Fundamentals of alcohol and other drug treatment

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Introduction

Problematic substance use is one of the social and individual tragedies of modern day life, with the consequences extending far beyond the individual. Substance use is also a highly complex field of behaviour, with no one theory or model adequately describing the diverse range of presentations, drivers, and consequences that can be observed. Perhaps it is this complexity and limited understanding which is why few health and welfare professionals receive comprehensive and holistic training about substance use and addiction as a part of their studies.

This manual does not aim to provide a review of the broad principles of treatment or compare and contrast alternative theories and viewpoints. Nor does it attempt to reproduce much of the excellent work and writings that already exist in the substance use treatment field. Rather, it aspires to provide the reader with an integrated framework that weaves together all of the current accepted theories, from within which the clinician can not only expand their understanding of the client's presentation, but also provide them with a broader array of support and treatment options.

The material contained is therefore presented from an applied understanding of the clients, much akin to a conversation that a clinician might have with their supervisor. Therefore, rather than being definitive, the focus is upon increasing understanding and providing practical suggestions that the clinician can apply in the here and now.

Chapter 2 - Why people use substances - draws together an integrated theoretical framework to orientate the reader to the diverse drivers for substance use and addiction. Chapter 3 – Motivation - onwards presents a comprehensive guide to AOD services delivery.

At points through the manual there are some suggested reflective supervision questions. These can be considered individually, or ideally in a group situation to reflect upon different approaches, worker's own preferences, and both broaden and deepen the application of these principles to each person's role.

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2 - Why people use substances

In order to effectively help someone with problematic substance use, addiction, or associated compulsive behaviours, it is important to first have an understanding of these behaviours. However, there are two challenges in any attempt to provide a valid and useful theoretical framework.

First, this group of behaviours is very diverse, and can perhaps be considered a syndrome rather than a single disorder, with multiple causes and different pathways of progression. An individual's patterns of consumption can vary from day to day, as well as at different stages in their substance-using career. Furthermore within each drug class, there can be diverse patterns of problematic use. For example, there are those drinkers who do not drink every day, but when they do it is to excess, compared with those who may consume a considerable every day, but who never appear to be intoxicated.

The result of this is that attempts to create a comprehensive model can be unwieldy and require such a degree of specialised knowledge (e.g. neurology, systems theory etc.) that they become inaccessible to clinicians supporting working at the coalface to support their clients.

Second, the preference for any theoretical framework will be influenced by a clinician's professional role and priorities. For example, a family worker may focus more upon social and systemic drivers of the behaviour along with interpersonal harm; medical personnel may have a greater focus upon the health problems, physiological dependence and withdrawal; and counsellors may focus upon substance use as a learned coping strategy that often results in psychological dependence. These different priorities can create challenges for collaborative care and knowledge sharing, especially within multidisciplinary services.

The many different models and definitions of addiction that have been proposed over the last few decades all possess merit, each explaining certain aspects of either the cause or the progression of the condition. Each model proposes interventions that *some* clinicians are able to use, and which are effective for *certain* clients, *some* of the time.

The challenge is that to date, they are often considered as alternatives to one another. There have been few attempts at an integrated model to assist clinicians of all disciplines to map the biological, psychological and social drivers of this behaviour.

Diagnostic Criteria

There are several different approaches and conventions to defining, diagnosing, and categorising substance use, however these tend to be based upon the *symptoms and consequences* of the behaviour (e.g. what harms are happening), rather than describing the *causes and underlying mechanisms*.

The Diagnostic and Statistical Manual of Mental Disorders 5 divides substance use disorders into three broad categories. The first of these are disorders relating to patterns of substance use (e.g. Alcohol Use Disorder). The second relate to substance-induced disorders, and includes disorders relating to (i) acute substance use presentation (e.g. Amphetamine Intoxication or Heroin Withdrawal); and (ii) substance/medication-induced disorders such as Cannabis-Induced Anxiety Disorder or Stimulant-Induced Psychotic Disorder.

