



The National Methamphetamine Symposium

**This resource is part of NCETA's
methamphetamine resource package developed for
the National Methamphetamine Symposium,
12 May 2015.**

**This resource and other methamphetamine
related materials are accessible from
NCETA's website:**

www.nceta.flinders.edu.au

PSYCHOTHERAPY FOR METHAMPHETAMINE DEPENDENCE

Treatment Manual

Drug and Alcohol Services South Australia



PSYCHOTHERAPY

FOR METHAMPHETAMINE

DEPENDENCE

Treatment Manual

March 2008

Dr Matthew Smout

The Amphetamine Treatment Project

Funded through the South Australian Government's Response to the 2002 Drug Summit

ISBN 978-0-9803130-5-5



Members of the Amphetamine Treatment Project, Drug and Alcohol Services South Australia:

- Dr Marie Longo, Senior Research Officer
- Dr Matthew Smout, Senior Clinical Psychologist
- Ms Sonia Krasnikow, Clinical Psychologist
- Dr Wendy Wickes, Senior Medical Officer
- Ms Amanda Mitchell, Community Health/Research Nurse
- Ms Sharon Cahill, Community Health/Research Nurse
- Dr Paul Williamson, Manager, Pharmacotherapies Research Unit
- Professor Jason White, Director, Pharmacotherapies Research Unit

Acknowledgements

- Dr Marie Longo for editing and proofreading earlier versions of this document

Table of Contents

Chapter 1: Introduction	1
Chapter 2: Motivational Interviewing	6
Chapter 3: Assessment	14
Chapter 4: Functional Analysis	26
Chapter 5: Psychoeducation	35
Chapter 6: Values Clarification	46
Chapter 7: Responding to Cravings	49
Chapter 8: Behavioural Activation	74
Chapter 9: Comorbid Psychological Conditions	84
Chapter 10: Relapse Prevention Skills	87
Chapter 11: Putting it All Together	91
References	96
Client Handouts	99
Handout 1: Craving Components	99
Handout 2: Craving Monitoring Record	100
Handout 3: Addiction Case Conceptualisation	101
Handout 4: Values Assessment Worksheet	102
Handout 5: Dysfunctional Thought Record	104
Handout 6: Activity List	105
Handout 7: Speed Refusal Skills Reminder Sheet	106

Chapter 1: Introduction

It is estimated that 24.9 million people worldwide have used amphetamines in the past 12 months (UNODC, 2006). Of the amphetamines, methamphetamine is the most potent and carries a higher risk of dependence and mental health problems (Topp et al., 2002). Methamphetamine use has been associated with higher rates of psychosis (McKetin et al., 2006), depression (Semple, Patterson and Grant, 2005), cognitive problems (Nordahl, Salo and Leamon, 2003), risky sexual practices (Molitor et al., 1998), medical problems (Albertson, Derlet and van Hoozen, 1999) and violence (Sommers, Baskin and Baskin-Sommers, 2006; Wright and Klee, 2001). In the decade prior to 2002, the prevalence of methamphetamine use in Australia increased (Australian Institute of Health and Welfare, 2005a). By 2001, 11% of Australians aged 20-29 years and 6% aged 14-19 years had used amphetamines in the previous 12 months (Australian Institute of Health and Welfare, 2005a).

1.1 Psychotherapy for Methamphetamine Use

Findings from the first studies into the psychotherapeutic treatment of methamphetamine abuse have appeared only recently and the therapy protocols are of markedly different intensity. In Australia, two and four-session cognitive behavioral therapy (CBT) interventions have been investigated (Baker, Boggs, and Lewin, 2001; Baker et al., 2005). In the United States of America, the Matrix Institute program required clients to attend 36 group CBT sessions, four individual CBT sessions, four social support group sessions, and encouraged weekly 12-step meeting attendance (Matrix Centre, 1995; Rawson, Gonzalez and Brethren, 2002). All treatments investigated have led to reductions in methamphetamine use, including the comparison conditions, with brief CBT producing higher abstinence rates at six-month follow-up than self-help (Baker et al., 2005), and the more intensive programs (Rawson et al., 2004) producing higher abstinence rates than the brief CBT.

1.2 South Australian Amphetamine Treatment Project Psychotherapy Study

In 2002, the Premier of South Australia convened a Drug Summit to respond to community concern over apparent increases in drug use, particularly amphetamine-type stimulants. One of the outcomes of the Drug Summit was the Amphetamine Treatment Project which conducted studies evaluating the effectiveness of various treatments for users of methamphetamine, including psychotherapy.

One hundred and four individuals meeting DSM-IV criteria for methamphetamine abuse were assessed and randomly assigned to 12 sessions of either idiographic CBT or Acceptance and Commitment Therapy (ACT). Retention in treatment was extremely challenging. Only 90 participants attended their first therapy session. Of those, around one third dropped out after their first session and only 21% of CBT and 12% of ACT clients completed all 12 sessions. Nevertheless, the majority (61%) of clients had exposure to at least four sessions, which Baker and colleagues (2005) had previously shown was enough to produce meaningful reductions in methamphetamine use and related harms. There were no differences between the two therapies, with both producing reductions in monthly methamphetamine use (as measured by both self-report and hair analysis), methamphetamine-related negative consequences, depression and dependence, and improvements in general wellbeing.

1.3 About this Manual

This manual is based on the author's experience in the South Australian Amphetamine Treatment Project, as the principal therapist in the psychotherapy study outlined above, a study of a Psychostimulant Check-Up (a brief intervention for psychostimulant users) of 80 participants, a provider of CBT in a randomised controlled trial of dexamphetamine maintenance for methamphetamine dependence and primary provider of psychological therapies for methamphetamine users in South Australian specialist drug treatment services between 2003 and 2007. The author estimates he has either assessed or provided psychological therapy services to over 300 methamphetamine users in that period. This manual is the synthesis of the most effective elements of the two protocols employed in the Amphetamine Treatment Project psychotherapy study. Despite pitting these protocols against each other in the psychotherapy study, the approaches are highly compatible and have been combined in other studies (Gifford et al., 2004).

1.4 A Model to Guide Psychotherapy of Methamphetamine Dependence

Both CBT and ACT models of behaviour share the assumption that the influence of the external physical environment on an individual's behaviour is mediated by the individual's internal experiences. Figure 1.1 illustrates the author's synthesis of ACT and CBT models of the relationship between the external environment, components of internal experience and overt action. Consistent with the assumptions of behaviour analytic theory, the ultimate 'cause' of any chain of events ending in an overt action is located in the manipulable environment external to the individual.

- **Environmental context:** External cues or contexts elicit thoughts, emotions, physical sensations and impulses to act.
- **Fusion or defusion:** How much influence a particular automatic thought will have over overt behaviour depends both on the current context and the "relationship" the individual has developed with that thought. An individual's relationship to a thought can be said to vary on a continuum from fusion to defusion. When a person is fused with his/her thoughts, he/she cannot discriminate his/her subjective descriptions or evaluations of reality from reality itself. For example, if the individual is fused with their thought "chocolate is disgusting", he/she does not recognise that this is their own opinion and not an inherent property of chocolate. Furthermore, the verbal evaluative functions of "disgusting" are likely to dominate and interfere with any experiences (that is, the taste) resulting from direct interaction with the chocolate. Additionally, when a person is fused with a thought that takes the form of a rule (for example, "Do what feels good to you"), the individual follows that rule as if it were an order, and so the thought comes to direct overt behaviour. Fusion with rules can interfere with the individual adapting their behaviour to changes in their environment (Hayes et al. 1986). By contrast, defusion is a state of relationship to thought whereby a thought can be observed without behaving according to its literal meaning. An example of a defused relationship with a thought would be an individual in a committed relationship acknowledging attraction to someone outside the relationship, without flirting with that person, or without engaging in self-admonition for having had the thought. See Coyne and Wilson (2004) for more discussion of cognitive fusion and defusion.

- **Experiential avoidance or acceptance:** The influence of emotional or physiological sensations on overt behaviour is mediated by the individual's 'relationship' to these experiences. To the extent individuals are able to tolerate or accept the experiences they are able to (overtly) behave independently of the action these experiences tend humans toward. To the extent individuals are unwilling to experience these emotions or physical sensations, these emotions and physical sensations or the environments that elicit them will direct behaviour toward avoiding or terminating them.
- **Values:** Values are relatively stable and enduring action preferences. They are rules individuals choose to direct their behaviour. The ability of values to direct behaviour in the presence of cues that elicit thoughts, emotions, physiological sensation and action tendencies in incompatible directions is mediated by the final common pathway, mindfulness.
- **Mindful awareness or inattention:** Mindfulness is the ability to purposefully pay attention in the present moment where any decisions made can be enacted. This is the final common pathway that mediates the influence of the external and internal environments of the individual. To the extent that the individual is mindless, he/she is unaware of the influences on his/her behaviour, and he/she behaves much as an animal without language capabilities would be expected to: their behaviour is predominantly governed by classical and instrumental conditioning processes. With increasing mindfulness, the individual becomes more aware of the influences on his/her behaviour and there is greater opportunity for behavioural variability. The utility of this awareness on any given occasion depends on the individual's relationships with the components of his/her experience at that time. Over time however, the advantages of cultivating mindfulness ability is more obvious as it is a necessary precondition for altering one's relationship with his/her thoughts, emotions and physical sensations. With increasing skill in emotional acceptance, cognitive defusion and mindfulness, behaviour can become increasingly governed by values, rather than conditioned responses.

The implications of this model for treatment are that in the long term, the client's greatest potential to liberate themselves from methamphetamine dependence is to cultivate emotional acceptance skills (particularly with respect to cravings), cognitive defusion skills, clear values and the ability to attend and follow their values regardless of their cognitive, physiological and emotional experiences at the time. This may seem an overly ambitious treatment agenda for methamphetamine users. However this manual outlines how this agenda may be implemented pragmatically, with sensitivity to the client's readiness and abilities. The complexity of the model is a consequence of taking a pragmatic stance toward the factors that usually maintain drug use. While physiological and conditioning processes are undoubtedly involved in the establishment of dependent patterns of methamphetamine use, the psychotherapist has very little direct influence over either. The model emphasises the processes over which the psychotherapist can exert most control. This model can be simply summarised: we cannot directly control the occurrence, frequency or intensity of our internal experiences other than via our selection of external environments; we can only control our responses to those experiences.

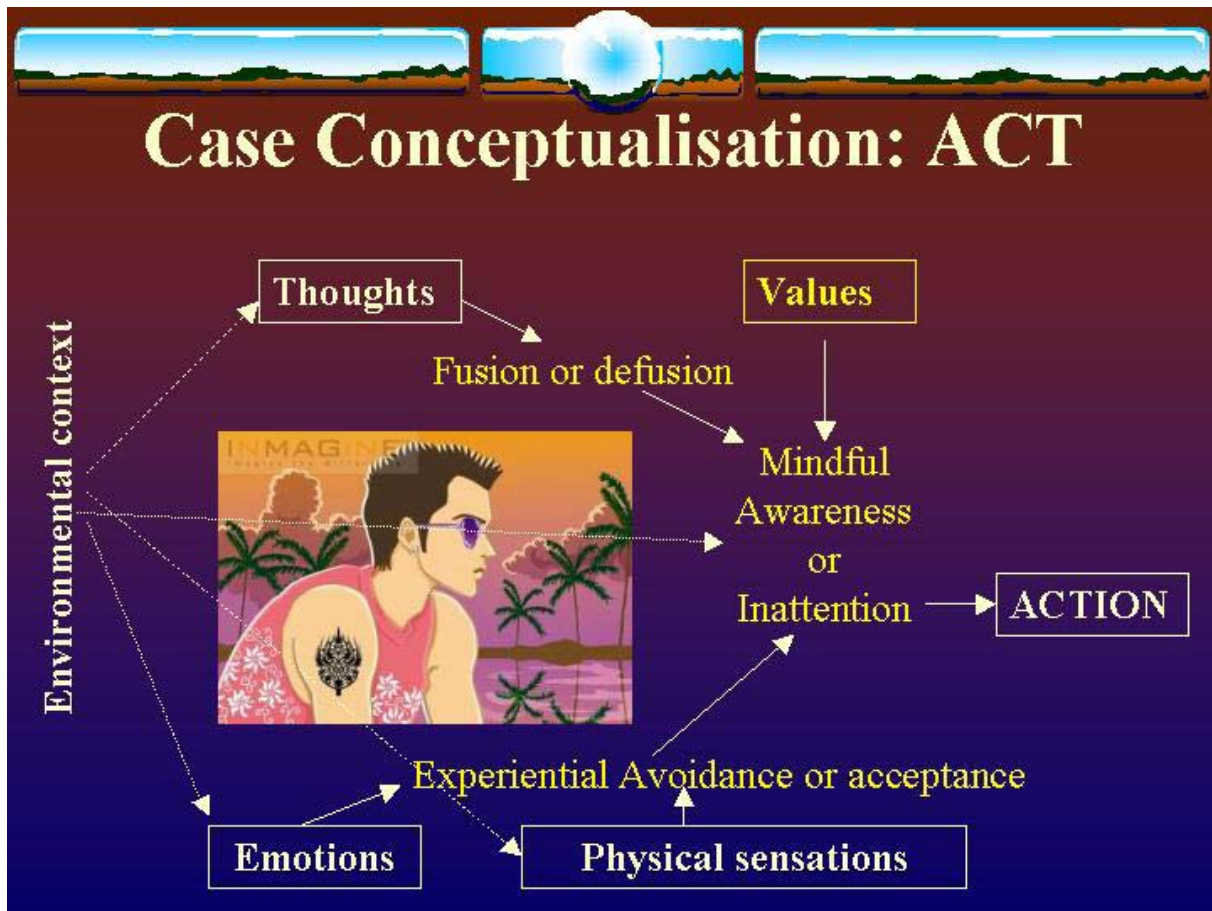


Figure 1.1: Conceptualisation of relationships among psychological components and processes guiding this manual.

1.5 Overview of treatment

This manual presents an idiographic approach to behaviour therapy with methamphetamine users. It is intended to be conducted within the spirit of motivational interviewing, and the assessment and therapeutic interventions are intended to be implemented with a motivational interviewing counselling style. Because motivational interviewing style and spirit are woven through this treatment, this is the first aspect of treatment to be presented (in Chapter 2).

Guidelines for assessment are provided in **Chapter 3**. While it is envisaged that assessment will occupy the majority of the first session (or second, if significant motivational interviewing is required to engage the client in treatment), assessment is considered to be an ongoing part of treatment, where the conceptualisation of the client's difficulties becomes evermore accurate and informative.

Chapter 4 provides detailed instructions on conducting functional analysis, the cornerstone of the treatment. All other treatment decisions are based on the evolution of the case conceptualisation that is continually informed and refined through the results of functional analyses. Clients themselves should become expert at understanding the causes of their methamphetamine use or craving in terms of the antecedents and consequences.

Chapter 5 provides useful information for incorporating into psychoeducation, which plays an important role in providing a rationale for therapy exercises, and occasionally has motivational

impact in its own right. Specifically, when clients have misconceptions or lack information about methamphetamine use).

Chapter 6 provides a number of exercises in helping clients to clarify their values. Although it is presented at this point in the sequence of chapters, the actual timing of its implementation would be expected to vary enormously depending on the client. Its introduction earlier in therapy is likely to be necessary and useful for clients who remain ambivalent and undecided as to whether to make changes to their methamphetamine use. Unless there is some important reason not to use, the immediate direct contingencies will not support a change in behaviour. For other clients, values clarification may be more usefully introduced later in therapy after methamphetamine use is ceased, and the client is starting to look toward a new behavioural focus. Some clients may be very clear about what is important to them and not require this component.

Chapter 7 contains a formidable arsenal of strategies for responding to cravings. This is to provide the therapist with sufficient flexibility to respond to the individual's unique presentation. Some of these strategies are intended as 'band aid' short-term responses to try and reduce or cease methamphetamine use as soon as possible. The learning of any of the techniques expected to facilitate enduring abstinence will be much easier if the acute intoxicating and withdrawal effects of methamphetamine can be minimised. This chapter contains several exercises aimed at developing the abilities outlined in the model in Figure 1.1.

Chapter 8 contains a detailed description of behavioural activation treatment, which is both an invaluable aid in reducing methamphetamine use and long-term relapse prevention, as well as an effective treatment for depression in its own right.

Chapter 9 discusses the issue of comorbid psychological disorders and how best to coordinate treatment in such cases.

Chapter 10 provides suggestions for relapse prevention exercises targeted for clients who have achieved abstinence.

Finally, **Chapter 11** discusses the integration of these components and the structure of treatment.

Chapter 2: Motivational Interviewing¹

Motivational interviewing is a style of conducting counselling designed to minimise interpersonal resistance and facilitate clients deciding to enact a specific behaviour change. It has traditionally been used in fairly brief, sometimes single-session interventions, or as preparation for undergoing a more structured education or skills training treatment program. In our experience with methamphetamine users, motivation to maintain drug use goals and remain in treatment constantly fluctuates, so we have found it helpful to maintain a motivational interviewing style throughout the course of treatment. The principles and practices presented in this chapter should be kept in mind at all times when implementing the other aspects of the protocol.

2.1 The Spirit of Motivational Interviewing

Motivational interviewing is conducted in a particular spirit characterised by collaboration, evocation and autonomy. A spirit of *collaboration* is assumed in most modern schools of cognitive and behavioural therapy and the present protocol is no exception. The therapist should adopt an attitude of joint discovery of the idiosyncratic factors maintaining the individual's patterns of behaviour. The client will play an active role in setting the agenda, gathering information about him/herself and exploring the effectiveness of change strategies.

The spirit of *evocation* assumes that the client has all the ability and motivation to change within, and the therapist mainly helps draw the client's attention to the incentives and resources to change. This spirit may conflict with that of certain educational or skills training approaches that assume the individual's problems are maintained by deficits in key areas of knowledge, emotional regulation or interpersonal effectiveness. Reconciliation between these two approaches can be achieved by beginning with the assumption that the client has all the resources needed to change effectively, and allowing the collaborative exploration of change efforts to reveal any natural barriers or limitations that might be addressed through further education and rehearsal. Even where information is provided or skills are taught, these tasks can usually be done by guiding the client to discover or learn this information or these abilities him/herself, rather than through lectures.

Finally, to adopt the spirit of *autonomy* is to respect that the client's life is their own, and that their inalienable right as a human being is to make their own decisions. These perspectives on therapy integrate well with the behaviour analytic conception that the therapist is part of the environmental context of the client's behaviour and can exert influence as a stimulus within that environment, but only as one stimulus competing among many (Kohlenberg *et al.*, 1993). The client is not merely a host for conditioned reflexes, but given appropriate conditions is capable of initiating behaviour in accordance with their values in ways that may transcend the pull to behave automatically in the direction of conditioned urges.

¹ A complete description of motivational interviewing is beyond the scope of this manual. The interested reader is referred to Miller and Rollnick (2002) for a thorough coverage. There are also several excellent instructional videos demonstrating the approach. The purpose of this chapter is to provide an overview and highlight some key points about using motivational interviewing in idiographic behaviour therapy for methamphetamine use.

2.2 The Tasks of Motivational Interviewing

- 1) Identify Target Behaviour.
- 2) Reduce resistance to change/treatment.
- 3) Build desire to change (increase its perceived importance).
- 4) Build confidence to change.
- 5) Elicit a commitment / plan to change.

Clients will arrive at different stages in the above sequence. There is no need to retrace steps at the outset. As treatment progresses, revisiting earlier stages may be necessary as motivation fluctuates. Some clients will arrive ready to start behaving differently and the therapist should proceed to the other components of the protocol if this is the case. Those who arrive at earlier stages should be taken through motivational interviewing from the stage they are at.

2.3 The Practice of Motivational Interviewing

The practice of motivational interviewing involves following four key principles, primarily through the use of four microskills.

2.3.1 The Principles of Motivational Interviewing

- 1) Roll with resistance.
- 2) Express empathy.
- 3) Develop discrepancy.
- 4) Support self-efficacy.

Rolling with resistance: The therapist does not directly confront hostile reactions, unwillingness or inability to change, or contentious statements from the client. The therapist avoids arguing, lecturing, placating and educating. Rather, the therapist offers reflections of client speech and behaviour designed to convey that the client has been heard, and when possible to redirect the client's attention toward the target behaviour change.

Example:

C²: 'I'm sick of you guys. You're no help. If I was into the smack you'd be whacking me on the 'done. What about us?'

T³: 'You're not sure how we can help you get off meth without some kind of pharmacotherapy'

2 Client
3 Therapist

Express empathy: The therapist makes statements that insightfully and accurately convey what the client is experiencing. It is not pity, sympathy or merely parroting. Empathic therapist statements go slightly beyond what a client has actually said to demonstrate that the therapist has not only heard what the client said, but has anticipated its implications.

Example:

C: 'I want to give up. But I feel better on it. When I'm off it I just think about all the bills, how I've messed my life up...I don't even know what I want to do with myself'

T: 'It's like at the moment, the only time you get a break from feeling miserable is when you're on the gear. If you could just get more relief from that misery, meth wouldn't be nearly as important'

Develop discrepancy: The therapist keeps track of the conversation and reflects back examples where what the client wants and what they have got are different. There may be discrepancies between current behaviour and values, between life now and life before drug dependence, or life now and what the client wants life to be like later.

Example:

T: 'You'd like to hold down a 9 to 5 job but using meth the way you do at the moment you'd be missing two or three days of work a week'

T: 'You've always seen yourself as someone who likes to be in control - that feels natural to you - but lately you've been taking more meth than you ever meant to'

Support self-efficacy: The therapist seeks to strengthen the client's conviction that they can make the target behaviour change. This should not be an exercise in persuading the client 'you can do it!' The therapist prompts clients to talk about times they have successfully made changes to their behaviour and to imagine ways of overcoming barriers to action.

1) Elicit success stories

Example:

T: 'When else in your life have you made a significant change like this? How did you do it?'

2) Invite elaboration of any mention of success

Example:

C: 'I stopped once before – but only for 3 days.'

T: 'Really, how did you stop?' 'How else could you have done that?'

3) Reflect ability change-talk

Example:

C: 'I know I'm not physically addicted.'

T: 'You're sure that if you decided you wanted to stop, you could'

4) Invite possible solutions

Example:

T: *'What do you think might work?'*

2.3.2 The Microskills of Motivational Interviewing

Open ended questions

Affirmations

Reflections

Summaries

Open-ended questions: Questions that cannot be easily answered in one word. These questions usually begin with what or how.

Example:

T: *'What is a typical day for you like?'*

T: *'How have you tried to control your meth use up until now?'*

Affirmations: Statements of appreciation, praise or encouragement.

Example:

T: *'I'd just like to thank you for making it on time today. It's not easy to get to appointments first thing in the morning when you're withdrawing and you wake up feeling tired and lethargic. I appreciate the effort you made'*

Reflections: Statements (not questions, as evidenced by the tone) that convey an understanding of what was previously said. Skilful therapist reflections also add something extra to what the client said, such as an emotion, value or implication that wasn't stated but could be inferred by the statement in the context of what else the therapist knows about the client.

Example:

C: *'It helps me get things done. When I'm off it I can't be stuffed doing anything'*

T: *'You like being productive (reflects value) and you've been using meth to get you moving'*

There are two types of complex reflections which are particularly powerful:

1) Amplified: Exaggerates a client's response to a point they are not willing to endorse. These reflections tend to evoke a more moderate statement in a direction more consistent with the goals of therapy. Care must be taken not to sound sarcastic.

Example:

C: *'I've tried deep breathing before. It doesn't help'*

T: *'Completely useless'*

C: *'It was OK sometimes, but other times the cravings were so strong I just couldn't do it'*

2) Double-sided: Reflect both what was said and the alternative that was not stated.

Example:

C: 'I'm using a lot less now than I used to' (argument against change)

T: 'You're really happy with what you've achieved so far (reflection of what was said) but you'd like to use even less than this' (the alternative to arguing against needing to change, is a reason to keep pursuing change)

Reflections are arguably the most important tool in motivational interviewing. Competent motivational interviewers maintain a ratio of questions to reflections of around 2-3 reflections for each question (Miller & Mount, 2001). People not competent in motivational interviewing often ask more questions than offer reflections. Experts like Bill Miller may offer 5-7 reflections per question. Reflection is the vehicle by which clients feel listened to, understood and hear their own thoughts arguing for change. It is worth striving to maintain at least a 1 to 2 ratio of questions to reflections throughout the protocol. Therapists are often surprised at how much progress in a conversation can be made purely through reflections, and how much stronger the therapeutic alliance feels as a result.

Summaries: Collect several points clients have made throughout a period of dialogue. The therapist selects the highlights, statements of desire, ability, need, reasons, and readiness to change.

Example:

T: 'You've come in because you're finding it difficult to cut down your meth use, and you're worried your mood swings are starting to affect your parenting and you really don't want to hurt your daughter. You're not sure what we can do, but you've had some success cutting down before by avoiding certain groups of friends and going to the gym. You're wondering whether we might have some other ideas for things you can try, particularly to manage the irritability. Have I missed anything?'

2.4 Discriminating Change and Resistance Talk

To be effective at motivational interviewing, the therapist needs to be able to discriminate two broad classes of client talk:

- 1) Change talk
- 2) Resistance talk

Change talk includes statements of:

Desire to change

'I'd love to be able to sit in the room while my friends are using and not have any'

Ability to change

'I know if I wasn't working I could stop using'

Reasons to change

'I'd have a lot more money and my girlfriend would be a lot happier if I gave it up'

Need to change

'I can't keep going, I'll go insane'

Commitment to change

'I'm going to stop using during the week'

The DARN-C acronym can help you remember the kinds of statements to listen for. The therapist will want to ask questions that elicit these kinds of responses, and to keep the client talking on these subjects once they are raised.

Resistance talk includes any statement of intent not to change. This includes indications that changing is not particularly important or desirable, or reasons and arguments against changing. Reasons not to change may include that 'it won't work' said in a dismissive, detached tone, rather than in the context of hope that it could work with fear that it would not. It also includes any hostile, angry, critical, or sarcastic statements that may be directed toward the therapist, others who wish the client to change, or the idea of change itself. The therapist will want to offer reflections the client will endorse to reduce any interpersonal resistance and enable the session to proceed with a spirit of collaboration.

Example:

C: 'My wife thinks I should go to rehab. No way! It's not that bad'

T: 'You're not going to be told what to do. When you cut down it will be on your terms, your way'

Statements of fears about changing or lack of confidence in change need not be signs of resistance. Treating them in the same way as resistance talk can lead the conversation backwards.

Example:

C: 'I just can't see myself not having some if somebody offers it to me'

T: 'It's really hard to turn meth down, it feels almost rude'

While the above response is not 'wrong' – it may be perceived as empathic – it risks stimulating the client to keep talking about the difficulty of the situation, focusing on the barriers rather than the possibility of change. It is more helpful to respond to such statements acknowledging the fear and reflecting the importance of overcoming it.

Example:

C: 'I just can't see myself not having some if somebody offers it to me'

T: 'That's one of the most important strategies to develop as far as you're concerned, the ability to handle situations where people offer you meth'

2.5 The Two Main Sources of Ambivalence about Change

Motivational interviewing sees 2 main sources of ambivalence about change:

- 1) Low importance of change
- 2) Low confidence in ability to change

Although there is no research to suggest you address these in a particular order, it makes logical sense to establish that making a change is important to the client before exploring how they feel about their ability to accomplish it. Where changing appears to be of low importance, elicit statements of desire, reason and need to change. Where the client appears to have low confidence in their ability to change, elicit statements of ability to change.

In ongoing psychotherapy, it is worthwhile keeping in mind which of these two sources is at play whenever clients are failing to progress toward their goal. The therapist can then revisit the client's level of motivation to achieve their drug use goals by exploring their current importance, and the clients' confidence in achieving them.

2.6 To Avoid Going Around in Circles

It is unhelpful and potentially counter-productive to have a lengthy conversation that doesn't progress in the direction of the client talking more about changing. If it feels like the conversation is 'going around in circles' or simply see-sawing between thoughts of changing and thoughts of not, check the following:

- Are you sure what the target behaviour is? What behaviour change are you steering the client toward?
- Has the client expressed desire, need and reasons to change? If so, move on to eliciting statements of confidence. If the client values changing and is confident of changing, move into planning action and other components of the protocol.
- Are your reflections going beyond the words the client says or are you only paraphrasing?
- Try some complex reflections: amplified or double-sided
- Offer a summary (as a way of drawing a topic to a close, to move on)
- Shift focus – sometimes the only way out is to ask an open-ended question along a new line of inquiry.

