

Brief Interventions for Substance Misuse: *Motivation and change*

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What's covered

- Reward and punishment
- Enhancing motivation the evidence
- Translating efficacy into effective treatments
- Where we are now-early days
- Where do we need to go next-capturing the evidence
- Summary

General Systems Theory

- Biological dimensions - reward (Nutt)
- Psychological dimensions - learning (Heather et al.) and trauma (Clarke and Edler).
- Sociological dimensions - deprivation and skills (O'Hare, Carroll, Miller.)
- Anthropological dimensions - natural evolution, hierarchy, agents of state control etc.
- Spiritual/meaning systems -Victor Frankl, Blake.
- Cybernetics - 3rd Order systems Browne, Bateson, Watzlawick.

Brief Interventions: Cochrane Reviews

Smoking cessation ^{1,2,3}

Opiate dependence and abuse ⁴

Opioid detoxification ^{5,6}

Amphetamine dependence and abuse ⁷

Alcohol dependence and abuse ^{8,9,10}

Substance misuse in pregnancy ^{9, 11}

Prevention of substance misuse in young people ^{12, 13}

BIs for Nicotine addiction

- Coronary heart disease- 16 RCTs not effective (Burch) intensive one month plus follow up effective
- Hospitalised Patients 33 trials 1 month intensive behavioural in pt and 1 month follow up up effective BIs not effective
- BIs for Relapse Prevention no evidence of efficacy
- Preoperative smoking cessation- 8 trials (1156 pts) more intensive interventions with NRT maybe be effective

Brief Interventions: other drugs

- Psychosocial for Amphetamines no RCTs no conclusions- Thailand
- Cannabis- 1 study misuse or dependence in outpatient setting effective
- Opiates with substitute prescribing-not effective in retention, reduced drug use
- Opiates any psychosocial treatment (2945) did not effect drug misuse but improved retention

Brief Intervention: Other Drugs

- Psychosocial for opiate abuse/dependence
5 trials (389 pts) inadequate evidence of efficacy: Institute of Psych/Italy
- Polydrug use- pregnancy (266 pts) BI not shown to be effective: USA group

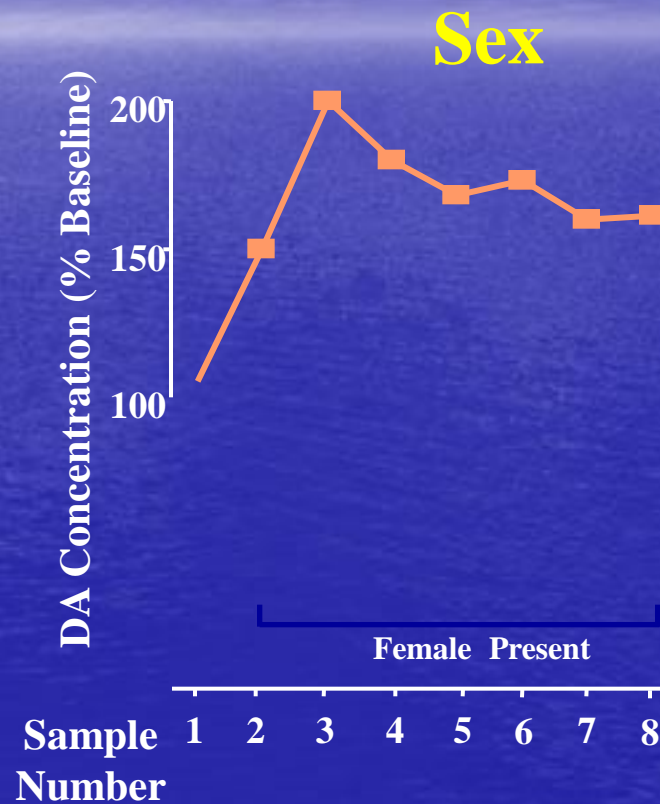
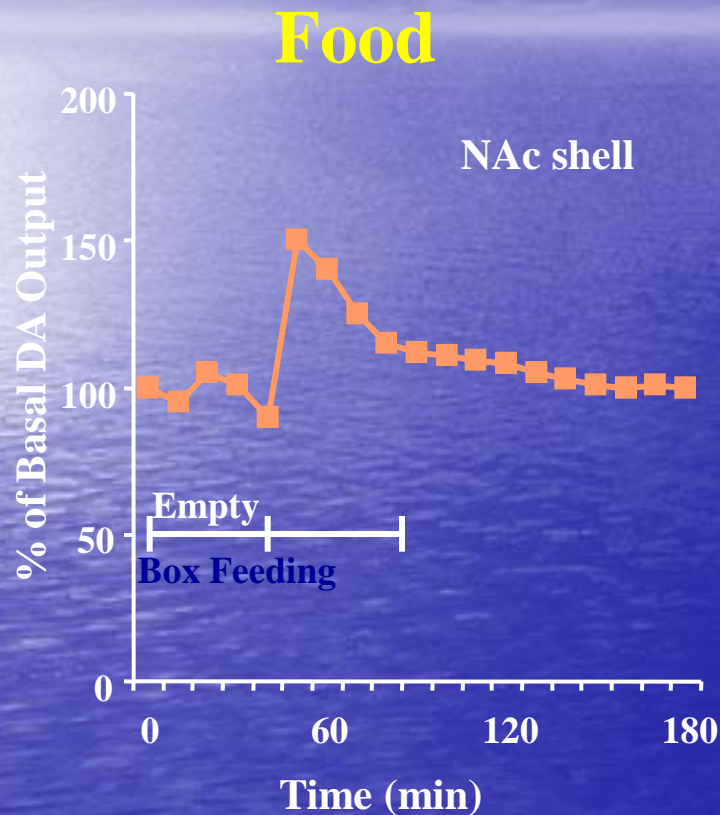
Brief Interventions for alcohol