The DSM 5 has combined the previous two pattern of use diagnoses of Substance Abuse and Substance Dependence, into a single disorder, defined by substance type (e.g. Alcohol Use Disorder), and there are four broad groups of the diagnostic criteria. DSM defines substance use disorders

> *"Maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by one (or more) of the following occurring, within a 12-month period:*
>
> *(1) recurrent substance use resulting in a failure to fulfil major role obligations at work, school, or home (e.g. repeated absences or poor work performance related to substance use; substance related absences, suspensions, or expulsions from school; neglect of children or household)*
>
> *(2) recurrent substance use in situations in which it is physically hazardous (e.g. driving an automobile or operating a machine when impaired by substance use)*
>
> *(3) recurrent substance-related legal problems (e.g. arrests for substance-related disorderly conduct)*

> *(4) continued substance use despite having persistent or recurrent effects of the substance (e.g. arguments with spouse about consequences of intoxication, physical fights).”* (p182)[34]

Under this definition, diagnosis does not consider the *causes or drivers* of the behaviour (e.g. social anxiety, grief, craving, peer pressure etc.). Instead, it simply describes the pattern with a focus upon harmful consequences. As a result, whilst diagnosis may highlight that there is a problem and even describe the problem, it does not provide much information regarding areas of clinical need.

Another problem relating to the use of diagnosis relates to a central criterion of mental disorders, which states that substance use only becomes a disorder once the negative consequences impacts arise to the person’s health, social or occupational functioning. The difficulty here is illustrated by the example of an addicted cigarette smoker. They may continue for years or decades with minimal or no negative consequences. Would that suggest that it is only once they get start to experience significant consequence that they have a disorder? Most physicians and health policy advocates would strongly disagree with this statement. However, they do not meet this key criterion for diagnosis.

Therefore, in order to understand substance use and addiction from a *clinically useful perspective*, it is necessary that a theoretical framework focus the underlying causes and ongoing drivers of the behaviour, rather than just upon the consequences.

There are many different theories posited to explain substance use, such as conditioning, self-medicating, attachment, family and systemic influences, moral deficit, physiological dependence and so on. All of these theories are at least in part, likely to be valid descriptors of factors driving the substance use. As a result, **the next sections describe seven of the key motivations for substance use, and explore how they are not mutually exclusive - most individuals who have problematic substance use present with a combination of these drivers.** These seven types have been chosen primarily because each requires a different therapeutic intervention by the clinician, and they describe a comprehensive framework through which most of the presentations that a clinician is likely to encounter can be interpreted.

The Seven and Seven Model

This chapter will provide a framework of addiction that aims to draw together biological, neurological, psychological, social, and other models into a cohesive, integrated framework. It will describe the seven primary

[34] American Psychiatric Association, (2013). *Diagnostic and Statistical Manual of Mental Disorders,* Fifth Edition. Washington USA, American Psychiatric Association.

drivers of this group of behaviours; differentiate problematic use from addiction; as well as highlighting the seven key moderating factors that can aid recovery. In doing so, it will aim to guide clinicians to draw upon medical, psychological, mutual-aid, and other resources to provide a truly holistic and multidisciplinary response.

Key terms

Before proceeding it can be helpful to clarify some terms as they are used in this manual.

- The word 'substance' will be used interchangeably with 'drug' and includes all chemicals that can be taken and which have a psychoactive effect (i.e. they change a person's emotional state, arousal, perception, attitude, or thinking). This includes alcohol, nicotine and caffeine, as well as many prescribed medications, over the counter medications, and illicit drugs. Readers with interest in other related compulsive appetitive behaviours such as gambling, buying, sexual activity, and use of technology or the internet, can substitute their area of interest for 'substance' in many contexts within this text.
- The term 'substance use' is used in this text to describe the recreational use of substances in order to achieve their psychoactive effects, usually changes in emotion, arousal, cognition or perception.
- 'Substance misuse' and 'Substance abuse' are cultural rather than clinical terms used to describe patterns or the use of substances that are outside culturally acceptable norms. As a result, these terms are not used in this text.

The text instead shall use the expression 'problematic substance use' to describe substance use that is either harmful, or around which the person has reduced levels of control. The term 'addiction' will be defined later in this text to describe a compulsive pattern of use, likely based upon different neurological pathways to other motivational states.

