et al., 2004; Hayes et al., 1999; Levitt, et al., 2004)
- May be helpful in treating dual-diagnosis clients

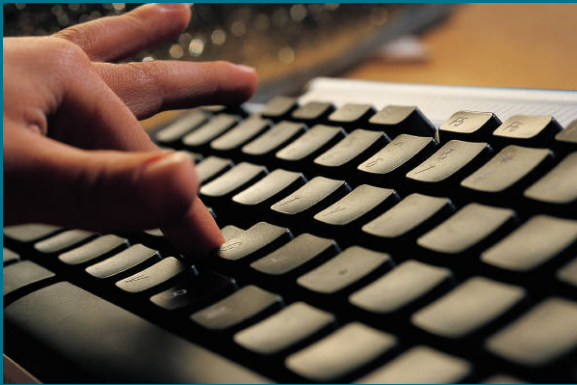
# MBRP Study II (2009-2011)



Funded by National Institute on Drug Abuse Grant PI: G. Alan Marlatt



# MBRP Study II



Self-Report  
measures of  
craving,  
substance use,  
mood



Physiological  
stress responses/  
recovery time  
following  
laboratory stressor




Behavioral  
Inhibition Skills via  
performance on  
cognitive tasks

# Future Directions

- Is this for everyone?
  - Gender
  - Dependence severity
  - Dual diagnosis (depression, anxiety, trauma)
- Meditation Practice
  - Supporting practice (booster sessions? Local sitting groups?)
  - Daylong practice (important?)
  - Length of in-session and daily meditations
- Long term effects
  - Latency to first lapse
  - Pattern of use following the first lapse
- Physiological and Neurological effects
  - Stress reactivity to triggers
  - Brain activation





“It is on the very ground of suffering that we can  
contemplate well-being.

It is exactly in the muddy water  
that the lotus grows and blooms.”

Thich Nhat Hanh, 2006



# Thank You!

- Mindfulness-Based Relapse Prevention for Addictive Behaviors: A Clinician's Guide.

Guilford Press, 2010

- <http://www.mindfulrp.com>