- Hospitalised 2 RCTs (2441 pts) less heavy use. Glasgow group.
- Primary care-22 RCTs (7,619 pts) reduced alcohol use at 1 year in men not clear in women. Newcastle
- In pregnant women enrolled in alcohol treatment 26 studies no RCTs
- Social norms intervention in college students 22 RCTs (7,271 pts) web/computer based effective less effective face to face once off.

Prevention with school age adolescents

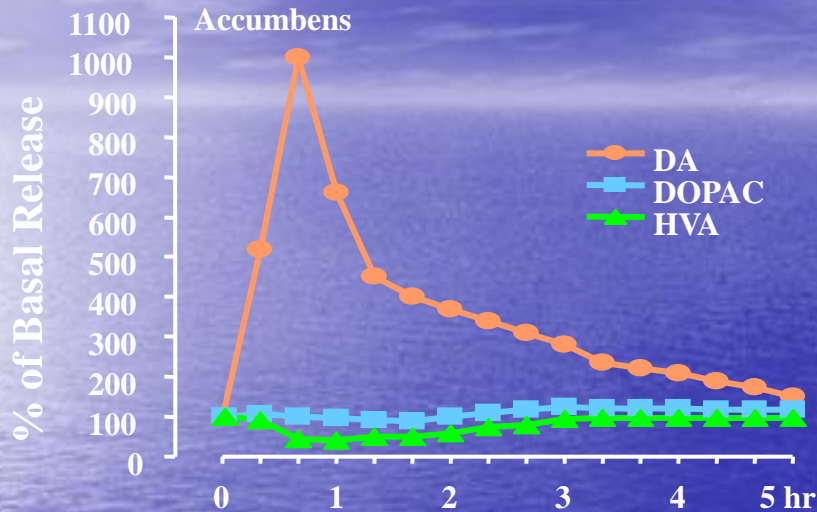
- Outside school setting 9 RCTs BI no evidence but MET and Family intervention some promise-Institute of Psych London
- Schools based- 32 studies (29 RCTs 3CCT) (46,539) 25 RCTs using skills based refusal