2.7 When Motivation to Change Reduces

Motivation fluctuates, although often predictably. As clients begin to take steps toward their goals they face new experiences. Change may be more difficult or less beneficial than they first thought. This is particularly likely with drug dependence where the benefits of abstinence are often mild and delayed, whereas the benefits of using are immediate and intense. When client speech suggests motivation has reduced, rebuilding or ensuring the maintenance of commitment to change should take priority over other therapeutic tasks at the time. See example on following page.

Example:

T: 'When you came here, you were worried your use was getting out of hand, you were worried about the effect of meth on your mood swings and parenting. What's changed?'

Either:

C: 'Nothing I guess. I just haven't had the willpower'

T: 'It hasn't happened yet but it's still really important to you to cut down'

C: 'Yeah – I want to be a good mother, I just don't have the willpower'

Or:

C: 'I don't know. Nothing'

T: 'No change in the amount you've used. Any other changes?'

C: 'What do you mean?'

T: 'How important is reducing your use to you now compared to when you came in?'

C: 'I guess I haven't been as bothered by it lately'

T: 'It hasn't caused you any problems. Your mood's been pretty stable, you're happy with your parenting'

C: 'Yeah, actually'

T: 'Did you have second thoughts about coming in today?'

C: 'Well, I had the appointment, I thought it would be rude to cancel last minute'

T: 'You came in to be polite more so than to work on reducing your meth use'

C: (shrugs)

T: 'Well I appreciate you coming in, especially when you're at a point where you're not sure why you'd want to come. I guess part of you thinks there must be a reason not to give up on this altogether'

C: 'No'

T: 'Well let's recap here. You came in using about three times a week, and having mood swings and fights with your daughter...and that was the pattern for about a month, right? Now over the last two weeks, you've continued to use the same amount, but you haven't been so bothered by it. Do you have any thoughts about why that is?'

C: 'Maybe the gear hasn't been as strong?'

T: 'M-hmmm. That's a possibility, any other possibilities?'

C: 'I guess my daughter hasn't been home much over the last two weeks'

T: 'Are you expecting these things, the amount of time you spend with your daughter and the quality of the gear to stabilise and stay stable from now on?'

C: (laughs)... 'no'

T: 'How likely in your experience is it for you to keep using three times a week without experiencing the irritability and fights with your daughter from now on?'

C: 'Not very likely.'

T: 'You'd expect to go back to feeling irritable again pretty soon'

C: 'Yeah. I do have to get on top of it'

Chapter 3: Assessment

The division between assessment and therapy is always somewhat arbitrary. In treating methamphetamine dependence where early attrition is the norm, it is especially important not to adopt a mindset of gathering information first and then implementing a treatment. The process of gathering information directs the client's attention toward factors that maintain their behaviour patterns. For clients ready to change, this process will be educative and facilitate their already-initiated efforts to alter behaviour patterns. For clients not ready to change, this process is likely to arouse anxiety and other emotions they would prefer to avoid. The therapist cannot wait to address resistance. Adopting motivational interviewing techniques even during the course of conducting a basic descriptive assessment is paramount in building the therapeutic relationship and commencing the important therapeutic process of reversing the motivational disorder.

3.1 Context of Assessment

The organisational setting in which you meet the client should also influence how the assessment proceeds. A client will probably expect, and therefore better tolerate, a detailed focus on their drug use if assessed in a specialist drug and alcohol clinic. In other settings, and particularly if drug use is less of a concern than other problems with which they have presented, it is important to attend closely to signs of resistance, and if necessary curtail the depth to which drug-specific information is explored.

How long it will take to cover the areas outlined in this assessment will depend on the client's level of methamphetamine and other drug use, as well as their social, psychological and medical functioning.

3.2 Distinction between Motivation for Behaviour Change and Motivation to Attend Treatment

In order to use motivational interviewing effectively the therapist needs to identify the target behaviour toward which change talk will be directed. It is worth keeping in mind a distinction between *behaviour change* (for example, changes in drug use) and *treatment involvement* as separate target behaviours. Some clients may be ambivalent about making changes to their drug use, but be happy to attend sessions regularly to talk to someone. Other clients may be clear that they wish to stop using drugs, but ambivalent about engaging in many sessions of therapy, either because they are confident they can change without assistance, or attending therapy is inconvenient or seen as embarrassing. Depending on what the client wants to achieve, and their apparent existing capabilities, the therapist may see retention in treatment as more or less important. Where the therapist assesses the client to require assistance to achieve their goals and the client is ambivalent about treatment, motivational interviewing targeted toward treatment retention is advised. In this case, the therapist aims to elicit desire, reasons, need, ability and commitment statements with respect to treatment participation.

3.3 A Guide to the Initial Assessment

A guide to the broad sequence of initial assessment is outlined on Page 23. The sections below explain the content of this guide in more detail.

3.3.1 Client Expectations

The amount of experience a client has had with treatment may range from none to many years of their life. The type of experience a client has had may have varied from inpatient to outpatient to residential settings, with therapists from a range of professional backgrounds and possibly from a range of theoretical perspectives within professions. The specificity of clients' expectations from treatment may range from none to vague to very specific. There is a range of outcomes a client might hope for from treatment (see Box 3.1). It may also be worth making a distinction between long-term and short-term goals the client may have from treatment.

Clients' openness to treatment is likely to vary from being willing to be guided by whatever the therapist thinks is best, to having strong and inflexible ideas about what needs to happen. With open clients, you may be able to proceed fairly smoothly through a structured protocol, and in fact this is advisable where possible. On the other hand, to the extent the client is not open you will have difficulty making progress with structured material. Your job is to continually attend to signs of resistance and optimise clients' openness through motivational interviewing techniques.

In order to forge the best possible therapeutic alliance, the therapist should attempt to ascertain what factors have led the client to attend treatment, and what the client's priority concerns are. The therapist should continually reflect this understanding back to the client to ensure the therapist's perception is accurate and to convey to the client that he/she has been heard. Ensure that sufficient time is allowed to at least *begin* to provide some of the functions the client was seeking by attending. This is more important than attempting to complete every section of the assessment.

Box 3.1: Examples of goals a client might have for treatment

Client treatment goals

- Obtain information
- Clarify thinking
- Obtain techniques to cope with cravings
- Treatment of a comorbid psychological problem
- Have a supportive listener
- Satisfy significant other
- Demonstrate commitment to changing behaviour
- Support a reduced court sentence

3.3.2 Client Goals regarding Methamphetamine Use

Clients come to therapy with different patterns of drug use and different goals for their pattern of drug use (see Box 3.2). Some have already stopped using and hope to remain abstinent. Some are keen to abstain for now but ambivalent about remaining abstinent permanently. Others hope for eventual abstinence but are only willing to contemplate a reduction in use for the time being. Others have no intention of stopping use but wish to change something about how they behave when using (for example, engage in less violence when using, reduce use of other drugs while intoxicated). How realistic or workable these goals are will vary from person to person. Clients may also vary in how rigidly or flexibly they hold these goals (that is, how open they are to revising them) and how committed they are to them.

Box 3.2: Examples of changes in behaviour a client may wish to make

Client behaviour change goals

- Remain abstinent
- Cease drug use permanently
- Cease drug use temporarily
- Reduce quantity used per occasion
- Reduce frequency of use occasions
- Reduce or cease use in certain contexts
- Change route of administration
- Reduce harms associated with use (for example, fights, other risk-taking behaviour, injecting practices)

3.3.3 Assessing Motivation toward Methamphetamine Use Goals

As the client discusses their methamphetamine use goals and throughout the assessment, pay attention to any change talk. If the client has already begun making changes to their use, it is not necessary to begin with 'traditional' motivational interviewing (eliciting statements of desire, ability, reasons or need to change). In this case, following assessment, the client and therapist may be able to focus on enacting behaviour change. Note that while it is probably safe to assume those who have already taken steps value the change (change is important), they may still be low on confidence to take further actions.

If, as is often the case, the client has taken no steps, or only tentative steps toward change, it is worth assessing the importance of various methamphetamine use change goals. The importance may vary by goal. For example, it may be very important to stop using for now but less important to never use again. The importance can be inferred from low rates of statements of desire, reason or need, from nonverbal behaviours such as affect and voice tone when discussing the goal, or assessed directly on a scale of 1-10. Ascertaining the client's likely motivation toward their goals, even at only a superficial level during the initial assessment is very important to efficiently direct where treatment begins.

3.3.4 Therapist Goals regarding Methamphetamine Use

The therapist should attempt through motivational interviewing techniques to direct clients toward the pursuit of the least harmful drug use goals the client is willing to contemplate. The preference should always be for total abstinence, with concessions to interim goals made as a pragmatic compromise to enable the maintenance of a collaborative therapeutic relationship. If the client chooses a drug use goal other than total abstinence, the therapist should continue to monitor for signs of increasing openness, contemplation of or readiness for less permissive drug use goals. The process of motivational interviewing toward less harmful drug use goals need not take place at this point in the assessment; it can commence at any stage where the client naturally emits change talk relating to less harmful use. If it becomes apparent the client intends the session to be a single-session intervention and they are yet to emit change talk toward less harmful drug use goals, the therapist should actively attempt to elicit such change talk before the end of the session. Consistent with the spirit of motivational interviewing, should the therapist wish to express concern about the client's chosen goals (for example, if achieving

the goal would not be sufficient to reduce immediate risk of harm to self or others), he/she can do so by first asking permission.

Example:

T: 'You've told me that what you're aiming to do is to keep using meth and xanax daily, but to try and limit your meth use to about half a gram each day. I have to say I have some concerns about having that as a goal. Would it be okay if I explained my concerns to you?'

3.3.5 Current Methamphetamine Use

Perhaps the most useful question with which to commence an assessment of drug use patterns is 'when did you last use?' The response will have a large impact on how the therapist can interpret the client's current mental state. Use within 24 hours could mean the individual still displays residual effects of intoxication, or more likely, the onset of withdrawal. Last use between 3 and 9 days ago indicates the client is likely to be in a period of peak craving (if dependent). Last use two weeks ago or longer indicates clearly the individual has plenty of experience of living without drugs to draw from in developing an approach to their future.

Many drug users in treatment will have a drug history of 10 or more years. In a first session, it is not necessary or even advisable that this history is explored in minute detail. A possible exception would be if a client has a history of committing to longer term treatment and indicates a willingness to commit this time. However, as treatment proceeds, drawing on this history may prove valuable in the context of demonstrating strengths in coping with antecedents to drug use, or by demonstrating the ineffectiveness of certain kinds of emotional control strategies. The time period that constitutes current use will vary depending on the client, but use patterns from the last three months are informative of the client's immediate struggles.

3.3.6 Other Drug Use

The assessment of other drugs can proceed similarly to the assessment of methamphetamine use. In addition to basic information about pattern and quantity of intake, the sequential relationship between the different drugs used is very important. Are sedating drugs such as cannabis, alcohol or benzodiazepines used to aid sleep or reduce irritability or dysphoria after a period of methamphetamine use? Or does the person manage to resist cravings to use methamphetamine until after a few drinks, in which case alcohol serves as an antecedent to methamphetamine use? What are the consequences of methamphetamine use on the use of other drugs? Does alcohol or nicotine intake increase dramatically when intoxicated with methamphetamine? Is methamphetamine used for energy and alertness to offset previous overuse of benzodiazepines or cannabis? Or, is methamphetamine and one or more other drugs used simultaneously in a situation to produce a 'joint effect'? There are potentially dozens of relationships that could affect clinical decision making. Simply put however, the goal of this assessment is to find out:

- (a) Which drugs used in what ways serve as antecedents to methamphetamine use?
- (b) Which drugs used in what ways are consequences of methamphetamine use?
- (c) Which drugs used in what ways accompany methamphetamine use?

3.3.7 Past Attempts to Cut Down or Reduce Methamphetamine or Other Drug Use

There is increasing evidence that the extent to which the therapist draws the client's attention to their strengths and increases their sense of confidence largely dictates how successful therapy will be (Gassman & Grawe, 2006). However, confidence can not be manufactured or persuaded. It will only serve behaviour change if confidence authentically derives from actual experience (Bandura, 1997). To this end, an exploration of past attempts to cut down or reduce methamphetamine use or indeed use of any other drugs may provide the client with evidence of their capabilities. It is important not to attempt to 'talk up', embellish or judge any reported accomplishments (for example, 'that's fantastic!'). Positive judgments are still judgments and a non-judgmental atmosphere is preferable. There is also the risk that providing positive evaluations will also tend to activate negative evaluations, as concepts related by opposite literal meanings may be equally likely to be elicited in certain situations (Hayes *et al.*, 2001). For example, if the therapist says, 'that's a great effort', the client might counter with, 'I didn't put that much effort in'. Instead, the therapist should simply reflect back examples the client provides without minimising or exaggeration (for example, 'so six months ago you gave up for two weeks'). For any period of abstinence, gather as much detail as the client can recall about what was different during that time in (a) the client's behaviour; (b) the client's social network; and (c) the client's occupational routine. In simple cases, this may be sufficient to alert the client to effective self-care behaviours, and necessary decisions to take about relationships, times, activities and places to avoid that they have not been making recently.

More likely for long-term and dependent users, current circumstances are different to those in which they have abstained in the past. The client may now be using larger amounts of methamphetamine or more often, or using in combination with other drugs, or by a different route of administration. They may formerly have had routines and social networks that limited opportunities to use in dependent patterns. They may now have closer proximity to, or have discovered further uses for methamphetamine. Exploring how circumstances may now be different might be very important in assisting clients to dispense with ineffective coping strategies. Some clients may resist making important behavioural changes (for example, to cease making direct payments of debt to a dealer) because they hold on to memories of previous occasions where the use of certain strategies (for example, repetitive self talk, 'I'm not going to score') seemed to work. Similar exploration may also be useful for influencing drug use goal-setting. Periods of abstinence several years ago may have made it seem plausible that the client pursued a goal of using once a month at a nightclub. However, the lack of recent periods of abstinence could be taken as evidence that maintaining a goal of using once a month is unworkable now.

It is quite common to explore periods of abstinence to find the client was able to achieve abstinence from methamphetamine by using another drug instead (for example, cannabis, benzodiazepines, alcohol). In these cases it is worth inviting the client to reflect on how successful the strategy of drug substitution is in the short-term and then in the long-term. Substitution is usually a means of avoiding the discomfort of withdrawal, and living straight.

To summarise, the non-judgmental exploration of previous periods of reducing or ceasing drug use can serve two useful therapeutic functions:

- (a) evidence of capacity to abstain: increase confidence and suggest strategies
- (b) evidence of unworkability of ineffective coping strategies or plans

3.3.8 Social Context of Methamphetamine Use

In a first interview, a broad sketch of social networks, legal issues (for example, arrests, court appearances, involvement with correctional services) and finances may be sufficient. Intimate relationships are of particular significance. Does the client's partner know they use? Do they use too? Is methamphetamine use important to their sex life? Is it contributing to affairs? Does the client have children? Do they know about their drug use? If they use with other people, how important are those relationships apart from someone with whom to use methamphetamine? This is an area in which clients are likely to have strong values with which their methamphetamine use may conflict. Reliability, honesty, trustworthiness, kindness, and consideration toward partners, close friends and family members are likely to be areas compromised by dependent patterns of drug use. Thorough exploration of this area can facilitate increasing the importance of behaviour change and provide purpose for exercises in accepting discomfort.

To the extent that the client is concerned about their health, the exploration of health functioning may increase readiness to change. Where clients have cardiac conditions or are taking medications such as antidepressants or antipsychotics, ask permission to provide information on how methamphetamine use can compromise these health conditions and the effectiveness of these medications. Sleep and eating problems play an especially important role in maintaining the cycle of methamphetamine dependence as they contribute to low energy levels. This is a common antecedent to further methamphetamine use which in turn, leads to further sleep and eating problems.

3.3.9 Psychological

Dissatisfaction with psychological functioning is likely to be a primary reason for presenting to treatment. Clients who report experiencing depression should be assessed for current suicidal ideation, desire, plans, intent and access to means of enacting plans. Emergency mental health services may be required to hospitalise a client if they report willingness and intent to die in response to their emotional suffering. It may be particularly important to be conservative in assessing the suicide risk of clients who are either intoxicated or withdrawing from large amounts of methamphetamine, whose cognitive functioning is apparently disturbed.

For clients who report less extreme acute responses, but chronic dysphoria, irritability or mood swings, the relationship between mood and drug use should be closely examined. Clients are apt to describe their mood as worse when not on methamphetamine, the predictable consequence of becoming dependent and experiencing withdrawal. Even depression as part of a protracted withdrawal over months is not uncommon among chronic methamphetamine users. The short and long-term antidepressant effects of methamphetamine should be contrasted. Even if the client has a long history of depression preceding methamphetamine use, long term use is unlikely to be improving this in any durable sense. Contrast how effective methamphetamine was as an antidepressant when the client first started taking it with recently. The client may acknowledge that methamphetamine is not an effective long-term antidepressant, but delay taking steps to reduce use because they are waiting for a lift in mood first. This vicious cycle (continuing methamphetamine use causing depression on withdrawal, motivating further methamphetamine use) can be highlighted to the client as a stimulus to making a behaviour change commitment.

3.3.10 Expectations of / Commitment to Treatment

By the end of the session both you and the client will have a better sense of what level of involvement in treatment is advisable. A client with little evidence of a dependent pattern of use and a history of

successful cessations of habits may need little more than a brief intervention. A client in a dependent pattern of use, with seemingly poor skills in managing social interactions and emotions, including urges to use drugs, has a greater need for professional assistance.

Where you feel the client would benefit from more treatment than they appear willing to commit to, direct motivational interviewing toward the target behaviours of *attending and participating in treatment*. The techniques are the same as those directed toward target behaviours of reducing drug use. Listen to the client's change talk. If attending treatment appears to have low importance, attempt to elicit statements of reasons, desire or need to change. If the client mentions they would like to attend treatment, gives reasons it would be worthwhile to attend treatment, or states that they need to attend treatment, the client may be ready for treatment but lack confidence in their ability to attend. In this case, the discussion may turn to practical barriers (for example, transport, work or childcare) that may be able to be addressed in order to make attendance more possible. If the client worries about their ability to remember appointments, ask their permission to send them reminders and brainstorm with them the most effective mode of reminder (for example, SMS, phone call, mail, next of kin contact). Make it clear to the client that attending and engaging with treatment can be thought of as a skill to master in the same way as reducing drug use, and one which may require practice and the occasional lapse. If possible in your service setting, make it clear to the client that missing appointments does not preclude them recontacting and reengaging in therapy.

3.4 Assessment Guide

[1] CLIENT EXPECTATIONS

For example: 'What are you hoping to get out of coming to see me?'

Things to look for

- Information about drug effects
- Information about harm reduction
- Someone to listen and clarify thinking
- Treatment for a comorbid psychological problem
- Strategies to cope with cravings
- Strategies to deal more effectively with other people
- Relative importance of reducing/ceasing use as a goal

[2] CLIENT GOALS

For example: 'What changes if any, are you hoping to make to your meth use?'

Follow-up: *'How long have you wanted to make these changes?' 'Why now?'*

Things to look for

- Prevent relapse
- Cease use
- Reduce use
- Reduce harm from use
- Change behaviour when using
- **Importance of changing use**
- **Confidence in changing use**

[3] CURRENT METHAMPHETAMINE USE

For example: 'When was the last time you had some meth?' 'How much did you have?' 'When was the time before that?' 'How much did you have?' 'How do you use it?'

How much did you have?' 'How do you use it?'

How much did you have?' 'How do you use it?'

Reflect back *typical use pattern*

Things to look for

- Last use
- Typical quantity and frequency over last three months
- Route of administration (ROA)
- Pattern of use (distribution of occasions of use across week/fortnight)

[4] OTHER DRUG USE

Repeat relevant aspects of [3] to assess: Alcohol, benzodiazepines, cannabis, cocaine, MDMA, opioid and tobacco use and enquire whether any other drugs are being used (for example: GHB, hallucinogens, inhalants, ketamine). Include **gambling**.

Things to look for

- Last use
- Typical quantity and frequency over last three months
- Route of administration (ROA)
- Pattern of use (distribution of occasions of use across week/fortnight)
- **Relationship to methamphetamine use: antecedents, accompaniments, consequences**
- **Need for inpatient detoxification**

[5] PAST ATTEMPTS TO CUT DOWN OR REDUCE METHAMPHETAMINE USE OR OTHER DRUG USE

[5a] Explore episodes of success

For example: 'What is the longest period you've gone without using meth?' 'How did that start and end?' 'In the last three months, what is the longest period you've gone without using meth?' 'How did that start and end?' 'Have you given up or cut down any other drugs before?'

Things to look for

- Longest period of abstinence achieved
- Most recent periods of abstinence or reduction in use
- Successful transitions to lower risk ROAs
- Successful cessation of any drug
- Substituting one drug for another
- Changes in social networks
- Changes in occupation
- Effective cognitive or behavioural strategies

[5b] Explore effectiveness of previous strategies to quit or reduce

For example: 'What have you tried to do to control or limit your use of meth/other drugs?' 'How did that work?' 'In the short-term?' 'In the longer term?'

Things to look for

- Strategies effective in the short-term that increased drug use in the long-term
- Attempts to avoid harm from drug use while continuing to use
- Experiences where acceptance of discomfort facilitated reduction or cessation in drug use

[6] SOCIAL CONTEXT OF USE

For example: 'Who are the most important people in your life right now?' 'How do they respond to your meth use?' 'How do you usually spend your time during the week?' 'Do you have any legal problems?' 'Do you have any debts?'

Things to look for

- Social networks that support drug use
- Friends who do not use
- Pressure to abstain
- Legal problems
- Poverty/debt
- Boredom/underactivity
- Unemployment/underemployment/risk of job loss

[7] MEDICAL

For example: 'How do you sleep?' 'What are your eating patterns like?' 'Are you on any prescribed medications?' 'Have you been to hospital in the last 12 months?' 'Do you have any general medical conditions?' 'Do you have any blood borne viruses?' 'When were you last tested?'

- Things to look for**
- Insomnia
 - Anorexia
 - Blood borne viruses
 - Problems with veins
 - Cardiac problems
 - Malnutrition
 - Prescribed medications
 - General medical conditions

[8] PSYCHOLOGICAL

For example: 'How do you feel most of the time?' 'Have you ever thought about hurting yourself?' 'Have you ever done so?' 'Does that happen only when you use meth?' 'Have you thought about hurting anyone else?' 'Have you done so?' 'Have you ever become paranoid or thought someone was after you while using?' 'What was that like?'

- Things to look for**
- Suicidality
 - Depression
 - Anxiety
 - Irritability
 - Aggression
 - Paranoia

[9] EXPECTATIONS / COMMITMENT TO TREATMENT

For example: 'How much involvement in therapy did you have in mind?' 'Some people attend once, others attend for a small number of focused sessions and others are looking for an open-ended program... what about you?'

- Things to look for**
- Resistance to coming back
 - Anxiety about being able to keep appointments

3.5 Treatment Planning

As a result of the assessment, the therapist and client should begin to formulate an idea of where to proceed next. This is a collaborative process, but the table below can suggest which areas the client and therapist might benefit most from exploring first.

<p>Already abstinent</p>	<p>Relapse prevention</p> <ul style="list-style-type: none"> ■ Set-up routines to minimise exposure to cues and provide alternative sources of reinforcement ■ Develop coping plan for accidental contact with cues ■ Check cue-reactivity (that is, strength of craving in response to antecedents of meth use): assess coping skills and teach if needed ■ Anticipate future high risk situations: assess coping skills and teach if needed ■ Anticipate apparently irrelevant decisions ■ Monitor commitment to abstinence: motivational interviewing to pursue restored commitment if necessary
<p>Cutting down</p>	<ul style="list-style-type: none"> ■ Set drug use goals between sessions: plan use occasions; anticipate urges to use at times other than planned – develop coping plan for those times ■ Monitor methamphetamine use (<i>in vivo</i> where possible) ■ Monitor urges to use: antecedents; consequences; effectiveness of responses to urges ■ Monitor commitment to reducing: motivational interviewing to pursue restored commitment if necessary ■ Monitor effectiveness of use reduction as a strategy vs pursuit of abstinence
<p>Reducing harm</p>	<ul style="list-style-type: none"> ■ Set harm reduction goals between sessions ■ Monitor harm when using methamphetamine: antecedents, consequences ■ Develop plan to avoid/reduce methamphetamine-related harm ■ Monitor effectiveness of harm reduction as a strategy vs pursuit of use reduction or cessation
<p>No commitment to any goal</p>	<ul style="list-style-type: none"> ■ Motivational interviewing toward increasing importance of changing methamphetamine use, and confidence ■ Motivational interviewing toward treatment attendance

Chapter 4: Functional Analysis

Functional analysis refers to the process of identifying the factors that control the target behaviour through careful examination of its antecedents and consequences.

Clients often wonder why they continue to engage in dependent patterns of methamphetamine use even when they can identify numerous disadvantages to using and benefits of quitting. Possibly as a result of the way psychology has been portrayed in the media, clients may present to therapy looking to explain their drug use as due to an 'addictive personality' or early childhood events. Whatever contribution personality, genetics or early life experiences make to current methamphetamine use, these are not factors that can be easily altered in the present. Furthermore, their influence is likely to be far smaller than the individual's current physical and social environments, and the individual's skills in coping with thoughts, emotions and physical sensations and acting in accord with long-term plans.

To maximise their chances of controlling their methamphetamine use, it is important that clients master functional analysis. Functional analysis is introduced as soon as clients express a willingness to understand why they are using. It is then revisited continually throughout therapy. The instructions listed in this chapter are relevant to functional analysis undertaken at any point in therapy.

4.1 Functional Analysis in Session

1) Ask the client to recall a specific episode: the last occasion of use, or a recent episode the client recalls well.

2) Obtain a brief description of the situation in which they used methamphetamine. Have the client describe the physical environment, the people present, and the activities going on. Ask the client to describe any immediate changes in physical sensations, emotions or thinking that occurred after they took the methamphetamine. Also ask for any changes in the client's behaviour and quality of interactions with others in the next hour or two following use. The therapist should discern which of the consequences served as positive reinforcers (the addition of a new desired event) and which served as negative reinforcers (the removal or relief of antecedent conditions).

Collect this information without judgment and resist drawing conclusions about what constitutes an important 'trigger' until several episodes have been analysed. It is useful to offer simple reflections of any changes mentioned following methamphetamine administration, and to offer summaries integrating the information the client gives with any previous functional analyses you've carried out. The information about changes in the first few hours following use across occasions of use will reveal any functions methamphetamine may serve for the client.

3) Next, ask the client to describe any events they can remember leading up to the instance of use. Again, ask them where they were, what they were doing and who they were with to help the client recreate the experience. Try to locate the earliest point the client became aware of a thought or urge to use. If clients find this difficult, it can help to count back and overview each hour leading up to the instance of use.

Example:

T: 'So, you ended up using around 8:30pm, what was happening around 7-8pm? Where were you, who were you with, what did you get up to?'

C: 'I was sitting around my house with Ben and Stacy, having a few drinks before we went

out. We were just talking and listening to music.'

T: 'Were you thinking about using meth at that stage?'

C: 'Yeah, we usually have meth when we go out, so as soon as they came over I was starting to get edgy'

T: 'At that point you noticed some physical signs of an urge to use, a little agitation'
(reflection)

C: 'Definitely'

T: 'What about before Ben and Stacy came around, how early in the day were you thinking about using meth?'

C: 'I wasn't thinking about it at all until they came over'

T: 'You said you usually use when you go out together, at what point did you decide to go out together?'

C: 'We go out most weeks – it's just understood, we don't plan it. Ben and Stacy usually just rock around some time on a Saturday night'

T: 'So on this last occasion, when did you start thinking about the evening ahead?'

C: 'As I say, just when they rocked up'

T: 'So, say around 6-7pm what were you doing with yourself?'

C: 'I was probably getting some tea and having a drink... I would have had a shower at some stage'

T: 'Did you notice any thoughts about using meth at this stage?'