2.1 - Psycho-Social Triggers

Five of the seven types of driver for substance use are psycho-social in nature, and these are discussed first. These are Reward, Relief, Habit, Discontentment, and Bio-feedback. This is followed in section 2.2 - Physiological Triggers with the other two drivers: Dependence and Substance-Induced.

Note that there is also mainstream culturally sanctioned use of drugs, such as wine at Holy Communion, or tobacco in past Native American rituals. However, this type of use is not discussed in this book because, on its own, it is rarely cause for concern and the mainstream cultural norms that have usually evolved around the use would, in many cases, prevent it from becoming problematic.

2.1.1 - Pleasure

Probably the most widely held view about substance use is that **people use drugs because they enjoy their effects**, and the majority of substance use in western societies fits this understanding. Whether it is enjoying the taste of a nice wine, or the socially lubricating qualities of a few beers, the substance use is about enhancing the person's experience.

The exact nature of the pleasure can differ from person to person, and from drug to drug.

- For stimulants it may include elevated mood, enhanced attitude and amplified energy levels.
- For depressants it may involve a deeper calming and relaxation.
- Both stimulants and depressants may enhance confidence.
- With hallucinogens, the enjoyment relates to perceptual distortion and altered states of consciousness.

All types of substance can also include indirect sources of pleasure, i.e. secondary benefits associated with the use, but not a direct pharmacological effect of the drug. These can be particularly significant amongst youth, and examples include:

- the fun of experimentation and trying something new,
- the thrill associated with danger, risk and uncertainty,
- peer acceptance – to enhance group membership,
- peer respect – to enhance role within a group,
- feel like an 'adult' - modelling a respected adult or role model.

Whereas most people may have many ways of enjoying life with or without drugs, for some people substance use may be their only source of fun and enjoyment.

Psychological mechanisms

These pleasure-seeking behaviours are learned through *'positive reinforcement',* a subtype of what psychologists call "operant conditioning". When a person performs a behaviour (using a drug) and gets a pleasurable response (feeling more sociable), they are likely to repeat that behaviour, and most non-problematic substance use, such as social drinking, falls into this category.

However, there is also usually a cost associated with the reward, such as hangovers, health problems, financial expense and more. If the negatives begin to significantly outweigh the positives, then the behaviour may moderate or cease altogether. Even where there are no significant negative consequences, excessive or prolonged use of a drug over time can sometimes reduce its rewarding effects anyway. As a result, most people just 'grow out' of potentially problematic substance use either by abstaining, or reducing it to manageable levels.

This cost/benefit approach to understanding substance use describes most people's substance-using behaviour. It has become the most widely held view of problematic substance use, also known as the 'moral model', or the 'economic model' of substance use. In other words, this model states that the person is choosing to use drugs or alcohol because the pleasure that they are gaining outweighs the costs. If the person continues to use despite the increasing costs, especially where those harms are affecting others (e.g. family), then the person is considered to be 'morally' at fault.

The problem with the moral model is that, especially in the case of problematic substance use, there are up to six other driving factors. This is why simplistic concepts of reward and choice are not adequate to explain all presentations.

Summary

The majority of appropriate substance use in western culture involves a person gaining some degree of pleasure from the behaviour and these can be called "Pleasure" triggers.

They may be motivated either by direct effects of the substance itself, or of the secondary benefits related to its use such as peer acceptance.

If there is an increase in costs or a reduction in benefits, most people will either moderate or cease their substance use.

Although the reward/pleasure theory of substance use does explain most people's behaviour, there are other powerful motivators in problematic substance use, and these are discussed next.

2.1.2 - Relief/Coping

The first type of motivator discussed was pleasure – i.e. the substance provides the person a pleasurable enhancing effect, and this type of learning is called 'positive reinforcement'. There is another type of motivator that can also be rewarding, but is often considered to be much more powerful than pleasure. This is where the drug alleviates psychological or physical pain or discomfort (relief).

Psychological Mechanisms

This type of learning is another form of operant conditioning, called '*negative reinforcement*'. Examples include drinking to cope with stress, having coffee to overcome fatigue, or using excessive amounts of medication to manage chronic pain.