Natural Rewards Elevate Dopamine Levels

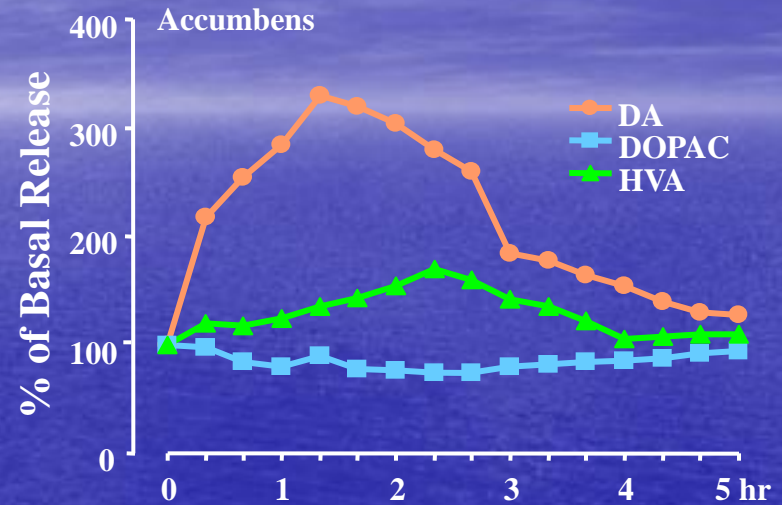


Effects of Drugs on Dopamine Release

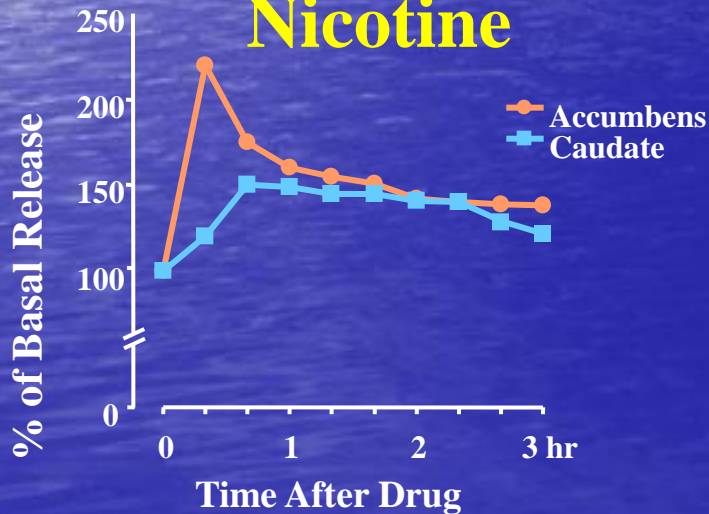
Amphetamine