C: 'I guess I would've in the shower. I would have been thinking about what to wear, thinking about the night... I guess it would have gone through my mind'

4) Then, ask the client about events even before this first thought. Try and find a point where the client felt no urge or had no thoughts of use. Again, count back hour by hour if necessary or even by day if that is easier.

Example:

T: 'What about 5-6pm, what was happening then?'

C: 'I was finishing up at work and driving home?'

T: 'Were you aware of any thoughts of using meth at this stage?'

C: 'It's hard to say... If I did it would have just been for a second. Maybe because I was about to leave work, I might have been thinking about that night'

T: 'What about earlier, 4-5pm?'

C: 'I doubt it, work was flat out. I don't have time to think'

Potentially any or all of the events that precede an episode of drug use could be treated as cues or high risk situations, for which coping strategies could be developed. The rationale for painstaking attention to the earliest signs of appetite to use is that where there is a protracted period prior to use, the earliest signs are likely to be the least intense and most easily responded to. Responding effectively to the earliest signs of the urge to use may avert the need to respond to more intense and difficult forms of the urge.

5) Assessing the functional significance of antecedents.

Investigate the significance of each component of an urge and reflect back. Functional analysis is essentially a recursive procedure. If a component of an urge such as a thought, physical sensation, emotion, or behaviour occurs, its immediate consequences should be examined. The presence of an urge component in the events leading up to an instance of use can be viewed as significant if it is followed by a departure from previous functioning in any domain of thought, emotion, sensation or action. For example, a fleeting (less than one second) memory of a past occasion of use among a stream of other thoughts followed by a stream of non drug-related thoughts, and without any reactivity in emotion, sensation or change in behaviour is probably of little significance (see Box 4.1 [A]). On the other hand, a fleeting memory of a past occasion of use which is then followed by protracted rumination about that occasion, other occasions of use, the experience of elements of emotion and sensation from those occasions and contemplation of obtaining the drug indicates that this memory and the events that elicit it are probably significant ‘triggers’ of urges to use methamphetamine (see Box 4.2 [B]).

Box 4.1: Contrast of the functional significance of thoughts as antecedents to methamphetamine use: [A] the thought has no functional significance; in [B] the thought contributed to the escalation of craving.

[A]

T: *‘Were you were aware of any thoughts of using meth at this stage?’*

C: *‘It’s hard to say... If I did it would have just been for a second. Maybe because I was about to leave work, I might have been thinking about that night’*

T: *‘You might have thought about using meth that night’*

C: *‘If I did it would have just been for a second. I’m too worried about making sure everything’s packed up before I leave’*

In this instance, the client kept working and switched attention back and forth between thinking about the night ahead and concentrating on work tasks. The occurrence of the thought of using had no significant impact on the client.

[B]

T: *‘Maybe just thoughts...meth would be available, but no real excitement or worry about whether or not to use it’* (**complex reflection**)

C: *‘I have wanted to cut down. I guess there was a moment where I told myself ‘I shouldn’t’*

T: *‘When you were in the shower thinking about the night ahead, thinking for a moment at some point the meth will come out, you had the thought ‘I shouldn’t’* (**interim summary**).
Was there another thought or an image right before the thought, ‘I shouldn’t?’

C: *‘I guess I had this picture of being out; off tap. I know it’s wrong but I really like the feeling.’*

In this instance, the client’s image of the night ahead was accompanied by them cautioning themselves against using, which implies there was an impulse to use. The thought was accompanied by appetitive

sensations. This cluster of events signifies the presence of an important cue or high risk situation for use - perhaps 'getting ready to go out.'

The same discrimination can be made in the case of other urge components. The client need not identify a thought as the first link in the chain of events leading to use. The client may instead notice particular physical sensations, often resembling anxiety, such as muscle tension, breath-holding or shallower breathing, increases in pulse or heart rate, or in body temperature. If these physical sensations persisted while the client continued to do what they were doing and did not stimulate thoughts of using or actions directed toward using, they may have had little direct functional relevance to methamphetamine use on that occasion. On the other hand, if at the point the client noticed these sensations they began to search for ways to relieve the feelings including consideration of methamphetamine use, the physical sensations functioned as a significant trigger.

4.2 Assessing the Functional Significance of Consequences

The functional significance of antecedents and consequences can only accurately be gauged by observing multiple occasions. Depending on their unique learning history, the client's methamphetamine use may be under relatively greater antecedent or consequent control. The longer the client has been using a drug, the more likely their use is to be under relatively greater antecedent control.

The client is likely to be able to state reasons for using the drug. It is important to remember that these may or may not be factors that maintain their drug use. Self-reporting about drug use is a separate behaviour from drug use itself, and has its own maintaining factors. For example, the client may state they use to experience a rush (expectation of positive reinforcement) however their recent experiences might indicate a paucity of rush experiences, whereas an investigation across situations reveals a consistent pattern of elicited urge (conditioned aversive stimulus), followed by urge relief on drug ingestion (experienced negative reinforcement). In this example, even though the client believes a 'rush' experience is an important factor in use, the relief of craving appears to be more important. The therapeutic task in this case is to draw the client's attention to the discrepancy between their expectations and their experience, and to elicit willingness to pursue managing the more potent maintaining factor.

Where the client continues to experience desired effects following drug administration, it is useful to estimate their potency, duration and effectiveness in fulfilling the desired function in comparison to alternatives. For example, if the desired effect is a 'rush' experience, ask the client how pleasurable or intense the experience is (which could be rated on scale of 1-10), how long it usually lasts, and how preferable that experience is compared to other pleasurable experiences in the client's life. If the desired effect is appetite suppression, ask the client how well methamphetamine currently suppresses appetite (with tolerance, clients who initially show appetite suppression may come to eat easily when intoxicated), how long for, what happens when withdrawing (when appetite may rebound) and whether this is an effective strategy in weight loss. The result of these explorations will either be (a) methamphetamine is no longer as effective in fulfilling its intended function as it once was, in which case therapy is again oriented toward managing antecedents that continue to elicit drug seeking; or (b) methamphetamine is fulfilling valued functions (use is under consequent control) in which case therapy returns to facilitating the client deciding to cease methamphetamine use, even as it entails forgoing its valued functions. With commitment to cease using, other behavioural alternatives may be explored that might serve the functions that methamphetamine use served. However, if the commitment to cease use is not there, it may be unrealistic to expect that discussing alternative means of attaining the functions of methamphetamine is likely to reduce use, because methamphetamine is likely to be relatively more convenient, immediate, and possibly potent compared to alternatives.

4.3 Other Useful Episodes on which to Perform a Functional Analysis

■ Last situation/other occasion really intended not to use and succeeded

- Illustrates that it is the behavioural response to the cues that determines drug use outcomes, not the presence of thoughts, sensations or urges.
- Reminds the client they are capable of executing a behavioural alternative to drug use, even in the presence of urges to use.
- May provide information about effective coping strategies that could form part of a coping plan for future occasions.
- Notice whether the client discounts the experience, attributes it to factors outside their control, or specific to that particular occasion. If so, use motivational interviewing to facilitate the client attributing any effective behaviour to personal response-ability, and to elicit statements that the client responded consistent with their values.

■ Last situation/other occasion really intended not to use but ended up using

- Illustrates particularly strong cues or consequences maintaining use.
- Opportunity to explore effectiveness of alternative behaviours prior to drug use.
 - What were the immediate consequences of the alternative behaviour? Did it result in more, less or no change in preoccupation with drug use? More, less or no change in sensations? Strength of urge? Involvement in activities to obtain/plan to use drug?
 - How long did these changes (if any) last? Then what happened?
 - Were effective behaviours abandoned?
 - Did the client persist with ineffective behaviours?

Example:

T: *Can you think of a time recently when you intended not to use meth, but ended up using?*

C: *Last week. I knew my wife was going out and I'd just got paid'*

T: *In the past, these are circumstances you would usually use in'*

C: *'Absolutely. As soon as the opportunity comes up'*

T: *'What did you do to try not to use?'*

C: *'I just kept telling myself 'I'm not going to use' and tried not to think about it'*

T: *'How did that work out?'*

C: *'It started out alright, but the thought just kept coming back into my head, over and over'*

T: *'When you first said to yourself 'I'm not going to use', you were able to stop thinking about meth and think about something else'*

C: *'Yeah, but the thought kept coming back'*

T: *'How long would you guess it took for the thought to come back'*

C: *'I don't know, a minute maybe'*

T: 'Sounds like you were really bothered that you had the thought of using. You tried to order yourself not to use, and redirect your attention, but you were only able to keep the thought out for a minute at a time. How satisfied were you with that strategy at the time?'

C: 'Not very. I tried to listen to a CD my last counsellor gave me, to try and relax, but I couldn't do it. The thought just kept coming back'

T: 'So again, in the context of trying to keep thoughts of using out of your mind, you tried to order yourself not to use, and listen to a relaxation CD and neither of those strategies kept the thoughts from coming. As you realised these things weren't stopping the thoughts, what happened?'

C: 'I just started getting really anxious. I just didn't think I could help myself. I couldn't concentrate on anything but getting on'

T: 'Were there any other things you did, or put in place to enable yourself not to use?'

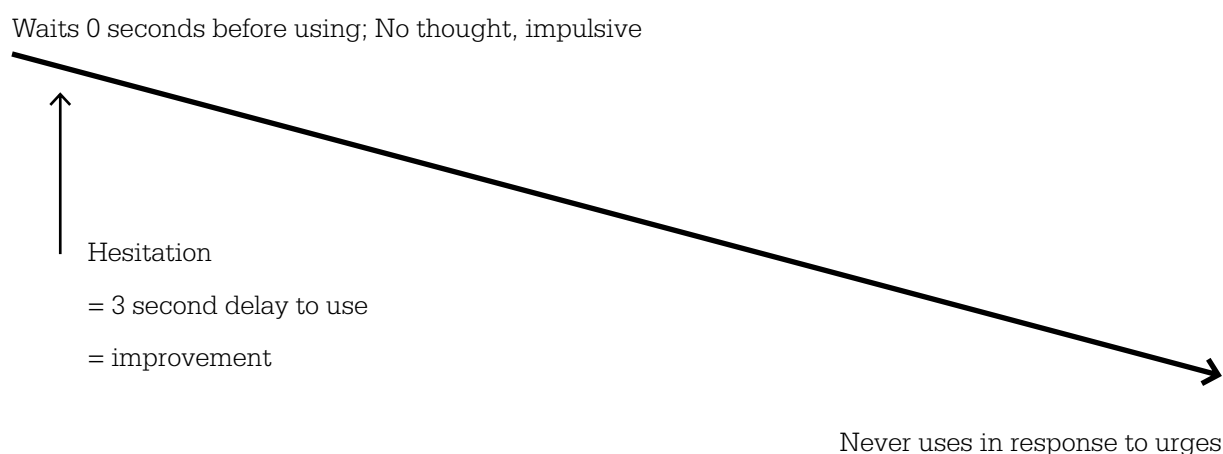
C: 'Not really. I've just got no willpower. I need to be stronger'

T: 'It sounds like having the thought of using, in the context of having the money and opportunity to use is an incredibly powerful cue for you. It also sounds like the strategies you've used to fulfil your value of not using in that context, haven't worked. I have some thoughts about how we might approach this situation differently, but I'm wondering what you think you might need to do differently, if anything, to successfully not use in this situation?'

4.4 Shaping by Successive Approximations: Delayed Gratification

Many clients will have a history of responding without hesitation to cravings by using methamphetamine. In this context, any delay, even if only for a second, constitutes significant progress. In exploring the events leading up to an instance of methamphetamine use, if a client mentions any sign of hesitation, contemplation, consideration of not using, or delay before using, invite them to elaborate. In providing a rationale for concentrating on these first steps to success, a simple diagram as that in Figure 4.1 might be used. Delays, even momentary, can be placed at the beginning of the same continuum as abstinence, with increasing periods between occasions of use along the continuum. It can be helpful for clients to see these seemingly small moments as early steps in a very important process.

Figure 4.1: Continuum of delay to use



Example:

T: *'You had the thought 'stuff it' and picked up your phone to call the dealer. Can you remember what went through your mind as you waited for them to pick up?'*

C: *'Just that I hope he answers!'*

T: *'Did you have any second thoughts, even if for only a split second, about hanging up?'*

C: *(pause) 'It did flash through my mind 'I shouldn't be doing this', but then he answered'*

T: *'OK...you were charging toward using like a bull at a gate, and there was a moment, a fleeting moment where you pulled up for a second, maybe just slowed down a little.'*

C: *'Only a second!'*

T: *'Yeah, a second isn't enough to make a difference to your pattern of use by itself, but it is the first step toward two seconds, two minutes, two days. If you compare how long you waited to someone who no longer uses it's not that impressive, but you're starting as someone who is waiting 0 seconds – no second thoughts. How were you able to hesitate on this occasion?'*

C: *'I was just waiting for him to answer the phone'*

T: *'And somehow while waiting you went from 'I hope he answers, I want to get some' to 'maybe I shouldn't do this'. What happened in between?'*

C: *'I guess I thought there was a chance he might not answer and I might not be able to get any'*

T: *'And rather than single-mindedly think about other ways to get meth, you considered not using. Did you catch any other thoughts or images right before you had the thought 'maybe I shouldn't'?*

C: *'I just remembered I am coming here, and I do want to stop'*

T: *'I know you probably don't think much of this, but this is actually a really big deal. There you were in the grip of a massive craving, about to use, and you considered – maybe for the first time in a long while – not following through...you managed to bring your long-term goals to mind – just for a moment – when it can count'*

4.5 Guidelines

- Use specific episodes rather than rely on the client's general beliefs about their triggers.
- Don't rush – walk through in 'slow motion'.
- Antecedent assessment should include: location, time, people present, activities, emotional and physical state and cognitions.
- Consequence assessment should include immediate consequences and then changes over subsequent hours.
- Invite elaboration of any mention of hesitating or contemplation of not using and help the client recognise its significance.

4.6 Taking an Inventory of High Risk Situations

In order for the client to have the best possible chance of ceasing or otherwise controlling their methamphetamine use, they will need a complete knowledge of the antecedents that elicit tendencies to use. If the client has insight into their 'triggers', it is worthwhile simply brainstorming with them to generate an initial list. The client should be encouraged to complete behavioural monitoring assignments between sessions, and any antecedents identified through these assignments should be added to the list in an ongoing fashion throughout therapy.

After the client has brainstormed freely, the therapist might use six broad categories (interpersonal, occupational, physical, emotional, cognitive, times) as prompts to generate further possible high-risk situations. Rows or columns could be drawn on a whiteboard or piece of paper for the client to add to. Box 4.2 provides examples of common high risk situations for methamphetamine users in each of the categories.

Box 4.2: Common high-risk situations (triggers/cues) for methamphetamine use

Interpersonal: Going out with friends, meeting new people, prior to sex, following conflict.

Occupational: Doing household chores, looking after children, shiftwork (especially at night), when working long hours, clubbing, concerts, studying, driving.

Physical sensations/states: Feeling tired, fatigued/low in energy, 'fat', craving, agitated.

Emotional: feeling angry, anxious, depressed/sad, bored, excited, sexually aroused.

Cognitive: Thoughts/images of experiencing the feeling of intoxication, or change from current mood, thoughts/images of performing/functioning better, persistent reminders of the opportunity to use (and, 'it wont matter, you can afford it'), racing thoughts, thoughts/images of rituals preceding use (for example, drawing blood back into syringe).

Times: Payday, weekends, particular number of days since last use, times of day or night.

4.7 Helping Clients to Identify Cravings

Cravings can be thought of as a pervasive high-risk situation/trigger/cue to elicit drug seeking or consumption. Although there is disagreement in the literature as to what a craving is and whether it is even a useful construct (Drummond, 2001), for the purposes of this protocol the term craving is intended to be synonymous with urges to use drugs. It is up to the therapist and client to define what constitutes a craving in terms of the client's own idiosyncratic thoughts, emotions, physical sensations and behavioural tendencies toward using methamphetamine.

Ask the client to describe their cravings.

Example:

T: 'Do you get cravings for meth? What are they like?'

It is useful to write the categories in Table 4.1 below on a white board or piece of paper, and list client responses under the appropriate category. The purpose of the exercise is to broaden the client's consideration of the aspects of their experience that can be ascribed to drug dependence, and treat

them as members of the same response class 'craving'. Hopefully this will simplify the task of coping with these experiences for the client (as if facing a single enemy rather than dozens).

Table 4.1: Components of cravings

Thoughts	Emotions	Physical sensations	Behaviours

Therapists should work with clients to continually refine conceptions of cravings, especially to improve sensitivity to the milder signs at the onset of cravings.

4.8 Using Information Gained through Functional Analysis

Clients should be encouraged to begin avoiding high-risk physical and social environments and activities wherever possible straight away. Where it is important to clients that they are able to enter high-risk situations in the long-term because doing so will serve other values, attempt to contract with them to avoid these situations until they develop new skills to manage them. As therapy progresses, the therapist and client can establish a practice of anticipating upcoming high-risk situations and formulating coping plans to manage them.

4.9 Behavioural Monitoring

Clients should be encouraged to monitor urges to use methamphetamine that arise throughout the week. A monitoring record is included in the Handouts section of this manual (Handout 2) that can be used for this purpose. Ideally entries should be completed as soon as possible after the urge is experienced. These should be reviewed at the start of the next session.

Chapter 5: Psychoeducation

5.1 Risks of Methamphetamine-Related Harm

There may be occasions when a client specifically asks for information about the harmful effects of methamphetamine. Other times, when a client's speech indicates that changing their methamphetamine use is of low importance to them, it may be worthwhile exploring how much a client knows about the risks of methamphetamine use and asking whether they would like more information. Either way, information about harmful effects should only ever be provided with the client's permission. Unless the client already values an area of functioning that may be potentially impaired by methamphetamine, and perceives themselves to be at risk, any information given is likely to have no motivating effect, and if anything is likely to create a distance in the therapeutic alliance. The information in this section is not a comprehensive account of all the potential harms related to methamphetamine use, but rather, is a selection of those which in the author's clinical experience have been of greatest concern to clients.

Example:

T: 'I was wondering what you've heard about meth, what effects it can have on people if you continue to use it regularly?'

:

:

T: 'So you assume that it can't be good for you, but you're not quite sure how. Would you like to know more specifically how it can affect your health?'

5.1.1 Effects on Mental Health

In the author's experience, clients have often presented quite indifferent to the prospect of dying from their drug use. By the time they have attended treatment services, many are quite depressed and willing to end their suffering and that of those around them. Therefore, information about acute lethal effects for these clients is unlikely to be a disincentive to use. However, most clients are clear they do not want to remain alive with a malfunctioning brain. The following are risks associated with methamphetamine use that may concern most users.

PSYCHOSIS

Early experiments demonstrated that psychosis could be induced from repeated high dose administration of amphetamines (cf. Morefield, 2004). It has recently been estimated that among regular (at least monthly) users of methamphetamine, around 23% will experience some kind of psychotic symptom in a 12-month period. Symptoms may include paranoia, especially delusional fears of persecution, and auditory illusions, perceiving common sounds as the noise of people come to harm them. In a smaller proportion of cases, individuals may experience a psychotic episode that is indistinguishable from paranoid schizophrenia. The risk of psychosis is three times greater for clients with methamphetamine dependence than non-dependent methamphetamine users and 11 times greater than the general population (McKetin et al., 2006). Psychosis is more likely to result from binges (repeated high quantities across consecutive days) than in lower dose, less regular use.

Methamphetamine-induced psychotic symptoms usually only last a few hours, and most cases resolve in a week following last use. However, in some cases residual psychotic symptoms can persist for up

to, or even longer than a month after the episode. It is important that clients are aware that once they have had a psychotic episode (methamphetamine-induced or otherwise) they are more likely to have another one if they use methamphetamine again. It appears that repeated methamphetamine use sensitises dopamine receptors, causing increased dopaminergic neurotransmission in response to lower doses on subsequent administrations. This means individuals who have had methamphetamine-induced psychotic experiences are more vulnerable to having subsequent episodes, even at lower doses (Pierce and Kalivas, 1997). Methamphetamine use in individuals with schizophrenia or another primary Psychotic Disorder is likely to initiate or exacerbate psychotic symptoms.

COGNITIVE IMPAIRMENTS

There is a substantial body of research demonstrating that memory, attention, judgment (especially likelihood estimation) and decision making (discounting reward magnitude in favour of reward immediacy) is impaired in methamphetamine dependent individuals (Nordahl et al., 2003). However, it appears there is partial recovery of functioning with abstinence and this should be emphasised to clients. At present however, it also appears that recovery is not complete even 12 months after last use and we do not know whether it ever fully recovers (Volkow et al., 2001b). The bottom line is that the client's best chance of optimal cognitive functioning following methamphetamine dependence is if they permanently cease using, and at present there is no reason to suggest it is ever too late to recover.

DEPRESSION

Although there are few studies of strictly epidemiological quality assessing the relationship between psychiatric disorders and methamphetamine dependence, the majority (~70%) of every convenience sample of methamphetamine users reports having experienced problems with depressed mood (for example, Hall et al., 1996; Vincent et al., 1999). Given the impact of methamphetamine on dopaminergic, serotonergic and noradrenergic transmission and the involvement of these systems in mood, it is surprising that anyone who is methamphetamine dependent does not experience problems with depressed mood.

Given the interference methamphetamine causes to sleep and appetite routines, the enablement of prolonged activity to the point of fatigue and the disruption to cognition after long binges it is easy to see how a depressive syndrome can be created by a regular pattern of methamphetamine use. It may be useful to explain these connections to the individual to demonstrate that methamphetamine is a sufficient explanation for their experiences. The majority of individuals can expect an improvement in their mood, energy, sleep and appetite once they withdraw, and this may motivate some clients to cease use. For some individuals, depression will linger even after a typical withdrawal period. Retaining these clients in treatment and maintaining a dual focus on treating depression and relapse prevention is critical.

5.1.2 Dependence or 'Addiction'

Much has been written about inappropriate and ineffective old-fashioned approaches to addiction treatment that consisted of bullying clients into confessions that they are 'addicted'. Any refusal on the part of the client was labelled 'denial', signalling the need for more aggressive confrontation. Social learning advocates have also been very critical of so-called disease concepts of addiction (Heather and Robertson, 1989). Some might almost consider it taboo nowadays to discuss the possibility with the client that they are drug-dependent.

However, most people presenting to treatment dislike the idea of using more methamphetamine than they can afford, the increasing intrusiveness of urges to use, the preoccupation with obtaining it and

the priority they give it above other areas of their lives. For clients not fully aware of the presence of these symptoms in their life, or the possibility that they might occur in the future, the presentation of this may act as a disincentive to continue using at current levels. In particular it may be worthwhile that clients know the risk of dependence increases approximately 2.5 times when methamphetamine is injected or smoked, compared to oral or intranasal administration (McKetin, Kelly and McLaren, 2006). The presence of dependence symptoms can be skilfully evoked and reflected in a motivational interviewing style and then summarised.

Example:

T: *'How does your meth use compare now to say, when you first started using?'*

:

T: *'What about other areas of your life – work, friendships, how you spend your time – how do they compare now to when you first started using?'*

:

T: *'You've noticed that as time has gone on you have tended to use more often and larger amounts than you did when you started. When you first used it was mainly a weekend thing, which then became a weekend plus a Monday thing, to recover. As time has gone on, you notice the time between your last use and your next craving is getting shorter. You've also noticed yourself becoming less involved in other areas of life. You don't see much of your old friends, you've stopped playing sport and you're worried all your absences from work could cost you your job. What does it mean to you that meth has taken over more and more of your life space?'*

C: *'It sucks'*

5.2 Explaining Addiction⁴

The rationale for teaching clients a model of methamphetamine addiction would be to increase a client's motivation and efforts to engage in behaviours to cease or reduce methamphetamine use. The utility of the particular model of addiction ought to be judged by that criterion. As yet, there are no formal studies the author is aware of that compare the motivation-enhancing qualities of competing models of addiction. Therefore, the reader is encouraged to tailor the rationale based on the assessment of the client including their patterns of use, harms accrued, and cognitive functioning. The pragmatic approach adopted in this protocol is that there is more than one mechanism by which people can become addicted and several may be operating in the same person at the same time. Below are the key points from which the therapist should tailor their explanation to their client.

5.2.1 Acute Pharmacology of Methamphetamine

- The primary effect of methamphetamine on the brain is to stimulate the release of larger-than-normal amounts of neurotransmitters (especially dopamine, noradrenalin and serotonin).
- Illicit drugs do not give the body 'extra fuel', they simply speed up the release of neurotransmitters that the body naturally synthesises.

⁴ It is acknowledged that the term *dependence* is generally preferred to that of *addiction* amongst professionals however the latter is in more common usage among clientele, so is preferred for the purposes of in-therapy psycho-education.

- The 'crash' occurs once the brain becomes temporarily depleted of dopamine, noradrenaline, and serotonin. At this point, further ingestion of methamphetamine cannot be 'felt'.
- This process is extremely stressful to the body.

5.2.2 Cued Adaption

- The body is designed to learn to predict stressful events and prepare for them.
- The body compensates by changing in ways that will oppose the primary effects of methamphetamine to offset its impact. This will be experienced as tolerance (declining effect) following drug ingestion.
- The compensatory response is elicited by cues that precede actual ingestion and will be experienced as an exacerbation of craving prior to use.
- The longer methamphetamine use continues, the greater the number of cues that are likely to be predictive of use, and the more likely that cues present earlier prior to drug use will come to elicit urges to use. This is due to the efficiency of homeostatic mechanisms: the more time the body has to prepare, the less impact methamphetamine can have once ingested. Therefore, there is an adaptive advantage to preparing as soon as possible.

5.2.3 Sensitisation

- There is reliable evidence that one of the direct effects of methamphetamine on the brain is to make the brain more sensitive (responsive) to future administrations of methamphetamine.
- Cues that come to predict methamphetamine ingestion elicit the appetitive qualities of methamphetamine, which reinforces approaching cues.
- The rationale can be provided that the brain is designed to become more efficient at the pursuit of reinforcement. In times of scarce resources, exploratory activity needs to be concentrated in the most relatively abundant environments. Not only must the use of resources be reinforced, but also approach behaviour toward environmental cues that signal resource availability.

5.2.4 Superior Potency to Alternative Reinforcers

- The potency of the action of methamphetamine on the ventral tegmental pathways (brain reward circuits) is greater than most everyday activities.
- If what people crave about methamphetamine is the rush or euphoria (especially likely where the route of administration is via injection or smoking), they are likely to become increasingly dissatisfied with other sources of positive reinforcement.
- The fewer alternative reinforcers, the more important methamphetamine becomes as a reinforcer.

5.2.5 Loss of Context Specificity

- The broader the range of situations in which use occurs, the broader the range of cues to elicit urges to use.
- People usually commence using methamphetamine in a limited number of specific situations. The longer use continues, the more likely it is that use will occur in a broader range of contexts.

- Use in response to affective states is an important step in transcending social and physical context-bound use.
- Use in response to negative affective states is a strong predictor of addictive patterns of drug use.
- The negative affective state the regular methamphetamine user is most likely to experience is methamphetamine withdrawal.

5.2.6 Cycles of Addiction

Where the assessment of the client reveals the presence of one or more of the addictive processes outlined above, the role of the process in addiction can be simply illustrated through a cycle diagram. Where more than one process is evident, the cycles can be integrated as depicted in Figure 5.1c.