The person might see drug or behaviour itself as bring very rewarding. However, the reward is not solely the effect of the drug. Rather, the majority of the reward in negative reinforcement is the pleasure that comes from the pre-existing discomfort being relieved. The greater the discomfort, the more 'rewarding' the behaviour or drug becomes.

> To illustrate negative reinforcement, take the example of drinking a glass of water. Water itself is neither pleasant nor unpleasant to drink. However, if a person is thirsty, then that first glass of water may taste delicious, and the thirstier they are, the sweeter that same glass of water would taste.
>
> This is clearly not because water itself is changing in flavour. Rather, what the person is finding rewarding is the removal of their thirst

(pre-existing discomfort), and the greater that discomfort, the more rewarding the water becomes.

If, however, the person were then to consume a second glass of water, it would be less appealing (because there is less thirst to be relieved), and by the time they got to a third or fourth glass, there is unlikely to be any positive reaction at all.

In the case of the *pleasure* type of motivator described earlier in this section, the person can take it or leave it – they are fine without it. However, in the case of the *relief* trigger, the person needs the substance, otherwise their discomfort or pain will continue or even increase.

Both 'pleasure' and 'relief' type motivators feel good, and in real life, relief motivators are often more rewarding than pleasure motivators, and many people use the word 'reward' to describe relief, e.g. "I was so stressed out after long day at work, I deserved a reward".

The figure below helps to illustrate the difference between pleasure and relief triggers, and also shows how the same substance can be much more powerful when it is used in response to relief triggers than to reward triggers.

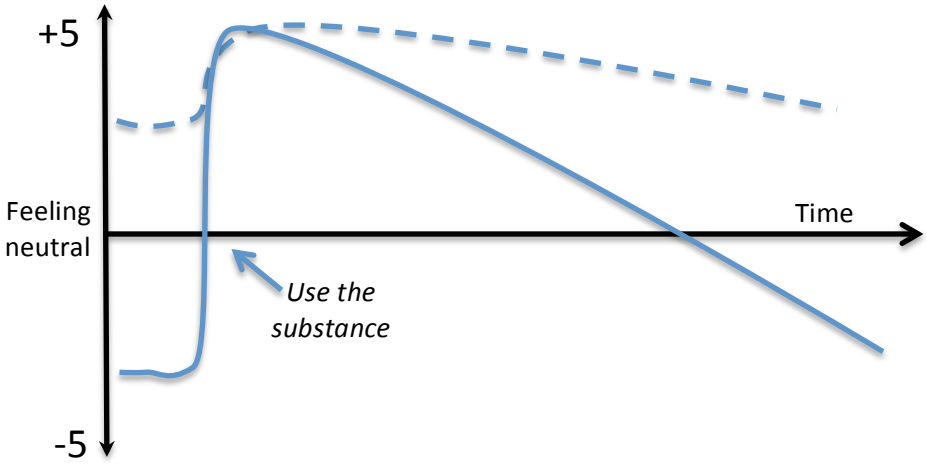

Figure 1 - comparison of reward and relief triggers

The y-axis in the graph represents feeling terrible at the bottom (-5), and feeling great at the top (+5), which is also how the substance makes the person feel.

In the pleasure-type scenario, illustrated by the dotted line, the person was feeling fine before they used. The drug gave them an enhancement – only a couple of points. As a result it would not take much in the way of costs to

offset this gain, and the person would soon moderate or cease their use if problems and consequences occurred.

However, in the relief scenario (the solid line), the person was starting from a much lower point, and so the same substance with the same effects would be experienced far more positively – an improvement of about 8 points on this graph. As a result, the pay off for the same drug is far greater than in the pleasure scenario, and so it would take greater costs to motivate this person to change. This is why relief triggers are so much more powerful than pleasure triggers.

In summarise, pleasure triggers enhance the person's experience, whereas relief triggers are to change their experience. As a result, people whose primary reason for using substances is response to discomfort or pain could be better described as *'relief-seekers'* rather than *'pleasure-seekers'*, as they are *needing* rather than *wanting* the substance's effects.