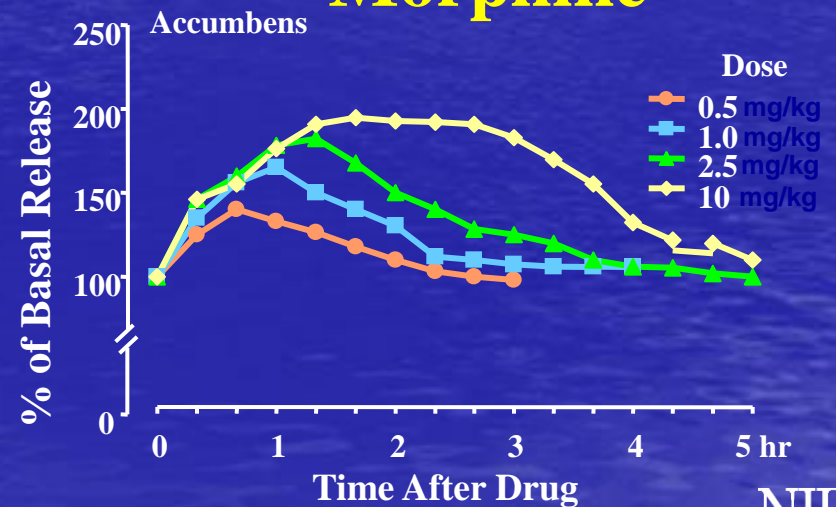
Cocaine



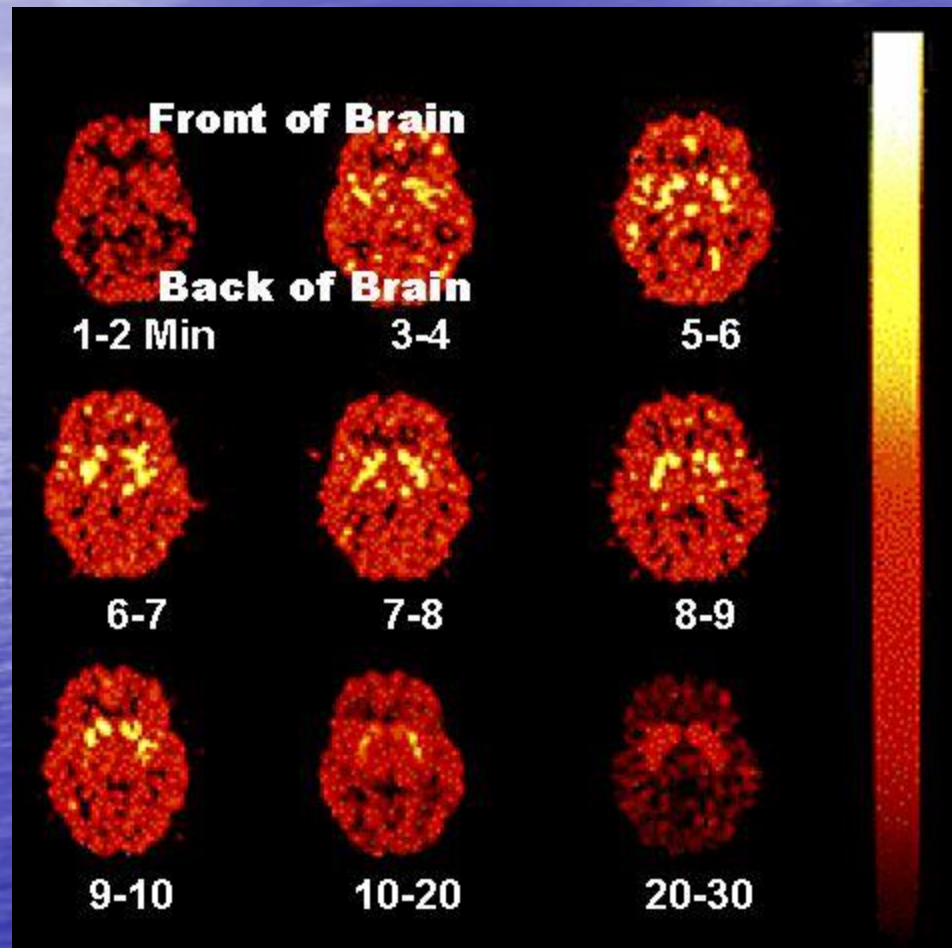
Nicotine



Morphine

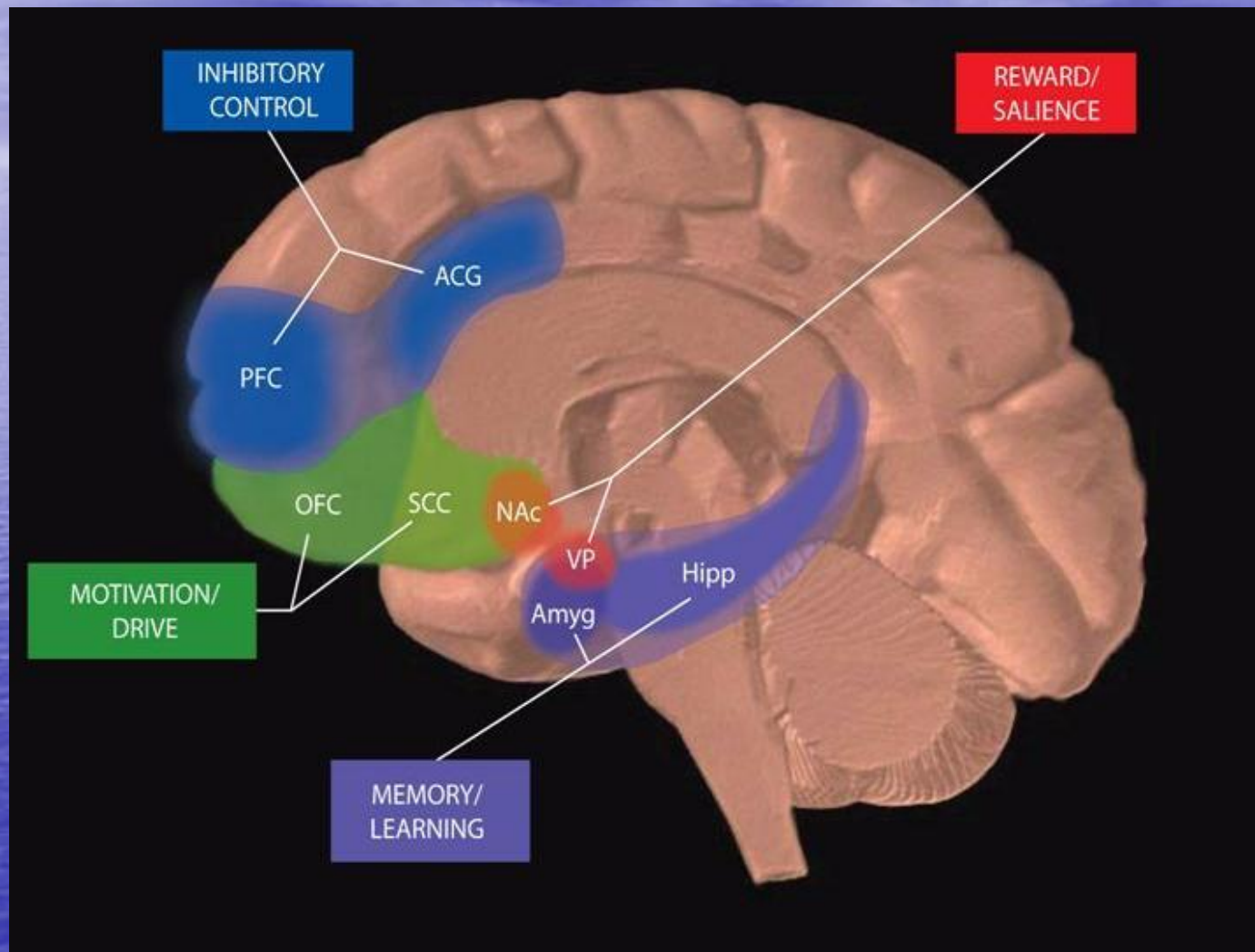