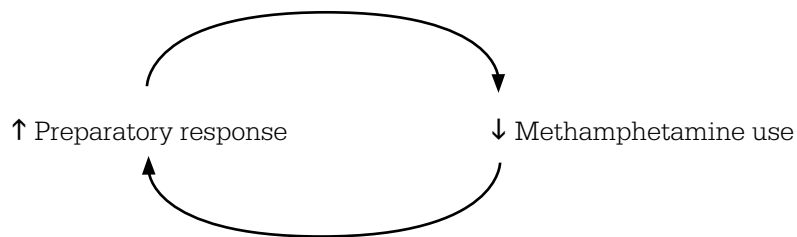


Figure 5.1a: Addiction cycle example: preparatory response and methamphetamine use

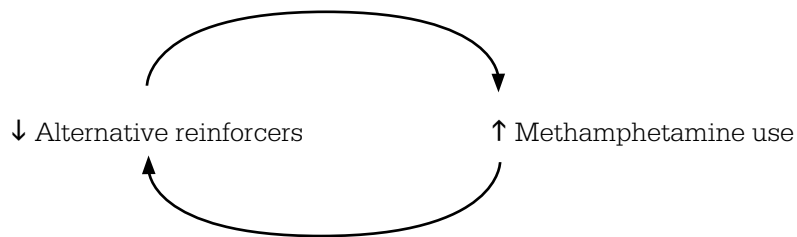


Figure 5.1b: Addiction cycle example: alternative reinforcers and methamphetamine use

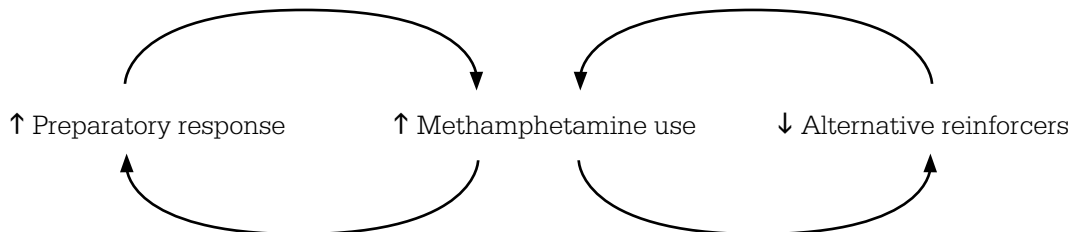


Figure 5.1c: Example of idiosyncratic case conceptualization through combining cycles of addiction

5.3 Urge Extinction Graphs

There are two useful visual depictions of the process whereby cravings are either maintained or extinguished. Figure 5.2 shows the natural course of a craving on a single occasion: it comes on, peaks then diminishes. However, what most regular methamphetamine users do is use methamphetamine (usually well before the craving peaks) which immediately terminates craving, functioning as an escape response. The user never learns the craving will attenuate on its own. The same graph depicts that should a client endure past the peak and allow the craving to attenuate, this experience will have a reinforcing effect on waiting behaviour (that is, distress tolerance or endurance). It is not unusual for a client to have had no experience in allowing cravings to attenuate without using methamphetamine.

Figure 5.3 shows craving extinction from a longitudinal perspective. It is worth highlighting to clients that following their last use of methamphetamine cravings are of high intensity, high duration and come close together. As time goes on, craving intensity and duration reduces, and time between cravings increases, until they are infrequent and of low intensity. Of course, this graph depicts an ideal 'if all else is equal' scenario. The actual frequency and intensity of cravings will depend heavily on exposure to cues. The approximately linear extinction of cravings can easily be disrupted by contact with a cue that has been previously highly predictive of methamphetamine use, especially if there has been no preparation for this contact and it catches the client by surprise. The client should be made aware that a similar longitudinal process is necessary for each significant cue. The length of time needed for extinction is approximately in direct proportion to the intensity of urge to use elicited by the cue.

The key purposes of presenting these graphs to clients are:

- To help clients to form realistic expectations of the difficulties they will face upon abstaining.
- To offer hope that despite the difficulty they will face initially, it can be expected to get easier and easier.
- To remind abstinent clients of the enormous work they have invested when their motivation slides toward contemplation of returning to use.

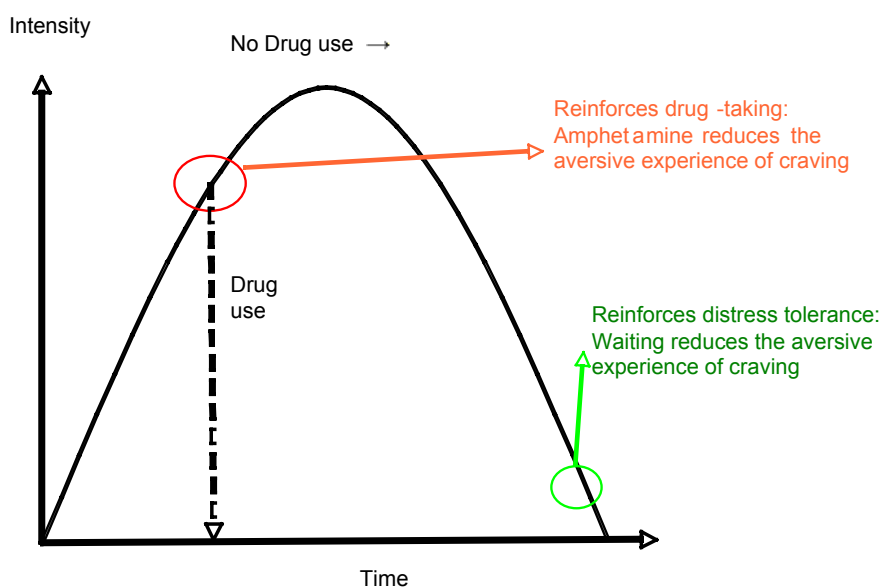


Figure 5.2: Urge escape vs endurance: Drug use prior to natural attenuation of the urge is negatively reinforced via escaping the aversive state of craving. Allowing the urge to attenuate negatively reinforces waiting/endurance via the reduction in craving.

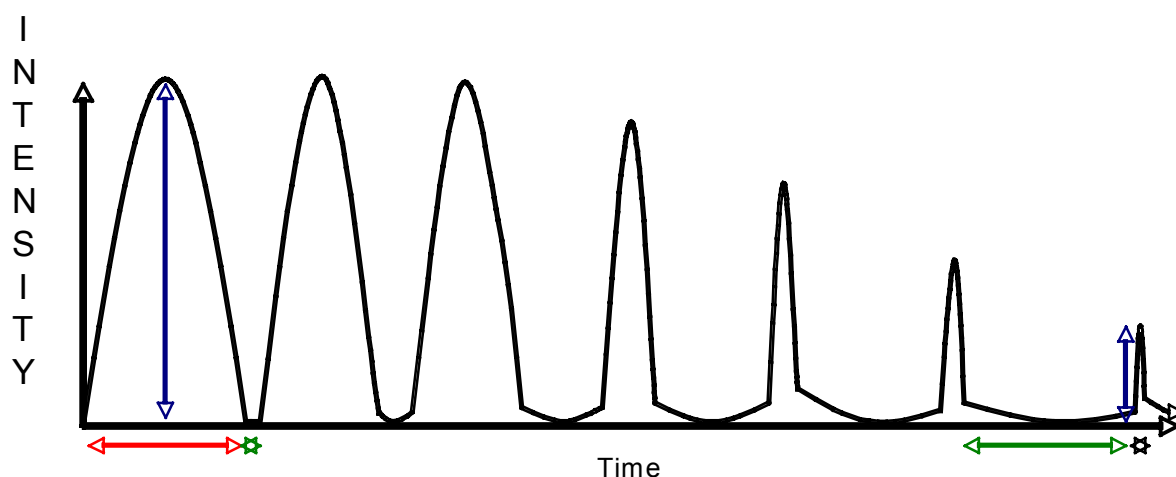


Figure 5.3: Craving extinction: longitudinal perspective

5.3.1 Feeding the Baby Tiger Metaphor

There is a very apt metaphor from ACT that describes the process of craving reinforcement, called 'Feeding the Baby Tiger'. It was originally written to explain the cycle of avoidance and anxiety but is equally relevant in explaining the course of cravings.

It's as if you find a stray baby tiger. It mews to you so you realise it must be hungry. You give it some mince in a bowl, and it stops mewing for a while. Notice at this point, while you may feel a little sorry for it if you didn't feed it, the baby tiger would be relatively harmless to ignore. Later it returns, hungry again, and it mews a little louder, so again you feed it. Because you feed it, it grows a little bigger, and so each time it returns, it growls a little louder. Before you know it, it is a fully fledged adult tiger and it roars ferociously... and at this point it feels like you are risking your life to ignore it.

But do you think continuing to give him the sides of beef it now takes to keep him quiet is a long term solution? Although it's hard when he roars like that, the only way to keep this tiger quiet is to starve him. The less you feed him, the less strength he'll have to roar at you.

5.4 Methamphetamine Withdrawal

Clients should be given a copy of Turning Point's (2004) *Guide to Getting Through Amphetamine Withdrawal* which provides an excellent user-friendly description of what to expect. Therapists should familiarise themselves with this material and be confident to answer any questions clients may have about the withdrawal process. The therapist should beware not to minimise or exaggerate the discomfort involved. Where the client has had experience of withdrawal, the therapist should elicit both descriptions of what occurred, and any strengths the client displayed in coping. The experience of withdrawal is likely to vary from occasion to occasion, depending on factors such as the intensity of use, physical and mental health at the time, and the physical and social environment available to the individual. If the client has had more than one withdrawal experience, their experiences can be compared, as well as compared with the client's current pattern of use, health and available social supports.

5.4.1 Symptoms of Methamphetamine Withdrawal

Whether the following are best attributed to the body adapting to the elimination of methamphetamine or from behaviour or direct drug effects when using, they are nevertheless commonly present during the withdrawal period.

- Sleepiness/tiredness.
- Appetite increase.
- Irritability.
- Craving.
- Depression.
- Memory and concentration problems.

5.4.2 Planning for Methamphetamine Withdrawal

It is not medically necessary for clients to enter an inpatient detoxification facility to undergo methamphetamine withdrawal. However, for clients using twice or more per week, with a physical or social environment that is either not conducive or obstructive to the process, it can be a very good idea. If nothing else, an inpatient facility can provide some 'time out' from exposure to some of the environmental cues that would make abstaining more difficult to achieve.

For those wishing to withdraw in their home or another private environment, it is advisable they treat the process as if they were going to be physically ill for a period of two weeks. The therapist can work with the client to problem-solve minimising their responsibilities as much as possible (for example, time off work, part-time child care, financial management plans, cancelling or rescheduling appointments). The client should choose their environment and organise it to be as conducive as possible to the withdrawal process. Contact with others should be restricted to those the client trusts to be supportive.

COPING WITH CRAVINGS

The client needs to consider how they plan to cope with their cravings. The therapist can introduce techniques from Chapter 7 of this manual if the client is willing to learn. If the client intends to use new coping techniques it is ideal if they have the opportunity to practice them and build some competence using them prior to the withdrawal period.

SUPPORTS

If the client has a partner, friend or family member willing to be present for some or all of the time, it would be helpful to obtain the client's permission for that person to be present for a session prior to undertaking the withdrawal. The support person should be given the opportunity to educate themselves about the withdrawal process and have any questions answered. The therapist may be able to offer recommendations for how to respond to the client. These recommendations may include:

- To ensure their own safety at all times (as irritability during withdrawal may lead to aggressive requests for money and/or methamphetamine): have a safety plan if necessary.
- To refuse steadfastly any requests the client may make to obtain methamphetamine during the period. It may calm their irritability in the short-term but will merely perpetuate the number of months they will live with methamphetamine-related irritability in the long term.
- To expect irritability and moodiness. Do not argue or reason with the client during this period of withdrawal. Agree to defer discussions and long-term decision making until after the withdrawal

period. Let them have their space wherever possible and don't ask a lot of questions during this period.

- Hypersomnia is expected, especially during the first three days. Tiredness will occur as insomnia and cravings predominate from Days 4-14. Abandon expectations of the client's contributions to household tasks during this period.

5.5 The Alternative to Addiction

Most of the psychoeducation information has concentrated on teaching clients how they develop a pattern of addictive behaviour. However, arguably more important is instilling a model of how to live in a non-addictive pattern of behaviour. This section is heavily influenced by the ACT protocol developed for our psychotherapy study.

5.5.1 Value-Guided Action: an Alternative to Emotion-Based Decision-Making

Addictive behaviour is widely conceptualised as continued engagement in behaviour bringing immediate small magnitude reward despite also bringing an increasing number and intensity of long-term adverse consequences. This pattern has been conceptualised in terms of many different theoretical processes. We shall see it as resulting from excessive emotion regulation.

Emotions are rapid onset, high intensity, short duration experiential events with aversive or appetite qualities. Emotions have been selected by evolution to assist survival in circumstances of acute danger or scarce resources, which are seldom encountered in the modern world. For example, the urge to eat prolifically if acted upon is arguably adaptive in an environment of scarcity but maladaptive in an environment of abundance. The urge to remain hypervigilant is arguably adaptive in an environment of frequent but unpredictable threat, but maladaptive in an environment of minimal threats. It is contended that humans can not control whether such urges or impulses are elicited. These are the product of individuals' genetic endowment and learning histories. However such tendencies need not govern overt behaviour. Emotional states set the occasion so that the consequences of addictive behaviour are reinforcing. For example, feeling anxious provides the conditions for the consumption of drugs that alleviate anxiety to be negatively reinforcing. Excitement provides the conditions for the consumption of drugs that stimulate the central nervous system to be positively reinforcing. The pattern whereby decision-making is dominated by the regulation of emotions - by definition, short-term, unstable events, to the neglect of delayed consequences - is a perpetual cycle.

The alternative is to teach clients to base their decisions to act on something other than their emotions. Consistent with ACT and MI, clients are taught to make decisions to act based on their *values*. Values are enduring, self-chosen rules for behaving. Whereas goals can be achieved and finished (for example, have a child), values remain a source of behavioural direction (for example, be a caring parent) that transcends specific goals. Values need not be justified or defended. Values are not merely those rules entrained by society. They are ways of being that the individual chooses. One of the key tasks for the therapist providing values clarification is to help the client distinguish statements that society might expect us to make about what we value from values we would choose ourselves, privately. Values will tend to guide us toward the attainment of enduring, stable, delayed rewards, often at the expense of immediate gratification or distress avoidance. The distinction between emotion-based and value-based decision making is no doubt conceptually clear to the therapist, although clients may take some practice in recognising it (see box 5.1 for examples of metaphors that could be used to explicate). However, developing the habit of directing behaviour by values rather than emotions is far more difficult to establish, and occurs far more readily via direct practice rather than verbal persuasion.

Box 5.1: Metaphors that distinguish between emotion-directed action and value-directed action

Metaphors for teaching distinction between values- and emotion-directed action

Boat in the ocean

Imagine that up until now you have been like a boat in the ocean. Where you have travelled has depended almost entirely on the waves and the weather. In fair weather, you drift into tropical lagoons. In stormy weather, you are tossed back and forth in the middle of the ocean without nearing any destination. Our task in therapy is to help you discover the motor that has been sitting neglected on your boat. This motor has a rudder, and can allow you to set a course and travel in the direction of your choosing. The waves will still splash against the boat and at time will knock you slightly off course, but with your motor you can set course again and move forward in your chosen direction even in spite of the weather. If you knew you could take this boat in any direction, which would you choose?

Kids in the car

It's as though your job in life is to drive around with a couple of kids in your car. You set off in the direction you choose, but sooner or later the child next to you pipes up and says, 'I want to go the shops, turn left' and a child on the back seat pipes up and says 'I want to go to the zoo, turn right' and the kids start screaming. You try to tell them to be quiet, you try to bribe them with lollies, but they don't stay quiet for long, pretty soon the only way to keep them quiet seems to be to drive in the direction they scream for. You may have come to therapy seeking a way to keep them quiet...or even to kick them out of the car. But we can't kill the kids! They're our children, they're part of us. What we need to do is to learn to keep our destinations in mind and to keep driving, even as the kids scream at us from time to time.

5.5.2 The Alternative to the Cycles of Addiction: Positive Feedback Loop

It should be encouraging for clients to know that it is not only addictive behaviour patterns that are maintained by cycles, but that behaving in accordance with their values can also become a self-perpetuating cycle. Unlike the sequence of establishing dependent patterns of drug use where consequent control gives way to antecedent control, valued action patterns must be established first through antecedent control before they are able to be sustained by natural consequences.

As Figure 5.4 shows, the establishment of valued action patterns occurs more slowly because the events that maintain valued action cycles occur much later than the direct actions of methamphetamine, which occur almost immediately and are therefore more potent reinforcers. Nevertheless, the experience of valued consequences of valued action in context is likely to increase the salience of that behavioural alternative when confronted with similar contexts on future occasions. The first therapeutic task is to develop strategies to increase attention to values in the context of confronting cues that elicit urges to use methamphetamine. Thereafter the client can work toward executing evermore effective value-consistent behaviours in context. Eventually with increasingly effective behavioural alternatives to methamphetamine use, the natural consequences will come to maintain that behaviour in a positive feedback loop.

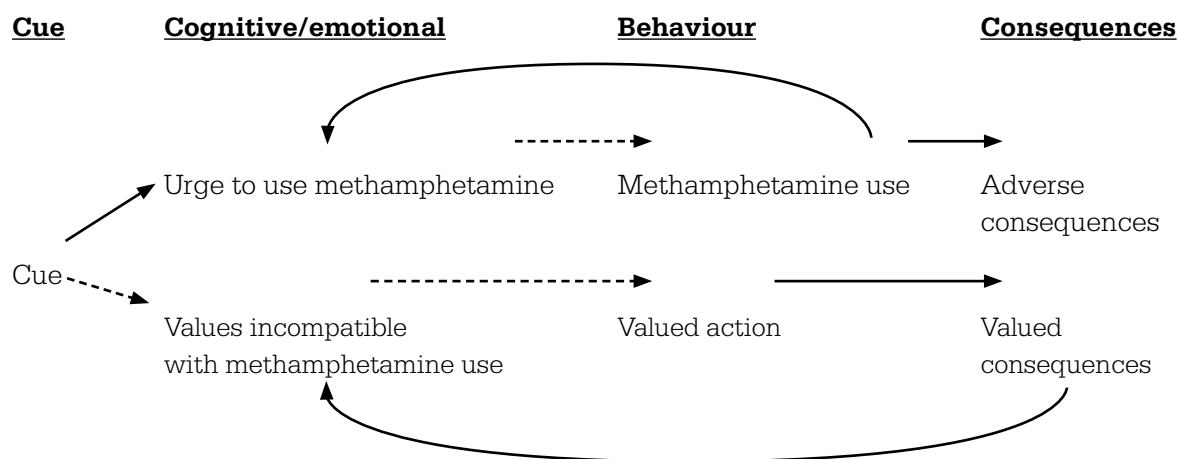


Figure 5.4: Visual depiction of the relationship between elicited thoughts and feelings, short term behaviour and long-term consequences. Solid lines indicate causal relations posited to operate independently of the client’s actions. Dotted lines indicate where the client’s actions are required to complete the chain of events.

5.6 Case Conceptualisation of Addiction Handout

Handout 3 (see Handouts) may be used to convey the cycles of addiction to the client. Individually relevant cues, urges and consequences gathered through motivational interviewing, assessment and functional analyses may be transcribed into the appropriate boxes. The therapist and client can then focus on developing the ‘coping/alternative behaviour’ box. The client should be encouraged to refer to this handout regularly, including during the onset of craving. It should be kept throughout therapy wherever possible and refined as understanding of the client’s unique context of use develops.

Chapter 6: Values Clarification

6.1 Values Clarification

Clients will differ markedly in their familiarity with and clarity of their values. Some clients will never have consciously directed their behaviour according to values. Others will readily list those principles for behaviour that are most important to them. There are several techniques that can be used to elicit clients' values, with varying degrees of structure and emotional intensity that can be selected to suit the personality and cognitive abilities of the client.

- Eliciting and reflecting values in motivational interviewing.
- Values assessment worksheet.
- Values Card Sort.
- Funeral Exercise.

Once specified, client values can direct activity scheduling exercises (see Chapter 8).

6.1.1 Eliciting and Reflecting Values in Motivational Interviewing

Attend carefully to client's speech, particularly statements of desire or need to change, and reflect the value back. Reasons given are likely to reflect socially desirable responses, those that are important to others, but not necessarily the client. If the client does not naturally emit statements indicating values, these can be elicited.

Example:

T: 'What has prompted you to seek treatment now?' (**open question, eliciting value**)

C: 'I had a really big fight with my girlfriend on the weekend. She threatened to leave'

T: 'Your relationship is very important to you. You don't want to lose her' (**reflect value**)

T: 'You've mentioned a number of reasons for quitting – it can't be 'good for you', you're getting older, but which reasons really matter? Which ones do you take most seriously?' (**open question, to elicit values**)

C: 'I'm really exhausted all the time, I just want to feel normal again (**client's response indicates behaviour change would be directed by emotions**)

T: 'If you did feel normal, what then could you do that you can't do now?' (**open question refocusing on values**)

C: 'I would be doing things with my kid on the weekend. Not just lying around recovering. I would go out with friends and have proper conversations, not just talk crap with people I wouldn't even call friends'

T: 'It would mean a lot to you to be a more 'hands on' dad...and to be really paying attention when you talk with friends, remember what you talk about, talk about things that you care about rather than just whatever goes through your mind at the time' (**reflect values**)

C: 'Yeah. I want my kids when they grow up to think they had a fun dad who did stuff with them; who wasn't just asleep or grumpy.'

6.1.2 Values Assessment Worksheet

The values assessment worksheet (see Handout 4) lists 10 broad domains to prompt the client to think about the kind of person they want to be, defined by how they want to behave. This can be set for a homework exercise and is best done quietly and reflectively. It can help to begin one of the domains in session to show the client how to complete the exercise. Sometimes clients will tend to describe goals: what they want from life. In this case, the therapist needs to prompt the client to consider how *he/she* would behave.

Example:

*C (in response to **Intimate Relations** domain): 'I'd like someone who was good-looking, honest, liked doing the same things as me, liked to laugh'*

T: 'Attractiveness, honesty, common interests, sense of humour, these are very important to you in a partner...are these also the most important qualities you want to possess? What kind of partner do you want to be?'

This exercise works well with clients of at least average intellect, whose change talk indicates they have preferences and priorities. Clients with low to borderline intelligence may also be able to complete the exercise if they have some familiarity with the idea of wanting to live a particular way. Those who are not used to thinking in these terms may require some socialisation through reflecting values in general dialogue, or completing the exercise with the therapist's assistance in sessions. Alternatively, a more concrete task like the card sort can help build a 'values vocabulary' and the values assessment worksheet could be used to revisit values later in therapy.

6.1.3 Values Card Sort

This task can provide an excellent introduction to the notion of values, particularly for clients who are not familiar or literate with a range of values. Clients are given a pile of cards, each with a single word encompassing a value, and a short definition. Clients are to sort into two piles, 'not important' and 'important'. Then on a second pass, the client discards the 'not important' pile and selects from the 'important' pile, their 'top five' most important values. This task can also be given for homework.

6.1.4 The Funeral Exercise

Clients are asked (following a period of relaxed attention to their breath) to imagine themselves at their own funeral and listening to the eulogies given. Clients can be asked to imagine either of two conditions: (1) their eulogies if they continued to struggle with their addiction; or (2) their eulogies if they overcame their addiction. In the latter case, the client would be guided not only to imagine any accolades that may be given for conquering that specific battle, but to also include mention of how their lives were spent once that battle was behind them. Therapists may choose to request only that clients imagine their funeral assuming they had overcome addiction, or both with and without overcoming addiction, if the therapist desires to highlight to the client the impact of the addiction across their lives.

This exercise can be extremely powerful, however it can also be distressing and without benefit if clients are not given adequate preparation. Observe the client's response to less personal metaphors. If the client has a talent for misunderstanding metaphors or taking metaphors literally rather than as analogies, the client may become distracted and distressed with concrete and peripheral aspects of the image. It should be noted that even clients susceptible to emotional reactivity may respond well to

the task if it is presented after they have developed skills in responding to powerful emotions and they are clear on the rationale: to focus on what they want their lives to stand for.

6.2 Mindfulness of Values

The most critical step in values work is to find ways to improve clients' attention to their values in the moments where decisions to act are made. Two suggestions are listed below:

- Have the client use prompt cards or imaginably rehearse asking themselves the following question while visualising cues that usually precede use: 'Which of your values would be served by using?'
- Imaginably rehearse in slow motion an anticipated or previously experienced high risk situation then pause the scene at points where decisions need to be made. The therapist ask at these points: which of your values would you wish to bring to your awareness?

Chapter 7: Responding to Cravings

7.1 The Role of Coping Strategies

In this protocol, coping strategies form part of the repertoire of behavioural alternatives available to clients instead of methamphetamine use in response to cues. They are not a substitute for urge acceptance, but rather a means to enact it.

7.1.1 The Problem with Trying to Directly Control Thoughts and Feelings

Traditionally clients have been taught to 'control' urges. For example, clients have been told to engage in relaxation in order to reduce their cravings so they don't use drugs. The Polygraph metaphor from ACT illustrates why this can be potentially counter-productive (see Box 7.1). The belief that it will be necessary to relax to avoid using drugs may create a kind of pressure which itself interferes with the task of relaxing. Similarly, distracting for the sake of eliminating a thought from conscious awareness rarely works because some part of the person's awareness remains vigilant to ensure the distraction is working. In essence, the individual is trying to follow the rule 'don't think of meth'. The person cannot follow the rule ('don't think about it') without breaking it, because it actually contains the object (in this case, meth) the individual is supposed to avoid. By believing that it is necessary to control urges before one can control his/her behaviour, it becomes very important not to have an urge, even the tiniest sign of an urge. Every fleeting moment one catches a taste they may be experiencing an urge can become a sign that their control strategy is not working. Every thought 'this isn't working' brings the person closer to giving up and giving into the urge. Clients who have been in this situation will say things like 'I tried to fight it, I tried to think of something else, but the urge was still there!' The message this protocol wishes to promote is: **it is not the urge, but the behavioural response to the urge that matters.** Clients are not taught to control the urge, but to consider other behaviours they can engage in besides using methamphetamine when the urge arises.

Box 7.1: Polygraph metaphor

'Suppose I had you hooked up to the best polygraph machine that's ever been built. This is a perfect machine, the most sensitive ever made. When you are all wired up to it, there is no way you can be aroused or anxious without the machine's knowing it. So I tell you that you have a very simple task here: All you have to do is stay relaxed. If you get the least bit anxious, however, I will know it. I know you want to try hard, but I want to give you an extra incentive, so I also have a 0.44 Magnum, which I will hold to your head. If you just stay relaxed, I won't blow your brains out, but if you get nervous (and I'll know it because you're wired up to this perfect machine), I'm going to have to kill you. So, just relax! What do you think would happen?... Guess what you'd get?... The tiniest bit of anxiety would be terrifying. You'd naturally be saying, 'Oh my gosh! I'm getting anxious! Here it comes!' BAMM! How could it work otherwise?'

7.2 Maintaining a Motivational Interviewing Spirit

Coping techniques should be introduced in a manner consistent with motivational interviewing principles. Clients should first be invited to consider their own experience and resources for responding to cravings. Where it appears new strategies might be useful, the client's permission should be sought to introduce these techniques. The client should be asked what they think will work best, and what they would like to learn more about.

7.3 Tailor Coping Strategy Training to the Individual

This is an idiographic protocol. It is assumed that individuals will have idiosyncratic experiences of craving. Before proceeding with coping skills training the therapist should ensure he/she has undertaken the work in the functional analysis chapter, especially the 'four-column' exercise specifying the client's experience of craving (see Handout 1). The therapist should also have presented the psychoeducation information from Chapter 5 on cravings.

7.3.1 Match Coping Strategies to Components of Craving Experience

This chapter presents a range of strategies for responding to cravings, but it is not necessary that all be presented. For instance, some clients may experience cravings as a lengthy internal battle between 'the angel', warning them not to use and 'the devil' egging them on to use. Such clients may not benefit from cognitive restructuring exercises because they have already devised the 'counter arguments' or 'rational responses' to their automatic thoughts of using, and hear them elicited by cues to use. These clients may benefit more from exercises that build skills in redirecting attention outward. For many clients, the intensity of physiological arousal experienced during craving interferes and biases any reasoning the individual might try to exert. Arousal reduction techniques might be important for these clients. The therapist should teach strategies necessary to target all of the components identified in the four-column technique, but not techniques designed to address aspects of craving the client does not experience.