These coping-type motives are well described in psychological models of substance use, and can evolve through a variety of means including:

- accidentally stumbling upon the desired effects, such as the person who finds that cannabis also seems to help them to fall asleep,
- deliberately searching for something to relieve distress, such as the person who experiments with different drugs in order to help them fit in and feel less socially anxious,
- modelling (vicarious learning), in which the behaviour is learned via observation of another person[35]. This is the mechanism involved when children learn skills or behaviours by watching their parents or their peers (e.g. seeing dad always reach for a bottle to unwind after work).

Types of Relief Trigger

From a clinical perspective there are two broad types of coping trigger:

A. The person uses the drug as a way of coping with **normally occurring unpleasant states**, e.g. when agitated, upset, anxious, or angry. Life-skills training is usually the appropriate treatment response.

B. The person uses the drug as a sole or preferred way of coping with **abnormal distress**. This distress can be internal (e.g. complex grief, trauma or personality based problems) or external (e.g. family violence). Targeted counselling around the cause of the trigger is a typical intervention here.

[35] Li, C., Pentz, M., & Chou, C., (2002). Parental substance use as a modifier of adolescent substance use risk, *Addiction.* 97, pp 1537 - 1550

Subtype A – The person uses to cope with normally occurring unpleasant states.

This first subtype includes using substances to cope with feelings such as low mood, anxiousness, anger, and guilt, as well as physical states such as tiredness, restlessness and pain. These states are described as being 'normal' because they form a part of day-to-day life and many people will have an alcoholic drink or a coffee to help them cope in the short term.

What differentiates the problematic substance users though is that in many cases it is their *only* way to cope. This is especially true for many young people who have not yet had the opportunity to develop coping skills, or for those adults who commenced substance use during adolescence, a time when many coping and other life skills are usually learned. This risk of relying upon maladaptive coping skills may be further increased if parents or other influential people in the young person's life also used substances to cope with negative states, or failed to model healthy and sustainable coping mechanisms.

Clinician interventions may therefore include teaching, modelling, and encouraging healthy coping responses to normal unpleasant emotions and distress. Specific techniques are discussed in Chapter 9 - Trigger Prevention.

> *Examples of people relying on substances to cope with ordinary life events:*
>
> *David was a 29-year-old male who never usually had a problem with alcohol, but recently he had been experiencing problems in his relationship. He was struggling with how to cope and had been drinking more and more in the evenings after work, and it was becoming aggressive.*
>
> *Ricky is a 22-year-old carpenter. He used to occasionally use party drugs, however he has been working longer and longer hours over the past few months, and by Friday night, he is too tired to go out with his friends unless he takes methamphetamines.*

Subtype B – The person adopts the behaviour as a sole or preferred way of coping with acute abnormal distress

This second subtype relates to people who are not just experiencing *normal* day-to-day levels of psychological discomfort. Rather they are also experiencing **abnormal problems and levels of distress**. These can be internal, such as social anxiety, complex grief reactions, trauma, or some personality disorders, or external, such as family violence, or bullying at work.

Sometimes, these problems are long lasting and wide-reaching, such as personality based issues and/or trauma, and psychological disorders. This can result in many interpersonal (problems in relationships with others) and intrapersonal difficulties (problems in relationship with self) and result in a base-line level of functioning that is distressing and unmanageable. The person is typically drawn to the substance that most effectively medicates this base functioning.

To illustrate this, consider a scale from 1 (feeling terrible) to 10 (feeling totally content and without a problem in the world). A person who would typically rate their baseline as under 5/10 would be very much drawn to a drug that gives them 9/10 (an increase of 4). However, a person who typically rates him/herself at 7/10 would find the same effects much less appealing because it represents an increase of just two. As a result, even though the effect of the drug may be the same for all people, for those with an uncomfortable or distressing baseline, the drug's appeal is going to be far stronger.

This subtype can also include para-suicidal or actively suicidal behaviour. For some clients, the pain of life is so bad, and the hopelessness so strong, that they binge upon the drug with the intention of passing out or potentially committing suicide.

For clients exhibiting relief triggers as a driving force behind their substance use, treatment needs to focus upon the underlying issues through psychotherapy and/or the appropriate use of medications. Furthermore, treatment will usually also need to address strategies for how to cope with the distressing symptoms without using drugs.