Your Brain on Drugs Today



YELLOW
shows places in
brain where
cocaine binds
(e.g., striatum)

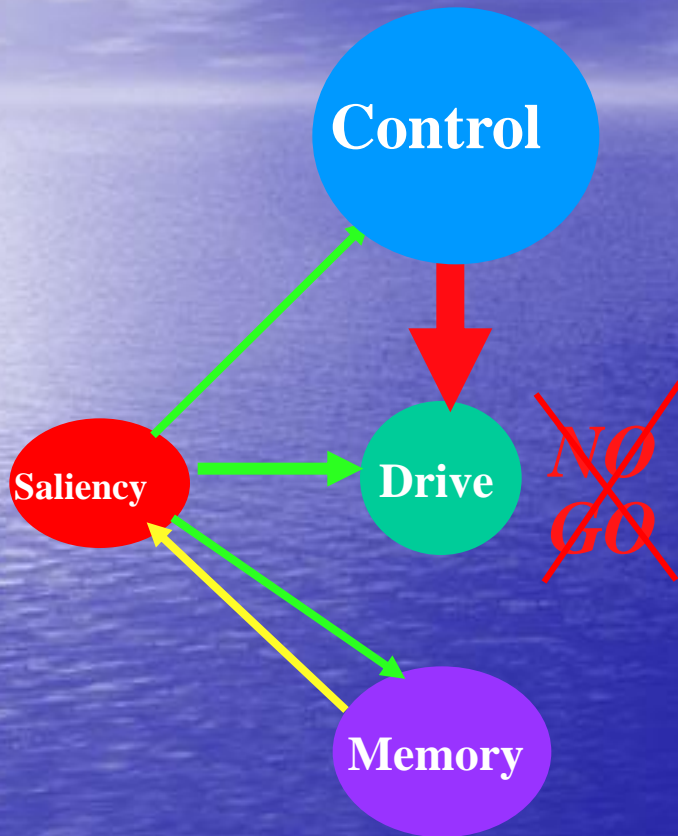
Circuits Involved In Drug Abuse and Addiction