7.3.2 The Client's Experience of Effectiveness Should Guide Strategy Selection

Clients differ in the amount of effort they have put into ceasing or reducing their methamphetamine use. Some will have tried their utmost to give up without resorting to professional help. Others, particularly those who are attending treatment at the bequest of another party, may have given little thought to the matter. The therapist should conduct a thorough investigation of previous efforts to change to uncover any previous use of strategies to respond to cravings. This should not only include the use of 'psychotherapy' strategies such as those in this chapter, but broader efforts to change, such as use of other drugs, sleeping, self-punishment (for example, self-injury), bingeing (for example, food, exercise, work, sex), wishing, praying, and relying on other people (for example, to distract them from cravings, forbid them from using). The workability (effectiveness) of past strategies should be explored fully. The client may have previously established strengths and skills that can be deployed in the present. On the other hand, the client may have a repertoire of tactics that sound reasonable and may temporarily alleviate craving or prevent methamphetamine use in the short-term, but in the longer term are ineffective at best or at worst, lead to further methamphetamine use or cravings. The same workability analysis should be applied to the past use of strategies such as those presented in this chapter. The same technique applied with different purposes in different contexts can have vastly different consequences for subsequent craving and use.

7.4 Assessing Workability

The therapist should ask the client:

- 1) What strategies they have used in the past to respond to cravings.
- 2) What they hoped the strategies would achieve (for example, eliminate/reduce urge, prevent drug use, improve mood while waiting for urge to pass).
- 3) How well the strategy achieved its aim: how effectively did it work and for how long.

7.4.1 Possible Client Responses

- There has been little or no effort put in to responding to cravings other than to use methamphetamine. The workability of controlling, reducing or eliminating cravings is largely untested. In this case, it is worth introducing the coping strategies in this chapter under the rationale of 'behavioural experiments', where the client can test these strategies and see whether they offer any assistance when not using methamphetamine in response to cravings.
- There have been past successful efforts in controlling, reducing or eliminating cravings. The client may have forgotten what they did that was successful, or fail to remember these strategies when it counts (confronted by cues that elicit craving). In this case, the therapist can prompt the client to fully articulate their previously successful coping strategies and prompt the client to develop a method of remembering to use them in the face of cues that elicit urges to use (for example, phone reminders, imaginal rehearsal).
- There have been past efforts to control, reduce or eliminate cravings but these have been either unsuccessful, or temporarily successful within an episode of craving, with no change in frequency or intensity of cravings across episodes. Often clients may report a struggle with urges to use where they resist initially, but the cravings rebound stronger later on. The internal tug-of-war between whether to give in to the urge or not, the angel on one shoulder and devil on the other, often escalate the intensity of the craving. For these clients, the workability analysis could merge into *creative hopelessness* (outlined in the box below), an Acceptance and Commitment Therapy phase aimed at creating a distinction between previous ways of coping (ways of controlling internal experience) and the therapy exercises to be introduced in the current course of therapy.

7.4.2 Creative Hopelessness

Acceptance and Commitment Therapy (ACT) is characterised by the stance that it is not possible to reliably, directly control internal experience (thoughts, emotions, physical sensations, urges) in the long-term (although it is possible to influence internal states *indirectly* through selection of and exposure to new contexts). Because the effects of psychotherapy exercises can depend heavily on the intentions, expectations and rationale held while performing them and ACT acceptance exercises can resemble exercises used in other therapies for emotional control purposes, ACT aims to mark a clear distinction between emotional control and acceptance rationales. *Creative hopelessness*, the first phase of ACT, is designed to highlight how most previous efforts to change are likely to have been efforts to control unwanted internal experiences and how these have failed in the long term not because the individual lacks the necessary skill, but because direct enduring emotional control is inherently unworkable.

- 1) **Conduct the workability assessment above.**
- 2) **Summarise broadly the kind of strategies that have been workable and those that have been unworkable.** ACT theorists expect that attempts to directly control internal private

experiences are unlikely to work consistently over time. These can be contrasted with behavioural strategies designed to produce outcomes external to the individual (the world ‘outside the skin’).

- 3) **If you can hear that the client has been struggling with unworkable efforts to change their life, highlight the struggle.** It may be useful at this point to use metaphors to illustrate the client’s predicament:

- Man-in-the-hole metaphor (Box 7.2)
- Rubber hammer metaphor (Box 7.3)

As ever, throughout this process, the client’s experience decides what has worked and what hasn’t. The therapist must not put words in the client’s mouth. In fact, ACT therapists will frequently remind clients, ‘don’t believe a word I’m saying – what does your experience tell you?’

Box 7.2: Man-in-the-Hole metaphor

T (gently): ‘Most of us don’t get taught the skills we need to cope with serious personal problems. I’m not blaming our parents, or our teachers – they didn’t necessarily know any better either. But for most of us it’s like we’re blindfolded. In fact it’s worse than that. Most of what we do get taught is worse than knowing nothing – we get taught to do things that make our problems worse. So here we are, we’re blindfolded, given a bag of tools, taken out to a field and then told ‘this is life, go run around’. Now unbeknown to us – we’re blindfolded after all – this field is full of holes, of all shapes and sizes. It’s only a matter of time before we fall into one. Ok, some lucky people might manage by chance to dance around them. Maybe some of the seemingly lucky people just haven’t fallen in one yet. But you fell in a hole. And in desperation you reached into the ‘good tool bag’ your culture gave you and took out the only thing inside – a shovel. So you dutifully started shovelling. And you tried shovelling deep, and tried shovelling wide, shovelling fast, shovelling carefully, shovelling with distraction, shovelling with relaxation, shovelling with keeping busy, shovelling with substituting other drugs... But all of these different moves are still kinds of shovelling. And shovelling isn’t the way out of holes. It makes them bigger.

So now, you’ve come in for therapy, I want to make it really clear that I don’t want to give you yet another shovel. Whatever we do here, if it is going to get you out of this hole, has to be something different to digging. Now one of the things we have to watch out for is that you’ve shovelled for so long, anything else is going to feel really unfamiliar - like writing with your wrong hand unfamiliar – uncomfortable and shaky to start with. We really have to watch that we don’t just slip back to what’s familiar. Familiar is what got you into this hole. It would be like even if I gave you a ladder you might start trying to dig with that! So, are you willing to watch out with me for your mind trying to turn whatever I introduce you to into a shovel?

Box 7.3: Rubber Hammer metaphor

It would be as if you were to go to the doctor and say that you have a headache, and the doctor looks at you and you’re hitting yourself in the head with a rubber hammer. You may not know that you’re hitting yourself, or you might have a very good reason for doing so. However, the first thing the doctor has to tell you to do is to stop hitting yourself over the head with the hammer.

7.4.3 Example of Creative Hopelessness

Clarify what client wants

T: 'So we've spent some time getting an idea of how you would want your life to be...I'm just wondering where meth would fit in? How would you be spending your time, and how often would you be using meth?'

C: 'I don't know. If I'm being perfectly honest I'd still like to use – just not all the time like I'm doing now...but I know my girlfriend would never accept that'

T: "So you're really torn here...you want to be able to use – you like the feeling, and having those moments...those really cool moments is important to you...it also feeds into your independence which is really important to you – the right to make up your own mind about how you spend your time...AND your relationship with your girlfriend is really important to you too'

C: 'Yeah'

T: 'So how have you been responding to this situation so far?'

C: 'What do you mean?'

T: 'You want to still use meth, AND be in a relationship with someone who doesn't want you to use speed, so what have you been doing?'

C: 'I guess I mainly use when I know she's not going to be around. Most of the time she can't tell. So if she's going out for the night and I have a couple of hours I might just dip my finger in the bag. Sometimes she goes away for the weekend and then I know I can do as much as I want'

T: I remember you mentioned that last session. And how has that worked out for you so far – using when she's not around?'

C: 'Not that great. I mean its fine at the time, while I'm actually using I don't care. But in between times I stress that she's going to find out...and I feel guilty about lying to her.'

Some therapists may have prompted the client to 'choose' at this point. From an ACT perspective, it is preferable that the client appreciates the unworkability based on their experience

'Using when partner isn't around' is identified as a control strategy; an attempt to influence private experience (stress, guilt). Therapist checks its workability

Checks other control strategies for dealing with stress

T: 'So using when she's not around is doable, but the rest of the time you're still feeling stressed. So when you're feeling stressed, how do you respond to that?'

Client identifies suppression; distraction. Therapist checks workability

C: 'I just try not to think about it. Try and concentrate on whatever I'm supposed to be doing.'

T: 'Kind of push the feeling away, distract yourself...how has that worked out - pushing the stress away?'

Therapist identifies 'zoning out' as another subtle way of avoiding/controlling private experience, checks workability

C: *'That doesn't work at all. I can still feel the tension... I guess my mind just gets a bit foggy, like I'm half asleep...I don't think about it so much'*

T: *'So you kind of 'zone out' – some psychologists would call it dissociating – that's kind of like another way of responding to stress, and that seems to help take your mind off it.'*

C: *'Yeah, I guess...but then I can't concentrate properly and ... the stress is still there'*

Therapist builds class of unworkable change strategies

T: *'So zoning out takes the edge off the stress, but it doesn't take it away completely. Okay, so you've tried using when your girlfriend goes out, trying not to think about it, distracting yourself, zoning out – are there any other things you have tried in order to get the life you want: your relationship and the speed.'*

C: *'I don't know'*

T: *'Are you zoning out a bit right now!?'*

C: *'Maybe...What was the question?'*

T: *'How else have you tried to be in a relationship with someone who doesn't want you to take speed, and take speed?'*

C: *'Sometimes I wonder whether I should just break up with her'*

Elements of paraphrase: behavioural choice, values, private events and response

T: *'Faced with having to choose between being in a relationship that really matters to you, with the guilt and stress and continuing to use speed, one of the ways you respond is to think about leaving....'*

'Can I put it this way, how has 'thinking about leaving' worked as a way of helping you live a life where you're using and in a relationship with someone who doesn't want you to use'

Paraphrase draws out the thinking as another control strategy – not treated as a literal intention to leave.

C: *'I don't want to leave, sometimes it just seems like it's easier'*

T: *'Actually leaving would be to go in the opposite direction to where you really want to go with that relationship. But fantasizing about leaving, seems to take away some of the stress and the guilt?'*

C: *'Yeah. But only for a while. Then I think about being without her and that would suck too'*

:

:

Creative Hopelessness
summary

Therapist attempts to highlight two broad classes of unworkability: the plan and the means of trying to control meth use

Therapist holds the client's change talk lightly. It's not that he/she doubts the client's intention, but he/she remains alert to the possibility the factors that led the client to this point are still present.

T: 'It sounds like you've tried a lot of things to have this life, tried quite hard - using only when your girlfriend goes out, trying not to think about it, distracting yourself, zoning out, fantasizing about leaving, justifying it to yourself ... and the stress and guilt haven't gone away for any great length of time.'

C: 'Yeah'

T: 'Not based on anything anyone else has ever said, but just going on your own experience, alone, how likely do you think it is that it is possible to live in a relationship with someone who doesn't want you to use meth, still use meth, and not feel guilty and stressed?'

C: 'I haven't been able to find a way!'

T: 'But maybe if you keep looking you'll find one?'

C: 'I keep hoping!'

T: 'What does it feel like to be hoping for a way out all the time?'

C: 'It's stressful - I feel uncomfortable all the time - my guts ache from being tight all the time...'

T: 'So, can I put it like this, 'hoping for a way out' is also not getting you the life you want.'

C: 'No. It's just wishful thinking...I know that.'

T: 'Does something seem wrong with this picture to you? You're trying to use meth AND be in a relationship with someone who doesn't want you to, and not feel guilty or stressed. You've tried all these different things: changing when you use meth, trying to distract yourself, justify to yourself, hoping for a way out, all the time feeling more and more uncomfortable. Could this work - ever? For how long?'

C: 'No. I know it doesn't work'

T: 'For how much longer do you want to keep trying to push this rock up the hill?'

C: 'I'm over it. I can't keep doing this'

T: 'You know your mind is probably going to keep working away in the background trying to find some kind of loophole so you can have it both ways'

C (smiles)

T: 'Even right now?'

C: 'I cant imagine never thinking like this again'

Although the client's words sound correct, the client does not seem to be experientially in touch with the futility of past solutions to his problem. The therapist circles until the client has made experiential contact

T: 'Yeah if that were the way out – not ever having thoughts of wanting it both ways – you'd be screwed. That's not it. That cant work'

C: 'So what do I do?'

T: 'Well, before we look at what TO do, we should be clear on what NOT to do. What is it exactly that hasn't been working?'

C: 'I cant have the relationship and the meth'

T: 'That's one thing that hasn't been working – chasing a plan that isn't achievable. Is there anything else that hasn't been working?'

C: 'Everything I've tried to give up meth'

T: 'Is there anything those things you've tried have in common?'

C: 'I'm not sure'

T: 'Before we try anything else, we need to be clear on what hasn't worked before.'

C: 'I'm not sure'

T: 'OK... are you willing to be unsure for a moment and stay with me without zoning out?'

C: 'I guess so. I don't really know what you're getting at'

T: 'It's like...(goes into Man in the hole metaphor)'

There is a certain state of mind or experience that seems to facilitate a readiness to change. Both MI and ACT authors have written about it. It comes from recognizing fully, without reservation, that the way one has been trying to live is futile. And although this moment of recognition may be *preceded* by anger, despair, frustration or anguish, the experience at the moment is actually somewhat *hopeful*, a relief, lighter, a slight sense of freedom. It is the point where the person gives up – not on life, not on his/her self, but gives up trying to do what they were trying to do. In Alcoholics Anonymous lore this moment is only reached after hitting 'rock bottom', but no such assumption is made here. It is a point at which the individual is more likely to look at the world with 'fresh eyes'. This is particularly valuable when preparing the individual to accept experience after a lifetime of trying to control and avoid it.

It can take considerable skill and practice to create conversations that lead to this point. However, the investment is worthwhile as the creative hopelessness experience potently facilitates the subsequent acquisition of skills or enactment of behavioural change commitments that follow. The more chronic the client's drug use history, the more likely the idea that trying to control internal states is futile will resonate with them. For the therapist looking to start experimenting with this technique it may be easier to do so with clients who have a chronic history more so than a short term history.

If the client has made any other significant behaviour changes in their life before, they may already have creative hopelessness experiences to draw on. A client may have overcome an obstacle (for example, learning disability, shyness), given up a troublesome behaviour (for example, criminal activity) or an abusive relationship, or even a passion that interfered with another value (for example, sport or music

for the sake of their family). Such experiences can be evoked through open questions. For example, 'Have there been any other times in your life where you had to make a dramatic change and give up something you were heavily involved in? As the client relives the experience, get them to slow down and pay attention to the mixture of emotions that led up to the point at which the change was made. Even if the client insists 'I just did what had to be done', see if you can slow down the story to catch even the most fleeting thoughts and emotions that portray the ambivalence or reluctance prior to making the change. Then help the client to notice the switch in emotions as the client first resigned themselves to change, through to when they embraced it (which may have happened long after the change, if at all) or accepted it (any sadness of resignation passed).

7.5 Coping Strategies

The following is a comprehensive array of psychological strategies to cope with cravings. Some are designed to work as immediate short-term responses. Others are skills that need to be rehearsed in the short-term outside of the context of strong cravings, but are likely to effect more enduring behavioural change than the emergency responses.

7.5.1 Arousal Reduction

Use: A set of short-term coping strategies to attenuate intense physiological arousal and enable the enactment of other strategies in the grip of strong craving.

Rationale: It should be explained to clients that these are skills that require regular practice to develop proficiency. However, the investment is worthwhile as once clients are proficient in these techniques, they can be used as emergency coping strategies that may work faster than benzodiazepines in reducing physiological arousal.

BREATHING TECHNIQUES

The following are presented in the sequence most easily taught. For the majority of clients, the entire sequence can be completed in several minutes. For clients who have difficulty, progress more slowly and do not proceed until the client has mastered an earlier stage.

- 1) Locate your breath: Ask the client to place one hand on their chest and one on their belly. Without forcing their breathing, ask clients to notice how their hand(s) are moved by their breathing. Ask the client to watch their breathing for a minute.
- 2) Count breath: Ask the client to count their breath where 'one' = IN + OUT breath. Tell the client when to begin and end. Ask the client to count their breath for one minute.

If the client's breath count is above 12, they are over breathing. In which case, go to step 3. If the client's breath is ten or less, step 3 is unnecessary.

- 3) Pace breathing: Ask the client to time their in and out breaths to your count. Count in six-second cycles: IN-2-3-OUT-2-3. If the client struggles with this, try a four-second cycle until successful, then increase to the six-second cycle. Observe the movement of the client's stomach as they breathe to check how successfully they are doing. Continue until the client can maintain a six-second cycle for 10 minutes.
- 4) Breathe into muscle groups: Slowly and gently, ask the client to visualise their breath travelling into their chest, then stomach as they breathe in and out. Then ask the client to 'allow the breath to travel right down into the right foot, as if you were bringing fresh oxygen and restoration to the muscles in your right foot. Allow the muscles to feel revived and nourished.' Pause. 'Now breathe

into and around the area between your right heel and the back of your right knee, the calf. Allow your breath to bathe that area of your body, renewing and revitalising the muscles in your calf, leaving your calf feeling calm and relaxed.

Repeat for as many major muscle groups as there is time available. If time is limited, particularly concentrate on areas affected by cramping or common sites of tension, such as the neck, shoulders, and face. It is very helpful to audio record the procedure for the client to take home and guide practice.

RELAXATION TECHNIQUES

Progressive muscle relaxation (PMR)

Progressive muscle relaxation consists of successively tensing and releasing different muscle groups. This is designed to teach the discrimination between the two states, and any fatigue induced by the tension phase should assist the release phase. After the client becomes adept at tense-release exercises, the client may progress to merely releasing the muscle from whatever state of tension it is in, without first tensing.

PMR has the advantage of being relatively easy to teach, and can be taught when the client is not currently experiencing a state of tension. The disadvantage is that it can intensify tension when clients are already experiencing it (and induce headaches in susceptible people), and some clients can overdo the intensity and duration of tensing and not spend long enough releasing muscles.

Tense for five seconds; Release for 15 seconds. Ensure the client only tenses at the minimum intensity necessary to detect the sensation. Encourage attention to the state of release during that phase (for example, *'enjoy the lighter, restful state of relaxing those muscles'*). With each muscle group do one side of the body at a time.

Exercises: Tensing instructions (then release and return to resting position) (Ost, 1987 cf. Clark, 1989)

- Hands: clench fist (feel tension in fist and forearm)
- Biceps: flex like a body-builder, drawing inside forearm toward upper arm
- Face:
 - Upper forehead: Raise eyebrows, as in an expression of surprise
 - Lower forehead: Frown
 - Eyes: screw up eyes as in a squint
 - Jaw: bite teeth together
 - Throat: press tongue hard and flat against roof of mouth with lips closed
 - Mouth: Purse lips tightly together
- Neck:
 - Press head backward toward the back of the chair or the wall
 - Press chin down to chest
- Shoulders:
 - Hunch shoulders toward ears
- Stomach: Pull/suck in stomach toward spine
- Lower back: Arch back away from the back of the chair

- Buttocks/calves: Keeping legs straight, press heels into floor
- Calves only: Lift heels and press toes into floor
- Shins: Keep heels on floor and lift toes upward
- Toes/Feet: Scrunch toes toward soles of feet

Imagery-guided relaxation

In a state of mild craving or tension, ask the client to identify which parts of their body feel tense. Identify which direction the tension feels as if it is being pulled in. For example, tension in shoulders could feel as though the shoulders were being forced upward toward the ceiling or downward toward the floor. Together with the client, come up with an image that represents this tension. In the case of upward shoulder tension, the client could imagine there were ropes attached to their shoulders and held tightly toward the ceiling. In the case of downward tension the client could imagine ropes pulling their shoulders on either side of their body toward the floor. Once the image has been described, the client can be asked (eyes closed) to feel that tension as caused by the image (that is, the ropes) and then change and then alter the image to reduce the analogous tension. In our example, the client might visualise the ropes gently and slowly being let out toward the client, growing slacker until the ropes puddle in a heap on the floor, allowing the shoulders to return to a comfortable position and float gently on the tide of their breathing.

7.5.2 Wait-Training and Alternative Activities

One of the most widely publicised recommendations for handling cravings is ‘the 3Ds: Delay; Distract and Decide’. Following exposure to a cue that elicits craving, any delay until actual use weakens the eliciting strength of the cue. Furthermore, when drug use occurs after a delay, it serves to reinforce that effort at waiting. Waiting can be thought of as an alternative response to reflexive drug use. The client could set themselves the task of trying to extend their latency to use further on each occasion of craving, and should this process continue, theoretically the delays to use will eventually extend over long enough time periods to consider the client abstinent. For clients who lack confidence in their ability to resist any episodes of craving without using eventually, providing a framework of trying to build up ability to delay use – even if progress in the initial stages is measured in seconds rather than hours – can provide a possible path to enact an intention to pursue behaviour change, without having to leap the tall buildings of more ‘obvious’ behavioural progress.

In practice, waiting is a fairly aversive experience and requires considerable acceptance / distress tolerance skill to achieve. For most people it will be a more effective psychological strategy to decide to engage in an alternative activity. The term distraction is best avoided as it connotes a simultaneous dual-focus of attention on the problem one is supposed to distract from and the distracting activity. Although the *function* of distraction is useful, the instruction to distract is prone to be followed as an attempt to suppress thinking, which has been found to be generally ineffective in reducing the frequency of thoughts and sometimes leads to a rebound increase in the frequency of the suppressed thought (Salkovskis & Reynolds, 1994). Instead, in the moment, the client decides to delay their decision to use for a specified period of time. During that time they also decide to engage in an alternative activity not for the purposes of avoiding thoughts of use – they would expect those to come and go – but simply to spend that time during the delay in a purposeful rather than mindless way. The distinction is subtle, but may potentially make a significant difference in the frequency of thoughts of drug use that occur.

- 1) In the craving diary (see Handout 2) the client should record the seconds/minutes they were able to delay using in the 'response' column. Over time, these records should be reviewed and any progress in ability to wait highlighted. If there has been no increase in delay to use, the client and therapist should perform a functional analysis of recent episodes of use to understand what is limiting the opportunity to wait.
- 2) The client can generate a list of activities to draw from when experiencing a craving and deciding to wait. Ideally, work will soon begin on the behavioural activation component of the program which should further expand the client's repertoire of behavioural alternatives for these situations.

7.5.3 Responding to Self-Talk

Use: When the client's experience of craving is predominantly cognitive, or for early low-arousal phases of craving where beliefs about using are evident.

- 1) **Identify automatic thoughts:** Guide the client to identify the thoughts that go through their mind preceding instances of methamphetamine use. This is best done initially in the context of therapist-guided functional analysis of recent episodes of use, but can later be done by clients recording their thoughts in craving diaries.
- 2) **Structure as expectancy:** Wherever possible, reframe the automatic thought as a belief about outcomes (expectancy) of having a craving in the form '*if x then y*'.

Example:

T: *'What went through your mind at that point?'*

C: *'I need some meth' (automatic thought)*

T: *'or else...'*

C: *'I'd go crazy'*

=> *Belief: 'If I don't use meth right now I'll go crazy'*

- 3) **Belief rating:** Ask the client to rate how much they believed the thought at the time on a scale of 0-10 where 0 is 'don't believe it at all' to 10 'absolutely convinced'. It is also helpful to check their current level of belief in the room with you, however, first check their current level of craving.

If the client has no urge to use while with you, their level of conviction in the belief at that time can inform whether self-talk strategies are likely to be helpful.

- If the client has little conviction in the belief in the context of not craving, but a high level of conviction in the context of craving, the conviction level is likely under the control of the physiological arousal and changing self-talk is likely to be of little use.
- If the client has high conviction in the belief in the context of not craving, self-talk change is very important as this belief is likely to contribute to an escalation of physiological arousal in the presence of eliciting cues and it needs to be defused.
- If the client has an element of craving in the room, the assessment of conviction in this belief can be deferred to another session, or until craving can be reduced in the current session. If it seems as though every discussion of this belief occasions a level of craving, this indicates the thought functions as a cue for craving. In this case, self-talk change is a useful but not a sufficient response.

It can only improve the individual's chances of averting drug use to have a cognitive response in the presence of the thought, however other responses will be needed to defuse the physiological arousal and redirect action tendencies.

4) Response to belief:

a) Cognitive restructuring (cognitive therapy method)

i) Examine validity or utility of belief

The therapist can ask the following, or provide a worksheet or craving diary with these as prompts:

- 'What evidence do you have that {*feared consequence*} will happen if you don't use? Is this 100% true?'
- 'Have you ever gone without using meth when you've wanted it? Did {*feared consequence*} happen? (If so, was it as bad as you are imagining it now?)'
- 'How useful is it for you to assume that {*feared consequence*} will happen? Is this just an excuse to justify continuing to use?'

The traditional cognitive therapy approach of using disconfirmatory evidence to change unhelpful beliefs is somewhat limited with methamphetamine users. For many, the feared consequence of being deprived of methamphetamine will be escalating frustration, irritation and possibly aggression. These are very likely to be consequences and experiences that have occurred in the past. This approach may be more useful with clients who fear experiencing medical or psychiatric harm if they do not use.

If you use this technique with clients, try it in the context of experimentation (for example, 'let's see if it's helpful to look at your thinking in a different way to the usual') and observe the effect on the client. If the client emits resistance talk, do not try to persuade, convince or insist the client's beliefs are invalid.

- The client may still be prepared to develop a self-statement in response to these beliefs.
- If not, check the client's reaction to the rationale that their beliefs are either triggering or contributing to the escalation of their cravings and use.
 - If the client agrees his/her beliefs do trigger or intensify cravings, ask them whether they would be prepared to 'soften their stance' and see the feared consequences as possibilities rather than certainties.
 - If the client is not sure or disagrees with the rationale, return to the functional analysis that identified these thoughts. Check their role and if you are sure the beliefs play an important eliciting or exacerbating role, use Socratic questioning to help the client see the connection.

ii) Generate alternative self-talk

Ask the client to suggest an alternative statement they could say to themselves in response to the automatic thought. If the client has difficulty, use Socratic questioning to help him/her come up with one based on the reassessment of the original automatic thought.

Example:

T: 'Originally you said you were 90% sure you'd go crazy if you didn't use meth once the craving got over 70%. After we looked at it more closely, you decided you believed this

only 50%. What's a come back you could use when that thought 'I'll go crazy' comes up?

C: 'That I'll be OK'

T: 'U-huh. You could say that. Is there anything else you could say to yourself as well? How likely do you think it is that you will go crazy if you don't get meth when you want it?'

C: 'I could go crazy, but I might not'

T: 'U-huh. Of course, the way you said it then sounded like going crazy was more likely than not. Do you believe that?'

C: 'Not really...it could go either way'

T: 'Could you say something to yourself that made that clear?'

C: 'I guess there's an equal chance that I won't go crazy'

T: 'Could saying that to yourself have an impact on the intensity of your craving?'

C: 'I guess it could'

T: 'Is there a way you could put it that would reduce the intensity of your craving even more?'

C: 'I could say it's unlikely that I'll go crazy'

T: 'How much do you believe that on a scale of 1 to 10?'

C: 'Pretty high'

T: 'So you could use that: 'it's unlikely I'll go crazy''

C: 'Yeah, OK'

The quality of the self-statement is a function of its ability to reduce craving or increase confidence to cope with cravings. Encourage the client to not only use self-talk but to keep records of the outcome (see Handout 5) so that future functional analyses can evaluate the effect of the self-talk. It is important to remain vigilant to the possibility that such a strategy could be ineffective, or exacerbate cravings or drug use.

b) Cognitive defusion (ACT method)

Characteristic of ACT is its approach to thoughts. ACT does not require us to pay attention to the literal meaning of our thoughts; it is the relationship thoughts have to our behaviour that matters. We have the ability to treat our thoughts as though they were orders to be obeyed at all costs. We could treat conflict and disagreement between our thoughts as a crisis that needs to be resolved before we can take any further action. We could also treat our thoughts as a detuned radio playing in the background while we get on with living life. ACT views none of these relationships as 'correct' but aims to give clients the flexibility to switch between relationships according to which will best serve the pursuit of personal values.

The cognitive defusion techniques listed below are designed to change the client's relationship to their automatic thoughts and beliefs (which if taken literally, would increase craving intensity and/or methamphetamine use). As with cognitive restructuring, the effects of any use of these techniques should be subjected to functional analysis. The strategy used should be recorded in the 'response' column of any worksheet used (see Handout 1, Handout 5).