However, it is important to note that up to 80%[36] of people with problematic substance use, after years of compulsive behaviour, seem to spontaneously and naturally recovery without any formal treatment. This suggests that while many people do require support and help for co-existing issues, the overwhelming majority spontaneously recover.

> *Examples of subtype B relief triggers (type 2):*
>
> *Richard is a 24-year-old who has recently moved to Melbourne from Queensland for work. Richard describes a history of being quite uncomfortable in social situations and has difficulty making friends. He was offered methamphetamines a few months ago and found that for the first time he had confidence to go out, socialise and talk to girls. His use has increased until it is now 3-4 times per week and his employer has given him a final warning.*

[36] Sobell, L., Ellingstad, T., & Sobell, M. (2000). Natural recovery from alcohol and drug problems: Methodological review of the research with suggestions for future directions. *Addictions*, 95.

Jen is a 22-year-old female with an extensive history of trauma. She described having been severely abused by her father who is now deceased, and has no relationship with her mother, not understanding why mum just seemed to stand by and permit this to happen. Jen also has no relationships with her siblings and has a history of forming short, intense relationships with partners. She has no long-term friendships. She describes overwhelming feelings of fear, abandonment and loneliness, as well as intrusive thoughts. She reports that heroin is the only thing that has ever given her relief from these feelings.

Deb has been married for 25 years and lives alone with her husband, their two children having moved out of the family home. Since losing his job 10 years ago her husband has become increasingly aggressive when he drinks, which is now a daily occurrence. Unable to cope with this, Deb started using benzodiazepines 5 years ago and has become so reliant upon them that she has started 'doctor shopping'.

Summary.

Psychological models of substance use describe how the behaviour is not just about reward, but it also about 'relief', with the substance user *needing* the effects of the drug, rather than just *wanting* them.

Some people do so because they lack some basic coping mechanisms, and so they have come to rely upon substances as a way of manage their feelings in many contexts.

For others, there is a specific mental health issue that is overwhelming their coping mechanisms, and in such cases, the mental health issues itself also needs to be the focus of therapeutic interventions.

2.1.3 - Association/Habit

A third type of trigger are the *habitual* urges which develop as a result of the brain learning to associate highly rewarding behaviours (e.g. drug use) with unrelated and/or indirectly related trigger. This process is called **classical conditioning,** and was famously described by the Russian physiologist Ivan Pavlov who in 1903 demonstrated how a dog could be conditioned to salivate in response to hearing a bell ring even though there is no meaningful connection between bells and food.

With Association triggers, the motivation to use is not about a desire for the *effect* of the drug as per the previous two types described. Instead, it is the result a powerful reinforcer (e.g. a drug) being automatically connected

with some aspect of the context in which is it used. For example, someone may associate Friday evenings with drinking, watching football with pizza, or smoking a cigarette when they are on the phone.

Just because a substance is regularly used in a particular context does not mean that the context will always become a trigger, rather it just makes it more likely. Furthermore, habit triggers can often be overlooked in treatment, or underestimated in terms of their power to overwhelm the person.

There are seven broad groups of contextual triggers that can be commonly found and the first relates to people with whom the person associates the behaviour. These could be persons that they drink or use with, or someone they associate with supplying or providing their drug.

The second type relates to places that they associate with the behaviour, including where they buy, keep and use their drugs. Times forms the third type of habit trigger, whether it is particular time of the day, day of the week, or annual occasions.

Fourth are the activities where the person typically engages in the behaviour, and can also include contexts such as having the house to myself (however 'feeling lonely' would come under the previous category – relief/coping triggers).

The sight, sound, or smell of things associated with substance use form the fifth category, with sound and smell especially powerful at evoking associations, memories and urges. Surprisingly, weather itself can often be associated with substance use, making the sixth type of habit trigger.

Whereas negative emotions as triggers belong to the previous type of trigger – coping/relief triggers – positive emotions belong under this habit category. That is because the person is not wanting to change how they are feeling. Rather, it is often because they may associate substance use with certain positive emotional states, such as achievement, relaxation, or excitement.