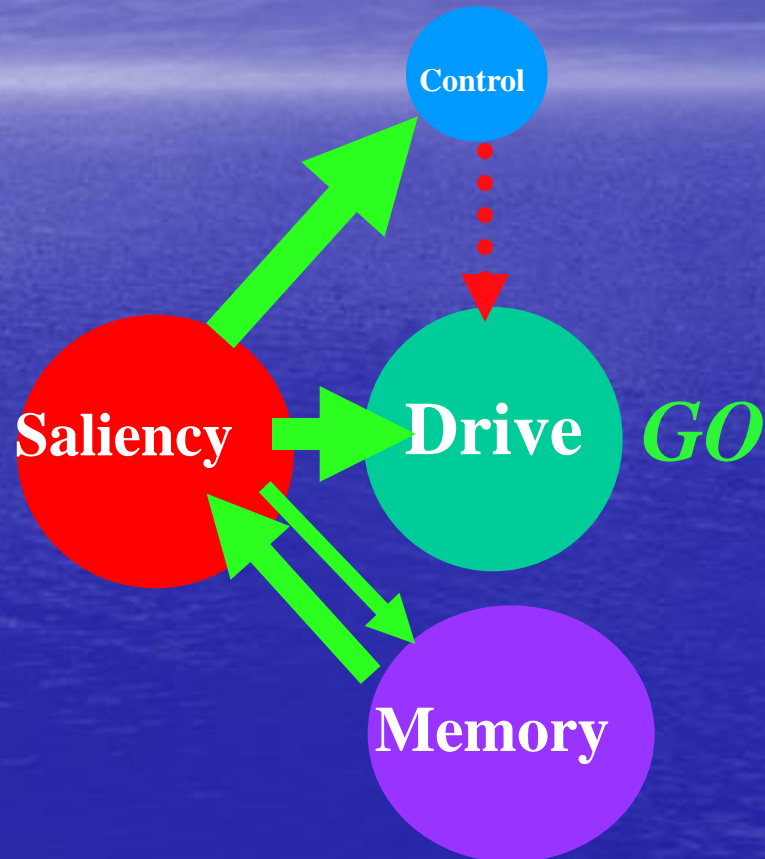
All of these brain regions must be considered in developing strategies to effectively treat addiction

Why Can't Addicts Just Quit?

Non-Addicted Brain



Addicted Brain



Because Addiction Changes Brain Circuits

PSYCHOLOGICAL DIMENSION

- Learning and reward- evolutionary theory
- Stimulus response (Pavlov)
- Coping with trauma (Clarke)
- Coping with school “failure”
- Coping with family difficulty- separation
- Salience (Volkow)

Heather, Monti, Carroll, Volkow.

Treatment Improvement Protocol 35

The Treatment Improvement Protocols are published by CSAT, a subgroup of the Substance Abuse and Mental Health Services Administration (SAMHSA) on behalf of the US Department of Health and Human Sciences.