Evidence a defusion strategy is effective will come:

- Qualitatively: from clients taking their thoughts less seriously
- Quantitatively through:
 - Belief ratings reducing
 - Clients acting in spite of, or inconsistently with their thoughts (for example, having the thought 'stuff it, just get on' and yet remaining at home engaged in alternative activities)
 - Reductions in time spent ruminating
 - Reductions in physiological arousal or behavioural reactivity previously associated with thoughts. This can be tested by writing the thought on a piece of paper or whiteboard and observing nonverbal responses, and/or obtaining ratings of distress response intensity in subjective units of distress (SUDS, scale of 0-100 where 0 = no distress, and 100 = most distress ever experienced in life).

Milk, Milk, Milk

See Hayes *et al.* (1999, p.154-155) for an example of this exercise used with a client.

- 1) Ask the client to say the word 'milk' once.
- 2) Ask the client what 'shows up' (that is, what they think of) when they say 'milk'. Ask for different examples.
- 3) Highlight that:
 - i) The mind generates thoughts about actual milk (literal meaning of the word)
 - ii) A number of thoughts may be generated even though there was no milk physically present
 - iii) We get experiences of the object just by uttering its name
- 4) Introduce the 'silly' part of the exercise – saying the word over rapidly and loudly.
- 5) Together with the client, say 'milk' over and over, faster and louder for 30-60 seconds
- 6) Check what the client was thinking as soon as it stopped.
- 7) Look for new/different experience of the sound 'milk'

Now repeat the procedure with a word that has significant emotional connotations for the client. For example, 'speed', 'alone', 'bored', 'I'm fat'. There is no insistence that the client's experience change; just notice whether it does.

Theoretical point: We are not looking to *replace* the original connotations of the word. We are trying to *add to them*.

Contents on Cards exercises

Have a stack of cards available on which to write disturbing thoughts or feelings. For example, 'I can't give up', 'I'm a loser', 'It's too much'.

The following exercises serve as physical analogies for a process of distancing oneself from the literal meaning of one's thoughts and feelings.

Exercise 1: Avoiding v holding the cards

Most useful for clients who get into mental battles over whether or not to use, or try and suppress thoughts of using.

- 1) The client is told their task is to make 100% certain that none of the cards touch his or her lap.
- 2) The therapist then throws the cards toward the client, one at a time, while the client tries to deflect them away.
- 3) Next, the client is asked to just let the cards land wherever they fall and merely watch them.
- 4) The therapist then throws the cards toward the client, one at a time, while the client watches.
- 5) Ask the client to notice what was different about each way of responding to the cards (that is, the effort involved).

Exercise 2: Pushing away vs holding the card

Purpose similar to Exercise 1.

- 1) The therapist holds a card containing a particularly disturbing thought in the palm of their hand and the client is asked to push against the card.
- 2) The therapist tells the client to hold the thought away while pushing the card.
- 3) The therapist asks the client how much effort this takes.
- 4) Hand the card to the client and ask them to hold it. Ask client to notice the difference in effort. *In each case the client is equally in contact with the card.*

Exercise 3: Carrying the cards

Have the client carry the cards in their pocket or in their hand as they go about their day. This physical metaphor illustrates the nature of having unwanted thoughts and feelings as purposeful action is taken.

Exercise 4: Wearing the cards (as presented by Dr Robyn Walser)

Attach the cards to the client with sticky tape. Have the client go for a walk while wearing the cards (can be in public, therapist can accompany). This is a very powerful acceptance exercise in which clients remain very much aware of their disturbing thoughts and emotions, including new ones generated by the exercise and social anxiety, while behaving independently of them.

Sound it out

Ask client to say difficult thoughts very, very slowly. Doing this alters the form of the phrase so that the aural properties and sensations necessary to produce the sound are more salient than the content itself. The purpose of the exercise is to provide an experience of increased psychological distance from the meaning of the thought.

Sing it out

Ask client to put difficult thoughts to a tune. The rationale is the same as with 'sound it out'. Both constitute forms of exposure to the feared stimulus. Unlike traditional exposure, the object is not to reduce discomfort, but for the individual to remain in contact with the stimulus, while engaging in behaviour other than avoidance. The therapeutic goal is to increase the response repertoire in the presence of avoided stimuli.

Speak in funny voices

Ask client to speak difficult thoughts in a comic voice (for example, Donald Duck). The rationale is as for 'sing it out'.

Your Mind is Not Your Friend

Therapists can develop their own style. The essential message is that minds have developed to improve our chances of survival, rather than to make us feel good. An example of a script can be found in Hayes et al., 1999 (p.151-2).

Taking your mind for a walk

This exercise is taken from p.163 of Hayes et al. (1999). It is useful for giving clients a different, more distanced perspective of their thinking.

The client takes the role of the 'person' and the therapist takes the role of 'the mind'. The therapist and client go for a walk together.

- The 'person' goes wherever they choose. The 'mind' follows.
- The 'mind' communicates nearly constantly about anything and everything: describing, analysing, encouraging, evaluating, comparing, predicting, summarising, warning, cajoling, criticising. The therapist draws on his/her knowledge of the kinds of thinking the client engages in (or is likely to engage) in.
- The person must listen but cannot communicate with the mind. If they try, the mind responds 'never mind your mind'.
- Then the therapist and client walk silently and observe any difference in quality of experience.

ACT language conventions to recontextualise thoughts

Most ACT therapists use language differently to therapists of other theoretical orientations. The language conventions: *and/be out*, *cubby-holing*, *I'm having the thought that* and *buying* thoughts can be introduced at any time and continue to be part of the general language used throughout therapy.

And/Be Out convention

This convention is good to introduce with clients who use the word 'but' a lot. Explain the etymology of the word 'but' as from the Old English *be-utan*, literally meaning 'be out' (Hayes *et al.*, 1999). It is used so that the word that follows 'but' negates whatever came before it. An example of how 'but' is used problematically in clinical contexts might be 'I'd like to stop using meth but I can't see myself doing it'. This language presents the failure to envision quitting as a logical obstacle to the goal of ceasing methamphetamine use. However, there was no actual experience of failure to envision preventing methamphetamine cessation. What was actually experienced was the thought 'I'd like to stop using meth' and the thought 'I can't see it'. It is almost always more accurate to replace the word 'but' with the word 'and'. The therapist then asks the client to agree to adopting the practice of replacing any future uses of the word 'but' with 'and'. The purpose is to draw the client's attention to how the way we talk about our experience subtly but importantly influences how we respond to it.

Cubby-holing

Instead of paraphrasing the client's dialogue, label the *type* of dialogue: 'description', 'evaluation', 'emotion' or any other label that speaks to the function rather than the content of the phrase. The script below demonstrates:

C: *'All my life I've been trying to be special.'*

T: *'Reason'*

C: *'I feel like now I just can't be.'*

T: *'Thought'*

C: *'I feel like the deadline has passed.'*

T: *'Thought'*

C: *'I feel like all the things that once turned me on are over for me.'*

T: *'Thought'*

C: *'All I can see now is drudgery.'*

T: *'Evaluation'*

C: *'There is nothing compelling me to do anything.'*

T: *'Description'*

C: *'Maybe life has been too easy.'*

T: *'Evaluation'*

C: *'Maybe I am just too comfortable.'*

T: *'Evaluation'*

C: *'I don't know.'*

T: *'Thought'*

The purpose of the exercise is again to change the relationship between the client and their thoughts. The client can be taught this way of evaluating automatic thoughts. Notice the difference between this technique and cognitive restructuring: rather than assessing the accuracy or validity of the thought, the thought is evaluated obliquely without interacting with its content.

I'm having the thought that

When clients speak as though their evaluative thoughts were undisputed facts (a relationship of cognitive fusion with their thoughts) it is helpful to reformulate statements like 'I'm useless' into statements that more accurately reflect what is happening, such as 'I'm having the thought that I'm useless', or 'I'm evaluating myself as useless'.

The therapist can begin paraphrasing client statements after introducing the notion of the mind as almost separate from the self (for example, your mind is not your friend). Later, the therapist can ask the client to adopt this convention explicitly when making statements about their thinking.

Buying thoughts

To emphasise when a client is 'believing' or taking a thought literally when it may not be useful to do so, the therapist can refer to this behaviour as 'buying (into)' the thought. Ask the client to recall obnoxious TV or radio advertisements where the announcer screams at the audience to grab a bargain and liken their minds to those announcers. 'Would you buy that thought on *his* (announcer's) authority?'

'Tell me how to walk' exercise

This exercise illustrates the independence between thought and action. Ask the client to teach you how to walk. To each statement, reply, *'how do I do that?'* Continue until either the client gets too frustrated or the client appreciates that we did not learn to walk by instruction – we learned through direct experience. The therapist can highlight that words and thoughts have arrogance about them, as though they are capable of anything, and yet their power is limited.

Think the opposite

Ask the client to engage in a specific behaviour while thinking about doing the opposite.

For example, have the client think to themselves over and over *'I cannot pick up the pen'* while they reach over, grasp the pen and hold it. Then have the client think over and over *'I cannot put the pen down'* as they place the pen on the table. Other simple examples include: standing up, walking around, opening the door or writing.

Try to pick up the pen

Ask the client to *try* to pick up a pen. If you observe the client actually picking up the pen, correct them (for example, 'No that's picking up the pen, I just asked you to try to pick up the pen'). This exercise can expose the inadequacy of thinking/words, and the distinction between the world of thought and action.

7.5.4 Imaginal Exercises

Overview briefly what imagery exercises entail: eyes closed, visualisation under relaxation. Emphasize the purpose is not for clients to relax or fall asleep. Ensure the client understands the purpose of the exercise in advance and consents to proceed. Do not proceed if the client emits any resistance talk without discussing and resolving any unwillingness. When conducting the exercise do not introduce content that was not agreed to by the client prior to beginning.

Prior to each of these exercises, help the client to relax into a state conducive to visualisation: ask them to uncross arms and legs, place feet flat on the floor, place their hands in their lap, close their eyes, pay attention to the sensations of sitting in the chair, and to follow their breathing without trying to alter it.

During specific visualisations guide the client slowly, in detail, through the situation, with descriptions and prompts in the present tense. Provide sensual prompts to intensify the imagery (for example, notice the colour of the floor, the walls, listen to the noises around you, notice how the room smells, its temperature).

After visualisations, help the client reorient to the room.

Example:

T: 'begin to visualise the room, and where we are sitting in relationship to one another, picture the colour of the walls, then become aware of how bright it is in the room, and when ready, allow your eyes to adjust to the light and we'll talk some more'

Discuss with the client how they might use such techniques on their own. The client and therapist may agree to make an audio-recording or write a script that can be reviewed to guide the imaginal rehearsal.

Mastery / alternative behaviour rehearsal

Prior to inducing relaxation discuss a recent or upcoming situation with the client. Obtain sufficient detail about the circumstances that you will be able to guide them to produce a vivid visualisation of the situation.

Discuss how the client would like to have handled (or handle) the situation. This might be to have assertively refused an offer, to have escaped (leaving the situation), to have remained in the situation without using methamphetamine or any suitable alternative. Discuss the likely effectiveness of the strategy based on the client's experience and select an alternative if necessary. Once both client and therapist are satisfied there is a potentially effective course of alternative action and what the likely consequences would be, the procedure can begin.

Induce relaxation then slowly help the client create/recreate the situation. Guide the client up until the point at which the decision to use or perform an alternative behaviour needs to be made. Have the client 'freeze' the image at this point and really notice the intensity of any thoughts, emotions, physical sensations, or urges to act. Allow these to reduce in intensity if necessary, to facilitate visualising performance of the alternative behaviour. Guide the client through the alternative course of action, through to the outcomes of the action. Guide the client to notice any sense of satisfaction or self-pride, and any increase in confidence for the future. Then help the client reorient to the room and debrief.

Debrief: How confident is the client that they could do the same thing in real life? If not, what would they need to do differently? Would they be willing to imaginally rehearse doing *that*?

'Fast forward'

Prior to inducing relaxation, discuss a recent or upcoming situation with the client. Obtain sufficient detail about the circumstances that you will be able to guide them to produce a vivid visualisation of the situation.

Discuss what happened (or would happen) once the desired effects of the methamphetamine wore off. Collect as much detail as possible about any aversive physical, emotional, interpersonal or cognitive experiences the client had (or would expect to have). This should include embarrassment, irritability, loss, arguments with others, legal trouble, impaired functioning in occupational or family roles.

Details can be collected for moments immediately after the desired effects wear off, then for hours or days later, or as far down the track as necessary to capture the client's concerns about the consequences of their methamphetamine use. For example, if the client had few immediate concerns about their use but long-term concerns about the effects on their memory or mental health, the therapist and client could discuss what everyday life might be like if their memory was unreliable or paranoia became more frequent. Clients may have observed more experienced users display some of these effects, which could inform a long-term image of themselves using methamphetamine.

The purpose of this exercise is to put the client in experiential contact with the costs of their methamphetamine use. Most clients will be aware of these costs at least at an intellectual level, and may even be quite concerned about them. However, they either do not think of the costs in the moment where the choice to use or not is made, or else have these thoughts in the context of a physiological-emotional craving response that inhibits their level of concern. This exercise is designed to strengthen the association between cognitive networks relating to high risk situations and cognitive networks relating to the adverse consequences of using. It is intended to increase the probability that thoughts of negative consequences and emotional responses to the consequences unaffected by craving will also be elicited in addition to appetitive consequences in the presence of cues that typically precede drug use.

Induce relaxation then slowly help the client recreate the situation. Guide the client right up to the point they decide to use methamphetamine but stop the description before the client can visualise consuming the drug (that is, do not let them see themselves smoke or inject it). Instead ask them to fast forward to the point at which the desired effects have worn off and describe the onset of the adverse experiences discussed prior to the induction. Go slowly, and help the client experience fully with as many senses as possible the adverse consequences. Where the aftermath includes social disapproval or conflict, have the client notice others' facial expressions and recognise the hurt/disappointment/anger/worry they contain. The image can then be fast-forwarded to any of the other points in time following use identified in the discussion prior to the exercise. When the client has been guided through all the adverse consequences devised, help the client reorient and debrief.

Debrief: What was that like? How was the experience of the consequences in the exercise different to the 'real life' experience? (look for reduced impact in real life experiences because of 'hangover' effects that impair concentration). Did the client try to mentally escape or avoid the consequences? Did the client try to rationalise or justify their actions during the exercise? Did the exercise have any impact on the client's desire to use methamphetamine in the future? Look for both reduced intentions to use as well as any elicited urges to use.

'Urge surfing'

Induce relaxation. Guide the client through visualising waves at the ocean. Very slowly describe the gradual swell, as the water gathers together, building, rising, climbing, and creating a wall of water.

Slow down even more as the wave reaches its peak, the first signs of foam start to emerge at the peak of the wave and then slowly watch the wave over-balance and watch the wall of water curl over, sliding, tumbling, falling back into the rest of the sea and spreading forward rapidly as it heads toward the shore. Ensure the client is capable of generating a vivid image of a wave rising, peaking and spilling toward the beach before introducing the next phase. Practice until the client can generate the image.

Next, invite the client to generate an urge to use methamphetamine by calling to mind some of its appetitive qualities. As soon as the client indicates some experience of craving, guide the client back to the image of the wave rising and guide them to 'see this wave as the urge to use you are experiencing right now'. Let them know their job is to surf this wave, as a surfer would. Slowly guide them through riding the wave as it builds and peaks, and then to ride the wave into the shore.

7.5.5 Attention Training Strategies

Use: For clients who have persistent, prominent, or intrusive cognitions as part of their craving or comorbid condition. Clients who appear to have 'busy' minds, who do not necessarily believe their automatic thoughts but have difficulty redirecting their attention away from their stream of thoughts may have difficulty enacting alternative actions to drug use. Attention training provides practice in focusing, switching and dividing attention, skills that are likely to moderate the influence of cues on subsequent behaviour.

Attention Training Task (Wells, White and Carter, 1997)

In this task, the client is presented with six sources of simultaneous sound and asked to focus on each sound one at a time, then switch rapidly between them and then attend to combinations of sounds. It is designed to improve the person's ability to consciously pay and switch attention. Rehearsal is done using benign (psychologically insignificant) sounds, but the skill development is intended to assist in disattending to ruminative streams of thought in cravings and other contexts of psychological distress.

It may be necessary to prepare the clinic environment to be able to use this procedure. There needs to be six sounds present for the client to attend to. Ideally three will be clearly audible in the room, and three will be audible but more distant, outside the room. Examples of sounds that could be used include a computer fan, a phone engaged signal, an air conditioner, a clock, the therapist can tap a pen on the table, the sound of traffic outside, people talking outside the clinic, a detuned or tuned radio, birds chirping (if regular enough). If the clinic is quiet, the therapist may need to bring in additional props. Alternatively, a CD version of the exercise is available.

Instructions:

I'd like you to keep your eyes open throughout this exercise and choose a fixation point on the wall in front of you (for example, a mark or a spot).

To start with, I'd like you to concentrate just on listening to the sound of my voice. No other sound matters. Your attention may be drawn to other sounds, and when that happens, that's fine, that's normal... but your job is to bring your attention back to the focal sound, which for now is the sound of my voice.

Focus all of your attention on the sound of _____. No other sound matters. Absorb only that sound. If your attention strays, re-focus on that one sound.

Repeat: 3 near, 3 far ~ 3 mins

I would like you to switch your attention from one sound to another as quickly as you can. Focus on the sound of _____. Focus only on that sound. No other sound matters. Now switch and focus on _____.

Repeat quickly: ~ 3 mins

Now try and focus on as many different sounds as you can at the same time. Expand your attention and absorb all of the sounds. Focus on all of the sounds both within and outside of this room. Count the number of sounds you can hear simultaneously.

~ 3 mins

Attention training walk

This exercise was devised by the author of this manual. The client goes for a walk and chooses a cue in the neighbourhood that will be encountered frequently, such as a bus stop, telephone pole, driveway, or car of a particular colour. Each time the client encounters the cue, they are to switch their attention between their train of thought and something in the external environment. It may be to attend to the colour of leaves on trees they walk past or to count as many tiles on the roof of the building they pass – the precise task is not important and should be chosen to suit the features of the environment in which the task is performed. The purpose of the exercise is to practice switching attention in response to a cue. The therapist can accompany the client the first time to show how the exercise is to be done until the client understands and can conduct their own practice.

Example:

The client chose to walk in leafy suburb, chose the cue to switch attention as every time she encountered a grey roof on a house (most were red), and switch attention from her train of thought, to counting as many leaves as she could as she walked past. She would start walking counting the leaves on trees as she walked past them. When she passed a grey roof she would stop counting leaves and listen to her train of thought until she encountered the next grey roof and so on.

7.5.6 Acceptance Exercises

Use: to develop distress tolerance / acceptance of unwanted emotions, thoughts, behavioural impulses and physical sensations without acting compulsively in response. These exercises need to be rehearsed regularly outside of episodes of craving in order for them to be effectively used as responses to cravings.

Being still (Alterman et al., 2004)

The purpose of this exercise is to give the client experience in attending to physical sensations and behavioural impulses without acting on them, using benign (psychologically insignificant) stimuli. The exercise is designed to break the habit of compulsively responding to urges. During this exercise, the therapist can ask the client to consider whether they notice any discomfort or itchiness or any urges to move *and* asks the client not to act on them.

Instructions:

Close your eyes...Picture yourself in this room...

Pay attention to your breathing for a minute ...

Pay attention to the muscles in your feet ...

Notice any urges you have to move any of the muscles in your feet, but do not act on them...

Now allow your attention to travel up your body to the muscles in your calves...

Notice whether there are any sensations of discomfort. Any itchiness, restlessness, any urge to move... but do not move.

Repeat for muscles in your thighs, buttocks, stomach, chest, shoulders, upper arms, lower arms, hands, lower back, upper back, neck, jaw, cheeks, eyes, forehead. (follow 3 breaths all the way through from your nose down to your stomach, and out again to finish)

Physicalising

The purpose of this exercise is to give clients a method of undergoing exposure to uncomfortable internal experiences that sustains their attention without their mind wandering off. The client chooses a disturbing experience (which may or may not be a craving). It might be a thought, an image, a physical sensation or an emotion. The therapist guides the client to locate their felt sense of their emotional response to this disturbing experience in their body (physiological responses). This exercise is also covered in the ACT manual (Hayes, Strosahl, and Wilson, 1999, p.170-171).

This is an acceptance exercise so it is not presented with a habituation rationale. It is not necessary that emotional-physical responses change or get less powerful, so be careful not to convey the expectation that they should. However, responses often do get less intense following either physicalising the initial experience, or physicalising subsequent reactions to the physicalised first experience.

Instructions:

Induce relaxed state, eyes closed, observing breath

'When you're ready, bring the disturbing experience we discussed before to mind, and watch how your body reacts to this. Where in your body do you experience this? (Without opening your eyes or taking your mind's eye off your reactions, tell me where you are experiencing this in your body). Obtain client's response. If more than one sensation is reported, ask which seems more intense and focus on that one.

'Physicalise' the sensation using a variety of parameters.

Example:

'If this had a size, how big would it be? If this [experience] had a shape, what shape would it be?...what colour?...would it be opaque or could you see through it?...what are the edges to this shape like?...Does it move or stay still?...If it had a speed, how fast would it go? ...How heavy is it? What is its texture like – rough? Smooth?

Set it [experience] out about a metre or two in front of you...if it objects to being put outside, just let it know that you will soon be taking it back...

As you observe _____ (refer to object as description just generated), do you notice any reactions in your body to this?

If there is a physical reaction to the first physicalised experience, physicalise this secondary reaction, and again set this out in front. Continue to physicalise reactions to the collection of previously physicalised experiences until the client reports no further sensations.

Once all reactions are physicalised, ask the client if they are willing to take the experiences back. Start with the last response physicalised and ask the client, *'Are you willing to take this back, to carry it with you? Can you make space for it?'* If the client is willing: *'Reach out and take this (describe object) and bring it to your chest and let it dissolve into you, and contain it, allowing it to dwell within you.'* Repeat for other physicalised responses working back from most recent to first objects.

If the client is unwilling: Grade the task of taking the object back – *for example*, *'would you be willing to move toward it without touching it? To reach out your hand toward it without touching it? Touch it fleetingly? Hold it in your hand?'* The client can also be asked, *'Must this object be your enemy? Is this something you must struggle with? Can you have compassion for this object – it is a child of your experience after all? Is there room inside you to feel that with compassion and kindness toward yourself and your experience?'* Usually, most clients will be willing. If the client is not, do not attempt to persuade them to take back their experiences. Bring the client back into the room and discuss the barriers to acceptance and the cost of non-acceptance. Leave the door open to future attempts to accept their experience.

Focus on 3 breaths to finish.

7.6 Teaching Coping Strategies – Summary

It is not intended that clients are taught every strategy listed in this chapter! Strategies are selected on the basis of their suitability as alternative behavioural responses to cravings, within the context of factors maintaining the individual client's drug use. The most suitable strategies depend on what the client has and has not tried in the past, what has and has not worked, the nature of their craving experience, the contexts and cues that elicit cravings, the client's cognitive abilities, willingness to experience aversive emotions and their motivation to end compulsive drug use. The box below outlines the sequence to follow.

Sequence:

- 1) *Define idiosyncratic experience of cravings (see Chapter 4: Functional Analysis)*
- 2) *Ask client to list strategies he/she has used in the past to cope with cravings*

For each, ask how well that strategy worked; note whether its effectiveness depended on the context or intensity of the craving

Check whether previously employed strategies targeted all or only some of the components of the craving identified (for example, was there a strategy for reducing physiological arousal? What about appetitive imagery?)

- 3) *Offer the client a brief description of the strategies from this chapter you think would be most helpful and ask him/her which he/she thinks would work best. Ask which they would like to try in-session.*
- 4) *Work with the client to rehearse strategies that can target each of the components of his/her craving*
- 5) *Rather than 'bamboozle' a client with multiple strategies, concentrate on one or two, practice them during the session, and review their effectiveness in the following session.*

Chapter 8: Behavioural Activation

Behavioural Activation is a simple but highly effective treatment for depression derived from a behavioural analysis of depression. Ferster (1973) posited that depression results from: (1) a decrease in behaviour naturally maintained through positive reinforcement and (2) an increase in behaviour which previously helped the person escape and avoid aversive experiences. Martell, Addis and Jacobson (2001) compiled these ideas into a cyclical model, a simplified version of which is depicted in Figure 8.1. In this model, depression is represented by the dotted circle which encompasses the behavioural changes and the physiological symptoms they give rise to. These behavioural and physiological components have mutual relationships such that an increase in one tends to increase the other in an escalating cycle. Martell and colleagues hypothesise that one or more negative life events disrupt the individual's routines so that positively reinforced activities are temporarily halted (for example, a lost job, relationship or physical capability). If the individual fails to re-establish patterns of positively reinforced activity, or copes with the loss by persistently avoiding activities that feel effortful (such as shopping, cooking, talking to others), the depressogenic cycle is established. Once established, depression increases the likelihood of further negative life events, for example, the loss of the phone or accommodation that may result from the person avoiding opening mail and paying overdue bills, which expands the cycle⁵.

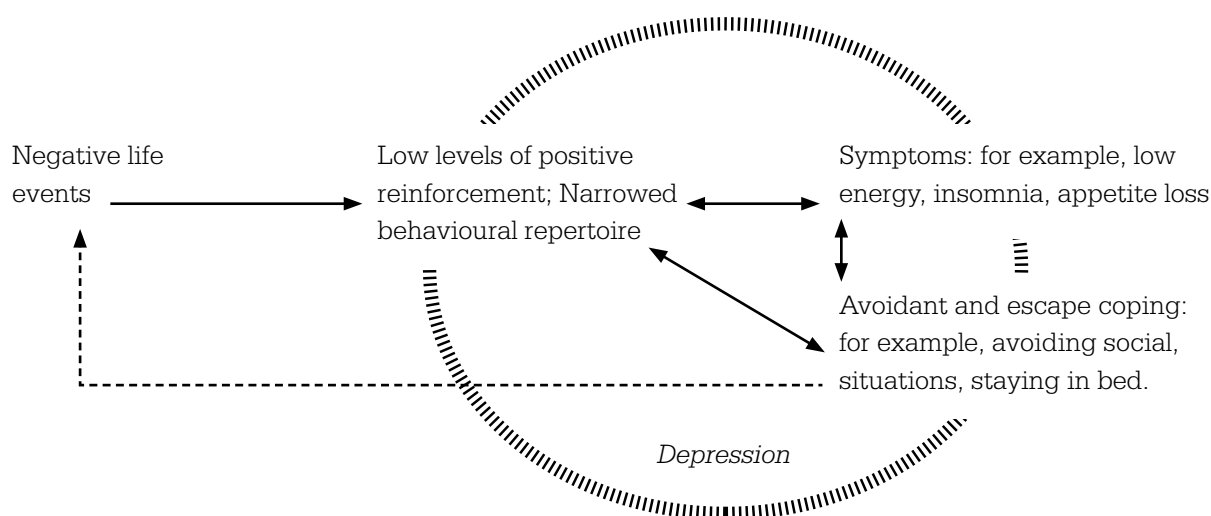


Figure 8.1: Behavioural analytic model of depression

This conceptualisation suggests that treatment should focus the client on: (1) reengaging in activities with a high likelihood of providing natural positive reinforcement; and (2) decreasing behaviours that serve only to attenuate short-term unwanted emotions.

⁵ The reader will notice the synergy with the Acceptance and Commitment Therapy framework outlined earlier.

8.1 The Role of Behaviour Activation in Psychotherapy for Methamphetamine Dependence

The approach is relevant in treating methamphetamine dependence for several reasons:

- (1) Activities compete for the person's attention. The more mentally occupied the person is the less likely they will be to experience thoughts of using methamphetamine.
- (2) Activities may be scheduled that limit exposure to external cues that elicit cravings, reducing the likelihood of use.
- (3) The more reinforcing activities in the person's repertoire, the less important methamphetamine use becomes as a source of reinforcement.
- (4) Engaging in reinforcing activities has an antidepressant effect that can help combat internal cues to use and treat comorbid depression (both concurrent with ongoing use and after cessation has been achieved).
- (5) It is very hard to pursue the goal of 'not using drugs'. It is easier for people to achieve goals which require an action to be taken, rather than an action to be withheld. Scheduling activities to be undertaken provides a clearer way for people to enact their 'recovery'. Besides which, clients' quality of life will not be improved merely by resisting drugs, rather by their level of engagement with natural sources of positive reinforcement.

8.2 Behavioural Activation Treatment Procedures

Behavioural activation treatment consists of four main tasks:

- Introducing the model.
- Monitoring the relationship between activity and mood.
- Scheduling positively reinforcing activities.
- Teaching clients to identify avoidance patterns and substitute active coping.

8.2.1 Introducing the Model

The therapist should familiarise him/herself with the model in Figure 8.1 if presenting it as a treatment for comorbid depression or with the model in Figure 8.2 below if presenting behavioural activation as a treatment for reducing methamphetamine use.

- 1) Elicit examples of the client's experience in each component of the model.

Depressed client

Examples:

T: 'How do you experience depression?' (elicit symptoms)

C: 'It's just this awful feeling. I can't stand it'

T: 'How do you feel it? Where in your body do you feel it?'

C: 'In here (points to chest) ...and in my head'

T: 'What's that feeling in your chest..like a heaviness?'

C: 'Yeah'

T: *'Like you're being weighed down'*

C: *'Yeah'*

T: *'Like moving is more effortful. Don't have the energy you want to get things done'*

C: *'Yeah. I'm always tired'*

:

T: *'What are some of the things you used to do when life was going well that you're not doing these days?' (elicit former positively reinforced activities)*

C: *'I used to play a lot of sport. I used to play football, cricket, and go to the gym most days'*

T: *'Sounds like you used to really enjoy physical exercise. What else?'*

C: *'I used to do normal things like go out to movies, and hang out with friends'*

:

T: *'What things are you doing more of now than you used to?' (elicit current negatively reinforcing activities)*

C: *'Sleeping. I used to get up at 6. Now I don't get up until after 12 most days'*

T: *'Before you were depressed you were an early riser...you got into the day'*

C: *'Yeah, now I don't want to face it. I wish I could just stay asleep'*

T: *'Wishing – is that something else you've done more of since being depressed?' (checking whether rumination might be an avoidant coping strategy)*

C: *'what do you mean?'*

T: *'Do you find yourself spending more time 'off in your head', fantasizing about things being different?'*

C: *'Yeah..I do that a lot'*

T: *'More than you used to?'*

C: *'Definitely'*

:

T: *'When did all this start?' (eliciting negative life events)*

C: *'Just after the band I was in broke up. At first I thought it would be a good thing...we were having 'creative differences' but I just couldn't come up with any ideas.'*

Client still using methamphetamine

Examples:

T: *'What are some of the things you used to do back when you weren't using meth every weekend that you don't do now?' (elicit formerly positively reinforcing activities)*

:

T: *'In what ways do you spend your time differently now than you used to?' (elicit current negatively reinforcing activities)*

C: *'I don't do anything anymore. I just get on, talk shit for the night then spend the rest of the*

week at home, feeling anxious.'

T: 'So you're spending a lot more time at home these days than you used to'

C: 'Yeah. I guess I'm smoking more..that's one thing'

T: 'Smoking more cigarettes. Cannabis?'

C: 'Yeah both. Whenever I'm awake, I'm choofing'

T: 'What happens when the meth wears off now?' (elicit withdrawal)

C: 'I just feel totally depressed. And anxious.'

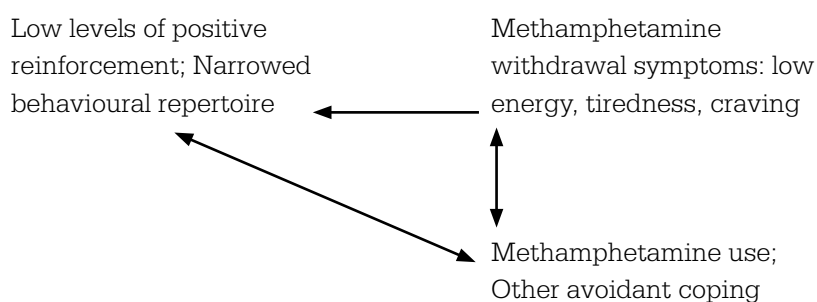


Figure 8.2: Model of relationship between activity and methamphetamine use

2) Write these items on a white board and/or piece of paper grouped according to whether they are formerly positively reinforcing activities, current negatively reinforcing activities or symptoms of methamphetamine withdrawal or depression.

Examples:

No sport, gym
Not going out

Heaviness in chest
Low energy
Indecisiveness

Over-sleeping / staying in bed
Wishing dead / unconscious / felt better

Examples:

Work
Time with friends

Depressed
Anxious
Irritable

Use methamphetamine
Smoke cannabis, cigarettes
Stay home / avoid people

- 3) Guide the client to discover the relationships between these components. Complete the arrows between components as the client explains.

Example:

T: *'Have you noticed any connection between these items (points to lost positively reinforcing activities) and these items (points to symptoms of depression)?'*

C: *'Mmmm... what do you mean?'*

T: *'Have you noticed any change in the symptoms of depression since you've been playing less sport?'*

C: *'Oh yeah. Yeah I never got any of those when I was playing sport'*

T: *'And what about as you've been going out less'*

C: *'Yeah I don't go out when I feel like this'*

T: *'So you go out less when you feel depressed, and what happens to your depression when you stay home for longer and longer periods without going out?'*

C: *'Oh yeah it gets worse'*

T: *'This is pretty common across most people... there's a relationship between the amount of enjoyable, meaningful activities in your life and how depressed you feel. The more enjoyment and meaning from the activities in your life, the less depressed you feel. The less depressed you feel, the more you do. It's a cycle.'*

Example:

T: *'So when you stay home, what effect does that have on your meth use?'*

C: *'It doesn't affect it at all'*

T: *'You feel like you use just as much meth now when you're sitting around the house as you did when you were working and going out?'*

C: *'Oh no... I didn't use it at work. Well not to start with, by the end I did.'*

T: *'You stopped going in to work as your meth use got heavier?'*

C: *'Yeah... I just started missing days. I had to give it away'*

T: *'So notice how using meth dictates how you spend the rest of your time. And once you stopped work, did your meth use go down?'*

C: *'No!'*

T: *'Stayed the same?'*

C: *'No, I used more'*

T: *'So could there be a connection between having less to do with your time and your meth use?'*

C: *'Yeah – I reckon a lot of its just boredom.'*

T: *'Right. So the less you have to do, the more likely you are to use meth?'*

C: *'Yeah. I need to find something else to do with my time'*

Examples:**Less
rewarding
life**No sport, gym
Not going outHeaviness in chest
Low energy
Indecisiveness**Depression**Over-sleeping / staying in bed
Wishing dead / unconscious / felt better**Avoidance****Examples:****Less
rewarding
life**Work
Time with friendsDepressed
Anxious
Irritable**Meth withdrawal**Use meth
Smoke THC, cigarettes
Stay home / avoid people**Avoidance**

- 4) Give the client the case conceptualisation handouts (see Handout 3) to transcribe material from the session and to add to during the week.

8.2.2 Monitoring the Relationship between Activity and Mood

Ideally⁶, clients should keep activity logs in which they regularly record what they did together with ratings of their mood type and intensity at the time (see Handout 6). The purpose is for clients to review these logs and notice the general relationship between how they spent their time and the effect on their mood. The logs should indicate which activities have antidepressant qualities (associated with less intense negative moods or positive moods), and which are naturally reinforcing (that is, those that are most frequently engaged in). The therapist should help the client distinguish between activities that provide negative reinforcement (relief from aversive emotional states) and those that provide positive reinforcement (enjoyment or meaning), and encourage clients to schedule more positively reinforcing activities.

- 1) Explain rationale: Discover relationship between what the client does and his/her mood.

Example:

T: 'The purpose of having you record your activities is to find out what effect the things you do have on your mood. Are you willing to do this?'

C: 'I don't know. I'm pretty sure everything will just be the same'

T: 'You feel like your mood doesn't go up and down that much. I imagine if you thought that, you wouldn't see the point in keeping a record. Some people find that although they think their mood is constant, when they look closely there are subtle variations. They may not seem important, but actually we can often learn a lot about which activities to do more of and which to do less of by paying attention to these subtle variations. Would you be willing to just test out whether there is any variation in your mood?'

⁶ If the client appears ambivalent about long-term treatment and the therapist is seeking brief interventions, this step can be omitted.

C: 'I guess.'

T: 'You still seem uncertain. I personally wouldn't want you to do anything that you couldn't see the benefit of. On the other hand, your mood at the moment is likely to lead you to be a bit pessimistic about things. Could you treat it as an experiment – if it turns out not to be helpful, we won't do it again. The worst that happens is you waste a couple of weeks keeping a diary.'

C: 'Alright, I'll give it a go'

T: 'I appreciate that. Let's just see what comes of it.'

- 3) Retrospectively fill in the hours on the activity and mood chart for that day to illustrate how to complete them.

Example:

T: 'So what time did you get up today?'

C: 'About 11 o'clock – because I knew I had to come here'

T: 'Okay, we'll mark the hours before as 'asleep'. What did you do between 11 and 12?'

C: 'Had breakfast, had a smoke, and got ready to come here'

T: 'How would you describe your mood around that time?'

C: 'How do you mean? I didn't really feel anything much'

T: 'Well you could just put neutral or use an emotion word like 'sad', 'angry', 'anxious', or 'happy'

C: 'Actually I was a bit anxious because I had to catch the bus to get here'

T: 'So if you were filling this chart you'd write 'anxious'. On a scale of 1-10 how severe was your anxiety, if 10 was the most intense anxiety of your life and 0 was no anxiety?'

C: 'Probably about a 2'

- 4) Supply enough copies of the activity and mood monitoring chart to last until the next appointment.
- 5) At the next appointment review the chart. Look for:
- Variability in mood type and intensity.
 - Activities associated with improved mood (activities that precede or coincide with mood elevations).
 - Avoidance strategies (that is, behaviours that repeatedly follow negative moods)

Draw the client's attention to these features and guide them to understand the relationships between mood and activity consistent with the model. Positively reinforcing activities can be listed for scheduling in subsequent weeks. Avoidance strategies are listed as behaviours to work on decreasing.

8.2.3 Scheduling Positively Reinforcing Activities

This is the most important step. It is important for the client to at least choose one activity to program for the coming week. Until further data is gathered through mood-and-activity monitoring charts, there has to be some other basis for selecting which activities to schedule. There are several possible sources:

- a) Activities from the client's past that have been positively reinforcing (were part of established routines, were enjoyable or meaningful).
- b) Current chores or tasks that are necessary for the client to complete to avoid further problems.
- c) Activities the client believes have the potential to be enjoyable.
- d) Activities consistent with the client's values and goals (see Chapter 6).
- e) Activities that may fulfil some of the functions that methamphetamine has served (for example, *aerobic exercise to increase alertness*).
- f) Standard 'ideas' lists, for clients who struggle to come up with tasks.

Generate a complete list of as many activities the client can come up with. Encourage the client to keep that list and add to it across sessions (Handout 6 may be useful). Schedule one or more activities for the coming week.

The activity chosen should be achievable and meaningful to the client. Often the most meaningful activities are the most complex or difficult, in which case it is advisable to work with the client to break the task into smaller steps, and schedule one or more of these. The client should be encouraged to attempt as many as they wish, but not to overshoot. It may be possible to have the best of both worlds by having the client schedule one or two tasks which they commit to doing and then have a number of 'optional' tasks the client may consider attempting. Ideally, the client will commit to at least one activity per day.

Most behavioural activation protocols encourage using some form of diary or record of when to perform the behaviour. There is some evidence that specifying a time and place to perform an action increases the likelihood of completing the action (Gollwitzer & Brandstatter, 1997). With methamphetamine users, physical cues or reminders may be more important than a diary. Most mobile phones have organisers with alarms that the individual can set. Including another person may help clients remember to follow through. Something as simple as a paper sign displayed in a car or a part of the house can also be an effective cue.

As the client continues to monitor their activity and mood charts, it may become necessary to revise and refine the list of activities for scheduling. It is the activity chart data that provide more accurate feedback about the positive reinforcement value of various activities. Activities that are consistently or increasingly performed are most likely to produce sustainable routines that will support long-term recovery.

Scheduled activities should be:

- Specific
- Achievable
- Written in diary or cued

8.2.4 Teaching Clients to Identify Avoidance Patterns and Substitute Active Coping

There is a specific sequence of events that clients are taught to look out for to better understand their behavioural response to negative emotions. Martell and colleagues (2001) use the TRAP acronym to help clients remember the three components of the sequence:

Trigger

Response

Avoidance

Pattern

Example:

Trigger = *An overdue account notice arrives in the mail*

Response = *Hopelessness, anxiety*

Avoidance

Pattern = *Play on the computer and ruminate about whether to use methamphetamine*

These 'TRAPS' can be obtained from mood-and-activity monitoring diaries or through eliciting questions as follows:

Example:

T: *'You mentioned you felt really low (**response**) Saturday night. Can you think back to just before you noticed your mood was low, to the point where it wasn't so low? What happened?'*

C: *'I was expecting Darren to come around then he called to say he wasn't coming (**trigger**). I was really pissed off at first, then I just got really down.'*

T: *'And what did you do next?'*

C: *'I didn't have any money so I couldn't get on, so I just had some valiums and I had some vodka and tried to get out of it basically' (**avoidance pattern**)'*

T: *'So this is a good example of a TRAP. The trigger was Darren telling you he won't come around, your response was?'*

C: *'Getting upset'*

T: *'Yes. And do you remember what the last two letters stand for?'*

C: *'Action Plan?'*

T: *'I think you might be thinking of TRAC – they sound a lot alike. No, Avoidance Pattern. What was your avoidance pattern in this case?'*

C: *'The alcohol'*

T: *'Yes...and the valium'*

Clients are encouraged to substitute active coping in place of avoidance. The TRAP acronym is changed to:

Trigger

Response

Active

Coping

The nature of the Active Coping response may vary but could include ideas from the coping with cravings chapter, solutions to the problem posed by the trigger or acceptance of the emotions without trying to dull them or escape them. In the example above, the client could have called up some other friends to talk or visit for company, taken a bath and watched a video, or simply allowed him/herself to be sad and sat with his/her loneliness until it attenuated.

8.3 Breaking Tasks Down

If a client is having difficulty performing a scheduled activity, chances are it is too difficult. Try breaking the task into smaller components. There is no limit to how small the steps could be as this example illustrates.

Example:

T: 'You've set yourself the goal of getting up at 8am. You are waking to the alarm but turning the clock off and staying in bed. Sounds like 'getting up' is too much so let's break it down. The first thing you might need to do is when you wake up, even before you open your eyes properly, mentally intend to stay awake. Just concentrate on not slipping into slumber again. Then, when you've got that far, work on opening your eyes. If it's too hard to open them and keep them open, just work on opening them for a split second then closing them again. The next step might be to turn your head to the side of the bed you get out. The next step might be to move an arm out of the covers. When you achieve that, you might lift the covers off...and so on. Just focus on each little micro-step. If the next thing you have in mind seems too hard, lower the bar'

C: 'I feel so stupid...making this so complicated...I should just be able to do it'

T: 'Have you tried telling yourself off like this before?'

C: (half-smiles)

T: 'How did that work in getting you out of bed? Look you start where you are. Right now you're having trouble getting out of bed. There's no good starting from somewhere else. There's no good starting from where you 'should' be. Let's start where you are. Why should getting out of bed be less difficult than any other activity you might try?'

Chapter 9: Comorbid Psychological Disorders

The presence of comorbid psychological disorders makes treatment of both drug dependence and the psychological disorder more difficult. Nevertheless, individuals with a drug dependence disorder are six times more likely to experience a comorbid psychological condition than the general population (Merikangas et al., 1998), so this must be accommodated within the treatment plan.

What literature exists on comorbid treatment clearly indicates that it is important to directly treat drug misuse/dependence from the outset. Problematic drug or alcohol use will complicate the treatment of any comorbid psychological disorder and may render otherwise efficacious treatment for some conditions, particularly anxiety disorders, impotent. Furthermore, research into comorbid alcohol dependence and depression indicates successful treatment of the alcohol disorder can lead to the resolution of the depression without requiring that treatment target depression (Schuckit et al., 1997). In contrast, there has been no study the author is aware of that has demonstrated the resolution of drug dependence without specific treatment, following successful treatment of a comorbid psychological disorder. When treating clients who continue to use methamphetamine, the cessation and successful withdrawal from methamphetamine must remain on the agenda of every therapy session until it is achieved.

The primary complicating factor is that clients with comorbid conditions invariably experience different levels of readiness to change with respect to each disorder. Typically, clients are more concerned and far more ready to change their comorbid psychological disorder than their methamphetamine use. A reasonable compromise is to elicit the client's agreement to pursue a dual agenda, whereby half the session is devoted to the discussion and pursuit of reducing methamphetamine use, and the second half may attend to comorbid psychological problems.

Even maintaining a dual agenda, the therapist should remain attentive for opportunities to highlight how the use of methamphetamine exacerbates or obstructs the resolution of the comorbid psychological condition. The relationship between methamphetamine use and the psychological disorder should be explored within functional analyses. Wherever the psychological disorder acts as an antecedent of methamphetamine use, the consequences of the methamphetamine use should be followed out in time until its post-immediate impact on the psychological condition can be appreciated.

9.1 Depression

Some form of depression (even sub-clinical depression) is perhaps the most likely concomitant of methamphetamine use. It is well documented that depressive symptoms accompany patterns of dependent use and there is further evidence that depression may persist for several months following methamphetamine withdrawal. The client should be advised that this is a known problem and that the fastest resolution of depressed symptoms in an enduring way is to maintain abstinence. Information on the effects of methamphetamine on neurotransmitters involved in depression and the need to give them time to recover normal functioning may provide a credible rationale for the client to maintain abstinence.

There is no evidence that treating depressed symptoms concurrently with methamphetamine use is an ineffective or counterproductive exercise. In fact, one of the most effective treatments for depression has already been presented in the context of methamphetamine dependence treatment:

behavioural activation. In clients who exhibit both methamphetamine dependence and depression it is highly advisable to devote the second half of the dual agenda to introducing behavioural activation for depression as early as possible.

There is now evidence that cognitive restructuring techniques may not be necessary in treatment of depression if behavioural activation treatment is provided (Dimidjian et al., 2006). However, cognitive behavioural therapy has the largest evidence base of any psychological therapy. If it will build rapport or enhance retention in treatment to address depression symptoms with a more traditional cognitive behavioural therapy approach, this is a perfectly legitimate basis for incorporating these techniques. The fundamentals of such an approach are introduced in Chapter 7. The behavioural activation treatment protocol should still begin first. Then, once the client is in the habit of scheduling an increasingly greater number and range of activities, clients can be taught to identify problematic automatic thoughts, test their validity and generate more accurate and adaptive cognitive responses.

Finally, there are two studies that demonstrate ACT to treat depression as effectively as cognitive therapy (Zettle and Hayes, 1986; Zettle and Rains, 1989) and therefore the ACT techniques introduced in the Responding to Cravings chapter (Chapter 7) can also be integrated into treatment if desired. The high synergy between ACT and the behavioural activation model may in fact make the use of ACT techniques preferable over cognitive therapy techniques in many cases, reducing the number of conceptualisations of the client's problems. Once again, the behavioural activation treatment protocol should be introduced first. Experiential avoidance can then be targeted through ACT psychoeducation and experiential exercises and persistent problematic cognitions can be treated with cognitive defusion exercises. As therapy proceeds, values clarification can be introduced and direct subsequent activity scheduling exercises.

9.2 Anxiety

Anxiety symptoms, including panic attacks, are also extremely common during methamphetamine dependence (Hall et al., 1996; Vincent et al., 1999). This is hardly surprising as the direct physiological effects of methamphetamine mimic the sympathetic nervous system response characteristic of fear. At sufficiently high doses, anxiety is a predictable direct effect of methamphetamine. The therapist can be more confident that a true Anxiety Disorder exists if the client can report evidence of a specific anxiety disorder (Panic Disorder with or without Agoraphobia, Social Phobia, Specific Phobia, Obsessive Compulsive Disorder, Post-Traumatic Stress Disorder, or Generalised Anxiety Disorder) prior to methamphetamine use or during a three-month period of abstinence from methamphetamine. If there is no such evidence, the client should be advised that it is possible any anxiety symptoms will resolve once they are successfully withdrawn from methamphetamine.

It should be made clear to clients that anxiety treatment is very unlikely to be effective until the client successfully withdraws from methamphetamine. Once again, if it will build rapport or maintain retention in treatment to do some preliminary work toward treating the anxiety disorder as part of a dual agenda, the client can be introduced into psychoeducation about the disorder and begin building skills that may be useful once treatment focus can concentrate on the Anxiety Disorder. Creative hopelessness (see Chapter 7) and ACT psychoeducation (see Chapter 5) about the long-term unworkability of avoidance and emotional control can begin even before the client has ceased methamphetamine use. It is primarily exposure exercises that are likely to be compromised by ongoing methamphetamine use as intoxication or withdrawal effects are likely to interfere with the normal habituation process. Also behavioural experiments intended to disconfirm beliefs about the consequences of anxiety that are normally effective in reducing these unhelpful beliefs might be sabotaged by unpredictable physiological responses from methamphetamine intoxication or withdrawal. While the exercises are

likely to be more difficult than if the client was detoxified from methamphetamine, attention exercises, acceptance exercises and defusion exercises can be introduced and demonstrated and rehearsed with benign content until the client ceases use.

9.3 Psychotic Disorders

Clients with active psychotic symptoms should be referred to a medical specialist. If the individual has a primary psychotic disorder they will require medication, and methamphetamine will interfere with the effectiveness of the medication. The therapist should assist the client to withdraw from methamphetamine in whatever practical manner they can (for example, inpatient detoxification, medication-assisted outpatient withdrawal, assist to locate stable accommodation). A dual agenda is not advised unless absolutely necessary to retain in treatment. Preferably the sessions should be kept simple with a clear focus, which should be abstinence if the individual has not yet achieved this. Strategies from Chapter 7 can be taught.

If the individual is experiencing transient methamphetamine-induced psychotic symptoms, assist the client to withdraw and work primarily to retain them in treatment until the symptoms remit. Thereafter treatment should proceed as normal, but continue to review the client's mental state as a regular agenda item.

9.4 Summary

- Maintain reducing/ceasing methamphetamine use as primary therapeutic focus.
- If necessary to retain in treatment, maintain 'dual agenda' (first half of session addresses methamphetamine use, second half the comorbid condition).
- Comorbid depression should be addressed through behavioural activation treatment and that can commence immediately.
- Comorbid anxiety should be assessed for the likelihood of a primary Anxiety Disorder. Specific treatments should be delayed until withdrawn from methamphetamine, but general psychoeducation and skill building with benign content can commence to retain in treatment.
- Clients with active psychotic symptoms should be referred for medical assessment.
- Once the client has successfully withdrawn from methamphetamine, treatment focus can concentrate on comorbid conditions as these are likely to be the greatest threats to relapse.

Chapter 10: Relapse Prevention Skills

Although the topics in this chapter are common components of cognitive behavioural therapy protocols for substance use problems, most of these exercises were designed for alcoholics with very poor social skills who had ceased drinking. In our psychotherapy for methamphetamine misuse study, the majority of clients who remained in treatment were yet to achieve abstinence and those that did, had comorbid psychological disorders which were a greater threat to relapse than the factors covered in this chapter. Nevertheless, the topics below may be helpful as the final phase of treatment for clients who have achieved their other therapeutic goals and are committed to doing whatever they can to prevent reoccurrences.

10.1 Refusal Skills Training

Ascertain whether the client finds it difficult to resist offers of methamphetamine. Discuss whether the difficulty is caused by the craving to use or anxiety about causing offence by refusing. Only in the latter case is this exercise likely to be worthwhile. In these cases, the procedure is straightforward:

- 1) Discuss rationale for learning speed refusal skills: Tailor to the individual based on functional analysis
- 2) Discuss non-verbal measures: confident posture; direct eye contact
- 3) Discuss verbal measures: see box below
- 4) Rehearse speed refusal: role play, give feedback
- 5) Give client speed refusal skills reminder sheet (see Handout 7)

Verbal speed refusal skills (cf. Baker et al., 2003)

- 1) Use a firm, clear, unhesitating tone of voice
- 2) 'NO' should be the first word out of your mouth.
- 3) Suggest an alternative (for example, something else to do/eat/drink)
- 4) Ask the person not to ask you anymore
- 5) Change the subject
- 6) Don't use excuses or vague answers which imply that at a later date you may accept an offer to use.

10.2 Abstinence Violation Effect

The Abstinence Violation Effect (AVE) refers to the psychological state that can follow when a client has made a commitment to abstain from drugs or alcohol, and then lapsed. The individual then reasons that since they have spoiled their clean slate, they may as well keep using or drinking. It is a form of 'black-and-white' thinking, where the individual equates the loss of control in a slip with that of having no capability to limit their consumption. The experience may be one of hopelessness or if the abstinence had been effortful, relief.

In the context of relapse prevention, the client is warned that this is commonly encountered by people trying to give up or reduce their use of a drug. The therapist and client can examine the validity of beliefs likely to contribute to this situation (for example, 'one slip is as bad as if I'd never stopped') using the cognitive therapy techniques in the coping with cravings chapter.

ACT: Responding to Relapse

When a client responds to a relapse with 'giving up', wavering commitment, or despondency, the ACT therapist asks:

'Which of your values changed during this relapse?'

Get the client to answer this very specifically. Usually no values have changed. The script from the ACT manual (Hayes et al., 1999, p.259) with local references substituted suggests how to address this issue:

'Unless your values have changed – 'what now?' is the same as 'what before?' If you were to move right now, right at this moment here in therapy, what would you do? If you are committed to heading west, and you find that you have taken a wrong turn and have backtracked 10 kilometres, is there anything that prevents you from turning the car around and heading west? If you were in a car headed west toward Perth, and your mind was telling you that the car will break down, the road will be closed or that you will fall asleep at the wheel, could you continue to drive west? If west is where you want to go, get in the car and start driving'.

10.3 Apparently Irrelevant Decisions

Apparently irrelevant decisions are choices that ostensibly have nothing to do with obtaining or using drugs but put the person at increased risk of doing so. For example, Dan may decide to go a work party where alcohol is served assuming there is no chance of becoming intoxicated. Once at the party, Dan may decide to go and talk to those who seem to have common interests. At some point in the conversation, there is the opportunity for Dan to make a funny joke containing a drug reference. At the end of the party, the people he has been talking to invite Dan to come back to their place for a drink. Wanting to build the relationships with his co-workers, he goes along. Dan is offered several more drinks, which he accepts. Later, the housemate of his co-worker offers him some methamphetamine. It is possible that Dan had fleeting thoughts (for example, 'I wonder if he's ever used?') while making his acquaintance. It is also possible that Dan was truly oblivious to the increasing likelihood of the impending opportunity to use.

Clients who have successfully ceased methamphetamine use should be educated about the potential for apparently irrelevant decisions to contribute to lapses and relapses.

- (1) Introduce the term *Apparently Irrelevant Decisions*.
- (2) Provide an illustration (like Dan's story above).
- (3) Elicit any examples from the client's own experience that fit this category.
- (4) Guide the client to identify automatic thoughts and examine their validity: contrast the client's level of conviction in those beliefs now compared to at the time (see Chapter 5, cognitive therapy section).
- (5) Anticipate future activities where apparently irrelevant decisions could be made. Brainstorm the range of possible decisions that could be made and appraise their relative risk of leading to methamphetamine use.

10.4 Testing Control

After a period of abstinence following dependent patterns of drug use it is common for individuals to wonder whether they are 'still dependent' or can return to using drugs occasionally as they did when they started using.

- (1) Introduce the idea of testing control.
- (2) Elicit any experiences the client may have had of having this thought and check whether they acted on it, and if so, what happened. If they had the thought but did not act on it, check out what stopped them.
- (3) Check the client's level of curiosity to test his/her control now.
- (4) Ask whether the client can anticipate any factors that might increase his/her curiosity. If so, use the cognitive therapy techniques outlined in coping with cravings chapter.

10.5 Testing Loss of Tolerance

Another common threat of relapse is posed by the individual's curiosity to test whether they have lost tolerance. This may be particularly tempting for those individuals with memories of especially enjoyable early experiences with methamphetamine, followed by a loss of pleasure with continued use as tolerance developed. Some clients will seek a period of abstinence precisely to lose tolerance in order that they may later return to using in the hope of having some more experiences similar to those they had when they started taking the drug.