<http://www.ncbi.nlm.nih.gov/bookshelf/br.fcgi?book=hssamhsatip&part=A61462>

Conceptualising Motivation

Motivation is a key to change

Motivation is multi-dimensional

Motivation is a dynamic and fluctuating state

Motivation is interactive

Motivation can be modified

The clinician's style influences the client motivation

Motivational Interventions

30 Minute Brief Intervention

The FRAMES approach

Decisional balance exercises

Developing discrepancy

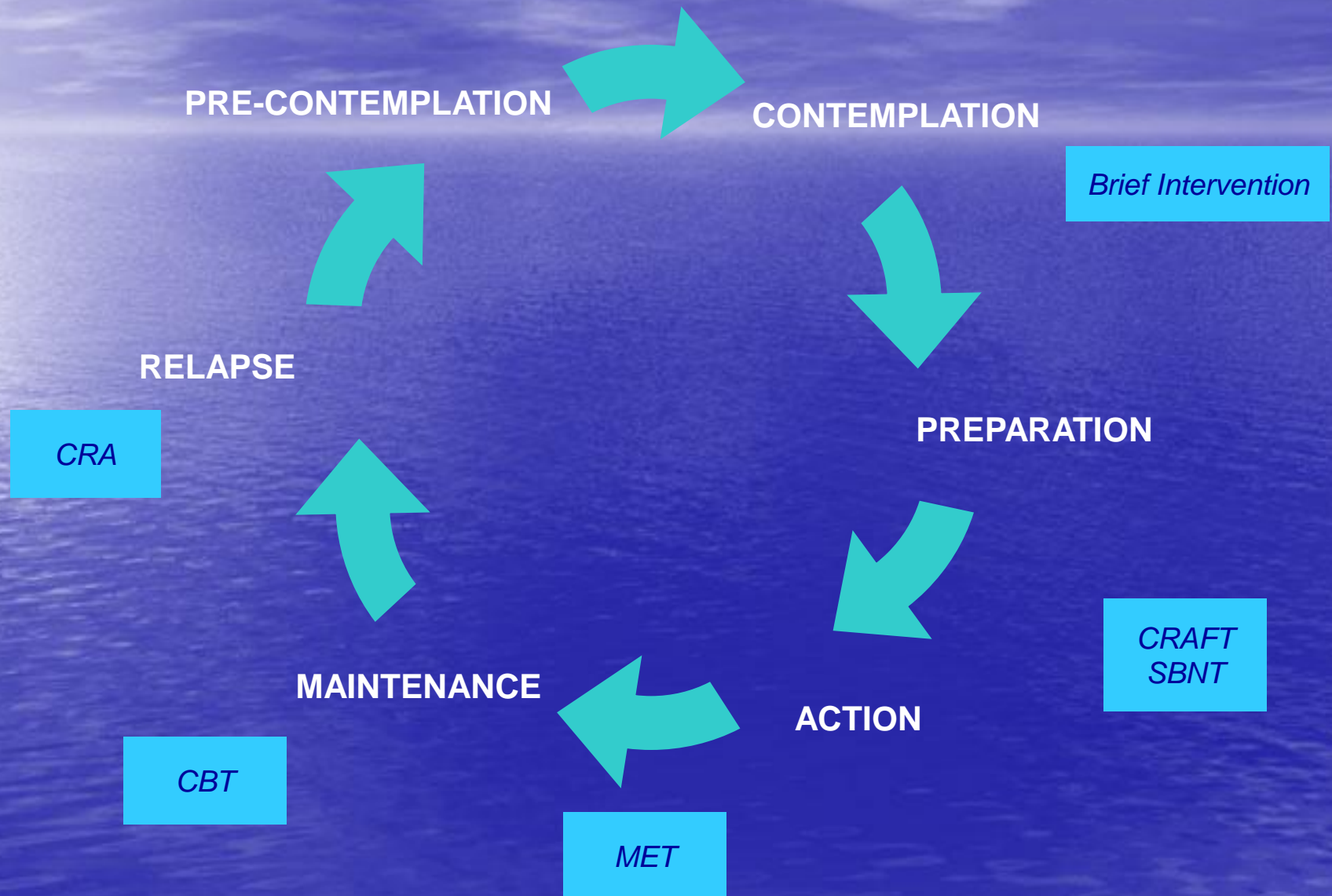
Flexible Pacing

Personal Contact with clients who are not actively
in treatment

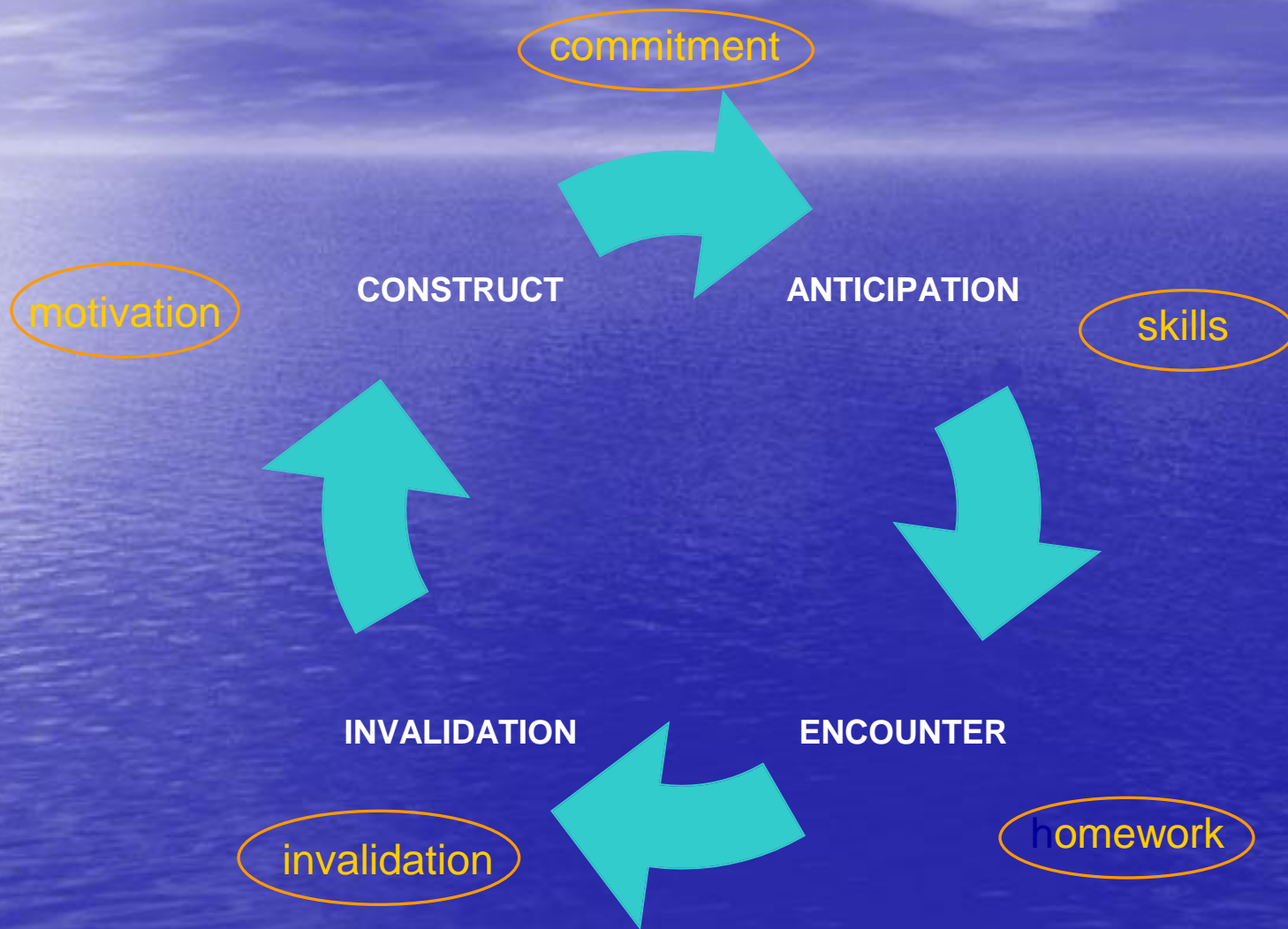
Significant Other

- SNBT
- CRAFT

Cycle of Change



Cycle of Change



Psychosocial Interventions

NICE Guidelines 2005

<http://www.nice.org.uk/guidance/index.jsp?action=byID&r=true&o=11634>

Sociological Dimension

- Evolution behaviour and survival – good enough fit
- Community Reinforcement Approach
- Community Reinforcement and Family Training
- Recovery pathways

Outer rings

- Anthropology
- Meaning Systems
- Cybernetics - 3rd Order Systems

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Cochrane References

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National Institute on Drug Abuse (NIDA)

<http://drugabuse.gov/pubs/teaching/Teaching6/Teaching.html>

<http://drugabuse.gov/NIDAHome.html>