10.6 Temptation to Use Again?

Sometimes clients will state that they are contemplating using drugs again after a period of abstinence. Motivational interviewing toward increased commitment to abstinence is usually a preferable first line strategy. If clients' reasoning for returning to drug use reveals misunderstandings or a limited perspective, then psychoeducation or cognitive therapy techniques can be employed to ensure the client's decision is soundly informed. If the client still appears to be more inclined to use than not, a useful question to pose is:

'Which of your values would be served by using?'

This question makes it clear that the dilemma is not between client and therapist but between the client's cravings and their long-term choices. Few clients will suggest that drug use serves any of their values.

Once the client concedes it is not their preference to use, but a lack of confidence in overcoming a craving, the therapist can prompt the client to select a strategy learnt in therapy to address the craving (or introduce a new technique).

At some point it will be helpful for client and therapist to share a common understanding of how this re-contemplation of using occurred. A functional analysis should be conducted, but is best left until after the decision to use is resolved in favour of abstinence, and cravings managed.

Chapter 11: Putting it all Together

This chapter is intended to guide the therapist in integrating the material presented in the previous chapters in the most efficient and effective manner for the unique circumstances of each client. All aspects of the protocol are intended to be delivered in the spirit of motivational interviewing and using its microskills as often as possible. Furthermore, assessment is considered to be an ongoing process of developing an increasingly refined conceptualisation of each individual client. The therapist should continually strive to understand what factors maintain methamphetamine use or pose threats to relapse and teach the client to do likewise. Whenever the therapist or client is stuck or confused, they should return to their case conceptualisation, perform functional analyses on recent events and check how recent events fit with the case conceptualisation. The case conceptualisation will either be consistent with the functional analyses of recent events in which case its validity and utility is reinforced, or it may need to be refined and updated. Either way, the case conceptualisation should direct the 'next step' in therapy.

11.1 Treatment Target Hierarchy

In behavioural analytic terms, there are multiple behaviours in psychotherapy which are of interest to the therapist. There are likely to be occasions where the effective pursuit of changing one behaviour may conflict with the effective pursuit of changing another behaviour of interest. Therefore, it can be useful to have a clear statement of the relative importance of the various target behaviours. The treatment hierarchies below (see Tables 11.1 and 11.2) are based on the hierarchy that guided decision-making in the cognitive behaviour therapy condition of our psychotherapy for methamphetamine misuse trial. The main difference is that motivation to remain in treatment has been included given the high rates of treatment attrition among methamphetamine use and the greater confidence that health providers can have in the welfare of methamphetamine users if they remain in treatment long enough that clear evidence of recovery can be documented. Table 11.2 depicts the approximate timing of addressing different treatment targets when addressing significant comorbid psychological disorders.

The hierarchies are not a specification of session-specific content. They are designed to govern across all sessions. The therapist works through these treatment targets as quickly as possible, which will vary enormously between clients. With a compliant client rapport may be easily established, the client may already have ceased using or made significant reductions in use and taken steps to limit availability of methamphetamine and exposure to cues, in which case therapy may begin with skill building for improving responses to cravings almost immediately. Other clients may be deeply ambivalent about whether to stop using drugs and attend therapy, in which case the therapeutic focus may need to remain with building a healthy therapeutic alliance and retaining the client in treatment across several sessions. The purpose of the hierarchy is to be clear that whatever level of the hierarchy you are working on, if a target higher in the hierarchy is ever threatened, you must leave the work you are doing to restore the higher target behaviour. For example, if in teaching craving acceptance skills the client begins to indicate ambivalence about remaining abstinent (a frequent reaction when clients find developing skills to remain abstinent difficult), the therapist should immediately return to motivational interviewing directed toward shoring up the client's commitment to abstinence.

Table 11.1: Client with no significant comorbid psychological disorders

1	Establish rapport
2	Enhance motivation to remain in treatment
3	Enhance motivation to reduce methamphetamine use
4	Enhance motivation to cease methamphetamine use
5	Activate strategies and routines to minimise exposure to cues that elicit cravings
6	Teach/strengthen skills that increase the client's ability to perform behaviour other than drug use in response to craving and high-risk situations
7	Anticipate future high-risk situations and develop a coping plan for responding
8	Relapse prevention (see Chapter 10 on Relapse Prevention Skills)

Table 11.2: Client with comorbid psychological disorders

1	Establish rapport	
2	Enhance motivation to change	
Dual agenda		
3	Enhance motivation to reduce methamphetamine use	Reduce depression through behavioural activation / Enhance client's understanding of their Anxiety Disorder through psychoeducation
4	Enhance motivation to cease methamphetamine use	If necessary introduce new techniques for alleviating depression / Introduce Anxiety Disorder-specific therapy exercises
5	Activate strategies and routines to minimise exposure to cues that elicit cravings	Relapse prevention of comorbid disorder
6	Teach / strengthen skills that increase the client's ability to perform behaviour other than drug use in response to craving and high-risk situations	
7	Anticipate future high-risk situations and develop a coping plan for responding	
8	Relapse prevention of methamphetamine use (see Chapter 10)	

11.2 Session Structure

Adhering to an artificial structure should never take precedence over providing the most effective response to the client's presentation at the time. However, for perhaps the majority of the time, the client will look to the therapist for guidance as to how to use session time. Some clients will, if allowed to lead, consume session time in prolonged, undirected discourse that does not allow them to develop new perspectives or learn new skills. Therefore, the therapist should attempt to structure the session, without being rigid or overly prescriptive. With the exception of the initial session which would predominantly consist of assessment, the following structure is a useful guide for subsequent sessions:

- (1) Set agenda (~2 minutes).
- (2) Review any major events since last appointment (0-5 minutes).
- (3) Review recent methamphetamine use and cravings (~2 minutes).
- (4) Review other drug use (~2 minutes).
- (5) Review homework exercise (if set, ~ 5 minutes).
- (6) Agenda items (~25 minutes).
- (7) Anticipate high risk situations for the week ahead (up to 5 minutes).
- (8) Set between-session assignments (~2 minutes)

11.2.1 Agenda-Setting

Both the client and therapist can add items to the agenda. The therapist should negotiate for at least an equivalent amount of time to be spent on his/her concerns/treatment plans for the client. The client and therapist then negotiate the priority of items and decide which will be covered, which may be covered if time permits and which should be deferred to another session, and agree roughly on how much time to devote to each. The reviews listed in the session structure should be considered 'standing items'.

11.2.2 Review Major Events since Last Appointment

This review is merely a cursory check to ensure the therapist is up-to-date with any important developments in the client's life circumstances. These include any losses, gains or changes in areas such as the client's accommodation, occupation, or relationships. In general these matters will not be dealt with in any detail unless the client asks for them to be placed on the agenda or they are involved in the functional analyses of occasions of methamphetamine use. If an acute significant change has occurred in these areas and the client is unable or unwilling to redirect their attention away from these events it may be necessary to discuss these matters in order to maintain the therapeutic alliance. Usually the quickest way the client will be willing to move on from these topics is if they feel they have been properly listened to and understood, so skilful reflective listening may often be sufficient, although assistance in problem solving with permission may also be appreciated.

11.2.3 Review Recent Methamphetamine Use and Cravings

At the beginning of the session, the review of recent use and/or cravings is best kept as a sketch: dates, quantities and maybe a brief description of context. Wherever a client has used or experienced a craving, it is important to add a functional analysis of these occasions to the session agenda.

11.2.4 Review Other Drug Use since Last Appointment

The exacerbation of other drug use on methamphetamine dependence is so severe and common it is worthwhile routinely checking for it. Its impact should be evident in functional analyses of methamphetamine use or cravings.

11.2.5 Agenda Items

The therapist should seek to perform functional analyses of any occasions of methamphetamine use or craving. The therapist should also seek to include one other item appropriate for the client's stage of progress through the treatment target hierarchy (for example, psychoeducation, short-term coping strategies, skill development for long-term coping). Where a 'dual agenda' is maintained, the agenda should include at least one item pertaining to the comorbid psychological condition (for example, psychoeducation, activity scheduling, cognitive therapy or ACT skills directed at that problem).

11.2.6 Anticipate High-Risk Situations for Coming Week and Plan for them

The client should be asked to think about the week ahead and to identify any likely high-risk situations (for example, unoccupied slots in schedule where will be prone to boredom, paydays, planned contact with friends who also use drugs). The therapist should elicit a plan for coping with the situation from the client. If this is difficult because of motivational or time constraints, the client can be encouraged to simply observe whether the occasion unfolds in a manner consistent with the case conceptualization developed to date.

11.2.7 Set Between-Session Assignments

The clients should be clear on the rationale for between-session assignments. The therapy session is only 1 out of 168 hours in the week, and he/she will only begin to make significant progress if more of those 167 hours can incorporate therapeutic activities. At a minimum, the client should be monitoring and keeping records of occasions of use and craving, and maintaining their comprehension of any psychoeducation, especially the case conceptualization of their problems.

11.3 Treatment Strategy Selection

The ultimate criterion for treatment strategy selection is: what works best for the individual. As mentioned throughout this manual, the functional analysis of methamphetamine use and cravings should direct treatment. However, this is an evolving process and some trial and error may be necessary in the development of the client's treatment and coping plan. Nevertheless, the following recommendations are based on theoretical predictions and should reduce the guesswork in formulating an effective treatment plan.

- 1) Attend to the client's motivation to abstain from methamphetamine and master therapeutic tasks at all times. Return to motivational interviewing and values clarification whenever the importance of abstinence appears to waver. Wavering motivation due to lost confidence may be enhanced by skill acquisition. Ensure therapy tasks are graded to a level the client can experience making progress.
- 2) Elicit actions the client can take to minimize exposure to external cues that elicit cravings and drug use. Make it clear to the client that this is not a sufficient intervention, but a preliminary measure to assist them in learning skills that will make a bigger difference in the long term.

- 3) Work with the client on activity scheduling and routine establishment to keep the client occupied to minimize the impact of internal cues (that is, thoughts, emotions, physical sensations, urges to act). Again, the client does not have to commit to maintaining these routines long term. Their function is to make the task of developing alternative responses to cues more manageable.
- 4) Help the client to develop 'emergency' responses to their cravings. These may be as simple as leaving the situation, or as skillful as one of the arousal reduction techniques. Again, make it clear to the client that these are not a sufficient intervention, but a means to make learning more powerful and enduring skills to cease and remain abstinent from methamphetamine possible.
- 5) Help the client master skills to most effectively reduce the impact of factors maintaining their methamphetamine use or cravings. The table below illustrates how functional analysis could inform skill selection. These are suggestions only. The therapist should exercise their best judgement taking into account what the client is willing and able to do, what he/she has tried in the past and how well those things worked.

Functional analysis indicates	Skill / intervention needed
Virtually no latency to use upon exposure to cues: 'mindless', automatic responding (cue-action relation)	Conscious awareness of choice in the moment of exposure to cue: Imaginal rehearsal of exposure to cues with hesitation ('freezing')
Reflexive methamphetamine use in response to aversive experience of craving (urge-action relation)	Craving acceptance exercises (for example, "being still")
Reasons not to use, importance of values inconsistent with use diminished in presence of craving (urge-thinking relation)	Mindfulness of values in context of appetite to use: 'fast forward' exercise
Desire to engage in alternative behaviour but confusion or indecision in the presence of cues (cue-action relation; urge-action relation)	Repertoire of alternative behaviour; Mindfulness in moment: Generate list of alternative actions; mastery/alternative behaviour imagery
Use preceded by prolonged rumination prior to or instead of significant physiological arousal (thinking-overt action relation)	Attention-switching skills
Maladaptive or inaccurate beliefs about responding to cues or cravings	Cognitive therapy skills

References

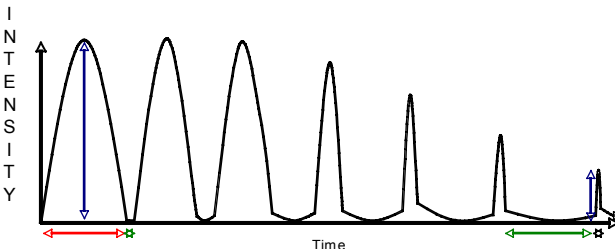
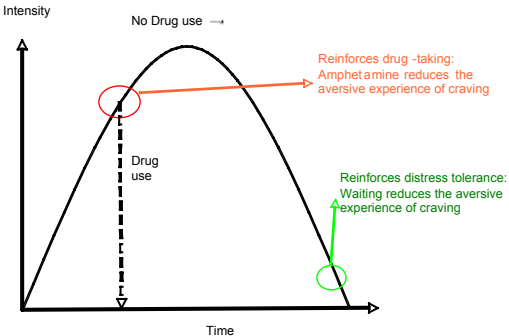
- Albertson, T.E., Derlet, R.W., and Van Hoozen, B.E. (1999). Methamphetamine and the expanding complications of amphetamines. *Western Journal of Medicine*, 170: 214-219.
- Alternman, A.I., Koppenhaver, J.M., Mulholland, E., Ladden, L.J., and Baime, M.J. (2004). Pilot trial of effectiveness of mindfulness meditation for substance abuse patients. *Journal of Substance Use*, 9(6): 259-268.
- Australian Institute of Health and Welfare (2005a). *2004 National Drug Strategy Household Survey: First Results*. Canberra: AIHW (Drug Statistics Series No.13).
- Baker, A., Boggs, T.G., and Lewin, T.J. (2001). Randomized controlled trial of brief cognitive-behavioural interventions among regular users of amphetamines. *Addiction*, 96: 1279-1287.
- Baker, A., Kay-Lambkin, F., Lee, N.K., Claire, M. and Jenner, L. (2003). *A brief cognitive behavioural intervention for regular amphetamine users*. Australian Government Department of health and Ageing.
- Baker, A., Lee, N.K., Claire, M., Lewin, T.J., Grant, T., et al. (2005). Brief cognitive-behavioural interventions for regular amphetamine users: a step in the right direction. *Addiction*, 100: 367-378.
- Bandura, A. (1997). *Self-Efficacy: The Exercise of Control*. New York: Freeman and Co.
- Coyne, L.W., & Wilson, K.G. (2004). The role of cognitive fusion in impaired parenting: An RFT analysis. *International Journal of Psychology and Psychological Therapy*, 4(3): 469-486.
- Dimidjian, S., Hollon, S.D., Dobson, K.S., Schmalings, K.B., Kohlenberg, R.J., et al. (2006). Randomized trial of behavioral activation, cognitive therapy, and antidepressant medication in the acute treatment of adults with major depression. *Journal of Clinical and Consulting Psychology*, 74(4): 658-670.
- Drummond, D.C. (2001). Theories of drug craving, ancient and modern. *Addiction*, 96: 33-46.
- Gassman, D., & Grawe, K. (2006). General change mechanisms: The relation between problem activation and resource activation in successful and unsuccessful therapeutic interactions. *Clinical Psychology and Psychotherapy*, 13: 1-11.
- Gifford, E.V., Kohlenberg, B.S., Hayes, S.C., Antonuccio, D., Piasecki, M.M., et al. (2004). Acceptance-based treatment for smoking cessation. *Behavior Therapy*, 35: 689-705.
- Gollwitzer, P.M. & Brandstatter, V. (1997). Implementation intentions and effective goal pursuit. *Journal of Personality & Social Psychology*, 73(1): 186-199.
- Hayes, S.C., Barnes-Holmes, D., & Roche, B. (2001). *Relational Frame Theory: A post Skinnerian account of human language and cognition*. New York: Plenum.
- Hayes, S.C., Brownstein, A.J., Haas, J.R., & Greenway, D.E. (1986). Instructions, multiple schedules, and extinction: Distinguishing rule-governed from schedule-controlled behaviour. *Journal of the Experimental Analysis of Behavior*, 46: 137-147.
- Hayes, S.C., Wilson, K.G., Gifford, E., and Batten, S. (1998). Individual therapy protocol: Acceptance and commitment therapy for the treatment of polysubstance-abusing methadone clients (unpublished manuscript).
- Hayes, S.C., Strosahl, K.D., and Wilson, K.G. (1999). *Acceptance and Commitment Therapy: An experiential approach to behavior change*. New York: Guilford.

- Heather, N. and Robertson, I. (1989). *Problem Drinking (2nd Ed.)*. Oxford: Oxford University Press.
- Kohlenberg, R.J., Hayes, S.C., & Tsai, M. (1993). Radical behavioral psychotherapy: two contemporary examples. *Clinical Psychology Review, 13*: 579-592.
- Marlatt, G.A. (2002). Buddhist philosophy and the treatment of addictive behavior. *Cognitive and Behavioral Practice, 9*: 44-50.
- Matrix Centre (1995). *The Matrix Intensive Outpatient Program: For the Treatment of Substance Abuse and Dependence Disorders: Therapist Manual*. Los Angeles: Matrix Centre.
- McKetin, R., McLaren, J., Lubman, D.I., and Hides, L. (2006). The prevalence of psychotic symptoms among methamphetamine users. *Addiction, 101*: 1473-1478.
- McKetin, R., Kelly, E., and McLaren, J. (2006). The relationship between crystalline methamphetamine use and methamphetamine dependence. *Drug and Alcohol Dependence, 85*: 198-204.
- Merikangas, K.R., Mehta, R.L., Molnar, B.E., Walters, E.E., Swendsen, J.D. et al (1998). Comorbidity of substance use disorders with mood and anxiety disorders: Results of the International Consortium in Psychiatric Epidemiology. *Addictive Behaviors, 23*: 893-907.
- Miller, W.R., & Mount, K.A. (2001). A small study of training in motivational interviewing: Does one workshop change clinician and client behaviour? *Behavioral and Cognitive Psychotherapy, 29*: 457-471.
- Miller, W.R., and Rollnick, S. (Eds.). *Motivational Interviewing: Preparing people for change (2nd Ed.)*. New York: Guilford.
- Molitor, F., Truax, S.R., Ruiz, J.D., and Sun, R.K. (1998). Association of methamphetamine use during sex with risky sexual behaviors, and HIV infection among non-injection drug users. *Western Journal of Medicine, 168*: 93-97.
- Morefield, K., Ali, R., Baigent, M., Christie, P., Pointer, S., and Danz, C. (2004). Methamphetamine psychosis in South Australia: Stage 1 of methamphetamine psychosis research program. *DASC Monograph No.11 Research Series*.
- Nordahl, T.E., Salo, R., and Leamon, M. (2003). Neuropsychological effects of chronic methamphetamine use on neurotransmitters and cognition: a review. *Journal of Neuropsychiatric Clinical Neuroscience, 15*: 317-325.
- Pierce, R.C and Kalivas, P.W. (1997). A circuitry model of behavioral sensitization to amphetamine-like psychostimulants. *Brain Research Reviews, 25*: 192-216.
- Rawson, R.A., Gonzales, R., and Brethren, P. (2002). Treatment of methamphetamine use Disorders: an update. *Journal of Substance Abuse Treatment, 23*: 145-150.
- Rawson, R.A., Marinelli-Casey, P., Anglin, M.D., Dickow, A., Frazier, Y., et al. (2004). A multi-site comparison of psychosocial approaches for the treatment of methamphetamine dependence. *Addiction, 99*: 708-717.
- Salkovskis, P.M., and Reynolds, M. (1994). Thought suppression and smoking cessation. *Behaviour Research and Therapy, 32*: 193-201.
- Schuckit, M.A., Tipp, J.E., Bucholz, K.K., Nurnberger, J.I., Hesselbrock, V.M., et al. (1997). The life-time rates of three major mood disorders and four major anxiety disorders in alcoholics and controls. *Addiction, 92*(10): 1289-1304.
- Semple, S., Patterson, T., and Grant, I. (2005). Methamphetamine use and depressive symptoms among heterosexual men and women. *Journal of Substance Use, 10*(1): 31-47.

- Sommers, I., Baskin, D., and Baskin-Sommers, A. (2006). Methamphetamine use among young adults: health and social consequences. *Addictive Behaviors, 31*: 1469-1476.
- Topp, L., Degenhardt, L., Kaye, S., and Darke, S. (2002). The emergence of potent forms of methamphetamine in Sydney, Australia: A case study of the IDRS as a strategic early warning system. *Drug and Alcohol Review, 21*: 341-348.
- United Nations Office of Drugs on Crime (UNODC). (2006). *World Drug Report: Volume 1: Analysis*. Vienna, Austria: UNODC.
- Volkow, N.D., Chang, L., Wang, G., Fowler, J.S., Franceschi, D., et al. (2001b). Loss of dopamine transporters in methamphetamine abusers recovers with protracted abstinence. *The Journal of Neuroscience, 21*(23): 9414-9418.
- Wells, A., White, J., and Carter, K. (1997). Attention training: effects on anxiety and beliefs in panic and social phobia. *Clinical Psychology and Psychotherapy, 4*(4): 226-232.
- Wright, S. and Klee, H. (2001). Violent crime, aggression and amphetamine: what are the implications for drug treatment services? *Drugs: Education, Prevention and Policy, 8*(1): 73-90.
- Zetle, R.D., and Hayes, S.C. (1986). Dysfunctional control by client verbal behavior: the context of reason-giving. *Analysis of Verbal Behavior, 4*: 30-38.
- Zettle, R.D., and Rains, J.C. (1989). Group cognitive and contextual therapies in treatment of depression. *Journal of Clinical Psychology, 45*: 438-445.

Handout 1: Craving Components

Thoughts	Emotions	Physical sensations	Behaviours

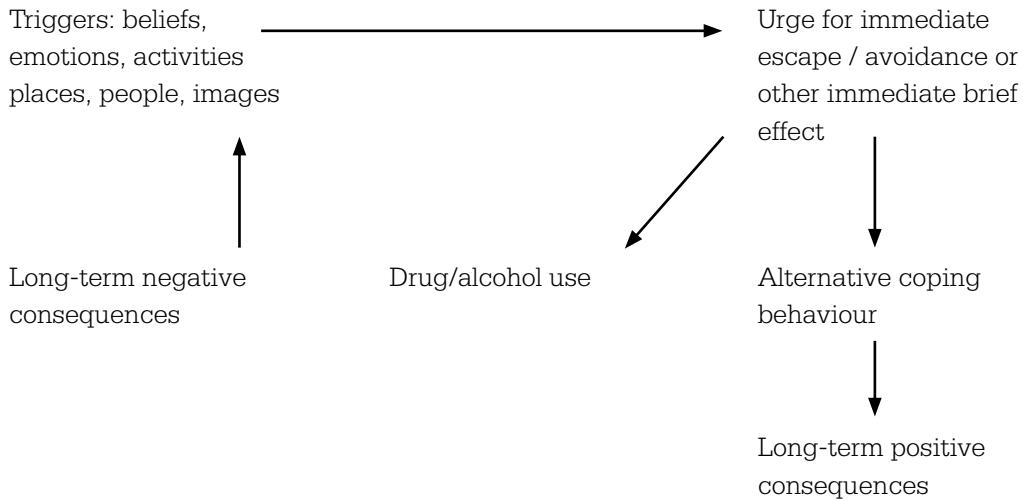


Handout 2: Craving Monitoring Record

INSTRUCTIONS: As soon as possible after you experience a craving, complete the information in the table below. This will help tailor your treatment to your unique experience. 'Response' is the action you took (for example, used meth, called a friend, surfed urge). 'Outcome' is the effect of your response to the craving. How did you feel, act, or interact with others? Also rate the intensity of your craving again after your response on the scale of 0 ('none') to 10 ('irresistible').

Day (date) Time	Where you were	Who you were with	What you were doing	Craving symptoms	Intensity (0-10)	Response to Craving	Outcome Craving 0-10

Handout 3: Conceptualisation of Addiction



Triggers: _____

Urge to escape: _____

 Or _____
 Immediately obtain: _____

Long-term negative consequences _____

Meth use

Alternative/coping behaviour _____

Long-term positive consequences _____

Handout 4: Values Assessment Worksheet

Instructions:

The following are areas of life that are valued by some people. Not everyone has the same values, and this worksheet is not a test to see whether you have the 'correct' values. Describe your values as if no one will ever read this work sheet.

As you work, think about each area in terms of the concrete goals you may have and in terms of more general life directions. For instance, you may value getting married as a concrete goal and a loving spouse as a valued direction. The first example, getting married, is something that could be completed. The second example, being a loving spouse, does not have an end. You could always be more loving, no matter how loving you already were.

Work through each of the life domains. Some of the domains overlap. You may have trouble keeping family separate from marriage/intimate relations. Do your best to keep them separate. Your therapist will provide assistance when you discuss this goals and values assessment. Clearly number each of the sections and keep them separate from one another. You may not have any valued goals in certain areas; you may skip those areas and discuss them directly with your therapist. It is also important that you write down what you would value if there were nothing in your way.

We are not asking what you think you could realistically get, or what you or others think you deserve. We want to know what you care about, what you want to work toward, in the best of all situations. While doing the worksheet, pretend that magic happened and that anything is possible.

1) Marriage / couples / intimate relations

In this section, write down a description of the person you would like to be in an intimate relationship. Write down the type of relationship you would want to have. Try to focus on your role in that relationship.

2) Family relations

In this section, describe the type of brother / sister / son / daughter, father / mother you want to be. Describe the qualities you would want to have in those relationships. Describe how you would treat the other people if you were the ideal you in these various relationships.

3) Friendship / social relations

In this section, write down what it means to you to be a good friend. If you were able to be the best friend possible, how would you behave toward your friends? Try to describe an ideal friendship.

4) Career / employment

In this section, describe what type of work you would like to do. This can be very specific or very general. (Remember, this is an ideal world). After writing about the type of work you would like to do, write about why it appeals to you. Next, discuss what kind of worker you would like to be with respect to your employer and co-workers. What would you want your work relations to be like?

5) Education / personal growth and development

If you would like to pursue an education, formally, or informally, or to pursue some specialized training, write about that. Write about why this sort of training or education appeals to you.

6) Recreation / leisure

Discuss the type of recreational life you would like to have, including hobbies, sports, and leisure activities.

7) Spirituality

We are not necessarily referring to organized religion in this section. What we mean by spirituality is whatever that means to you. This may be as simple as communing with nature, or as formal as participation in an organized religious group. Whatever spirituality means to you is fine. If this is an important area of life, write about what you would want it to be. As with all of the other areas, if this is not an important part of your values, skip to the next section.

8) Citizenship

For some people, participating in community affairs is an important part of life. For instance, some people think that it is important to volunteer with homeless or elderly people, lobby governmental policymakers at the federal, state, or local level, participate in the service structure of self-help groups, such as Alcoholics Anonymous. If community-oriented activities of this type are important to you, write about the direction you would like to take in these areas. Write about what appeals to you in this area.

9) Health / Physical well-being

In this section, include your values related to maintaining your physical well-being. Write about health-related issues such as sleep, diet, exercise, smoking and so forth.

Handout 5: Dysfunctional Thought Record (DTR)

Date and Time	Situation <ul style="list-style-type: none"> ■ Where were you ■ Who were you with ■ What were you doing OR <ul style="list-style-type: none"> ■ What did you first notice? 	Emotion <ul style="list-style-type: none"> 1) Type (for example, sad, anxious, angry) 2) Intensity (0-100) 	Automatic thought <ul style="list-style-type: none"> ■ Write the thought, belief or rule that accompanied the emotion ■ Rate how much you believe it (0-100) 	Response Write what you did to respond to the thought (for example, tested whether it was true, ignored it, checked it for cognitive distortions)	Outcome <ul style="list-style-type: none"> 1) Re-rate belief in the thought (0-100) 2) Emotion: type and intensity (0-100) 3) Change in the situation

Handout 6: Activity List

Below list as many activities in each of the categories as you can think of. Do not worry too much about the exact category an activity falls in. Keep the list and keep adding to it as you think of things.

Things you have to do to prevent further problems (for example, pay bills)	Routine activities (for example, self-care, house work)	Fun activities (for example, recreation, leisure)	Meaningful activities (steps toward your values)

Handout 7: Refusal Skills Reminder Sheet

Tips for responding to offers of meth:

- First, say no
- Make direct eye contact
- Ask the person to stop offering meth
- It is not rude to refuse drugs
- Do not make excuses for refusing
- Do not imply you might use another time
- You are response-able to decide whether you use meth

DBL