Examples of each of these trigger types are found in the following table.

Substance use that forms part of mainstream culture would be considered under this category of habit triggers. Whether it is communion wine, or a toast at a wedding, or a coming of age drink, there are many occasions, places, activities or times that both mainstream and subcultures have come to associate with certain types of substance use.

Table 1 - Seven common types of habit/association triggers

Type	Example
People	Seeing a drinking buddy (alcohol) Seeing their dealer (other drugs)
Places	The street where drugs are usually bought (heroin) The living room where they usually smoke (cannabis) The bottom of the fridge (wine)
Times	Friday nights (alcohol) Pay day (methamphetamines) Before bed (cannabis)
Situations	Driving, or when on the phone (cigarettes) At a party or out for dinner (alcohol) When I've the house to myself (cannabis)
Things	Dance music (ecstasy or amphetamines) The wine glasses (alcohol) Smell of an alcohol swap (heroin)
Weather	Hot days (alcohol) Cold days (heroin)
Positive Emotions	Excitement (alcohol) Accomplishment (alcohol)

Simply avoiding the trigger is not usually sufficient to break the association, and the connection may remain 'dormant' for many years (e.g. running into an old drinking buddy after many years may still trigger a strong urge to drink). As a result, interventions are often required for some of the stronger habit triggers in order to break the connection between the trigger and the substance use. Cognitive-Behavioural Therapy (CBT) techniques such as desensitisation and exposure are effective for this and are described in more detail in Chapter 9 - Trigger Prevention.

Examples of habit triggers (type 3):

Robert had been sober from alcohol for six years, and throughout that time, he would avoid Port Melbourne as that was one of his old haunts and it always brought back drinking memories.

Peter lapsed back into drinking one evening on the way home from work. He had done this journey many times during his five months

of sobriety and could not identify what had happened differently this time. Upon discussion, he suddenly commented that it had been the first warm balmy evening of the summer, and he always associated those nights with sitting on his porch drinking.

Jess was doing well at cutting her cannabis back, but every week or two she kept relapsing and was baffled by what was the cause. It didn't seem to be an emotional trigger ('relief type' described earlier) and there seemed to be no associations she could think of. Then she realised that she was relapsing whenever her parents went out, and that she associated being on her own with smoking pot.

Rick was doing very well without cigarettes, and had reported that he was able to manage even very stressful days now. One day at work he got a promotion and found himself obsessing about having a cigarette. He called his counsellor and in their discussion he noticed how he always associated smoking with being excited.

Summary

This third type of motivator is not triggered by wanting the pleasant effects of the drug (pleasure triggers), or needing the mood-altering or arousal-changing or pain relieving effects of the drug (relief/coping triggers). Instead, it is simply the result of the repeated association of the substance use with one of seven contextual factors (people, places, times, situations, things, weather and positive emotions). This process is called Classical Conditioning.

Specific therapeutic techniques can be used to help break these connections where they are particularly strong, as avoidance is not always adequate and these are discussed in detail in Chapter 9 - Trigger Prevention.

2.1.4 - Discontentment

It has long been recognised that human beings are not just motivated by pleasure and pain, rather there are also core drives that motivate a range

of behaviours, such as to gain security, form relationships, and grow. One well-known example of these drives is Maslow's Hierarchy of Needs[37].

When these core needs are met, there is a sense of wellbeing and a state of contentment and satisfaction. When they are not being met, the result can be an unpleasant state of 'discontentment', or emptiness, which can progress into significant and profound depression.

People are motivated to get these needs met even in the absence of external incentives. Finding healthy and sustainable ways to satisfy these drives is fundamental to many models of psychological wellbeing.

The drives include three broad areas: core survival needs, social and relatedness needs, and existential needs[38], and are discussed in greater detail in chapter 10 - Well-being and contentment triggers.

Of these areas, problems in meeting social needs have received particular interest in the literature around substance use and addiction. Much of this has been drawn from research around Attachment theory[39], and a relationship between poor attachment styles and some forms of problematic substance use is now well established[40].

These core needs may have never been adequately met for some people, especially those who have grown up in troubled families where necessary skills were not role modelled. The resulting state of unmet core needs can be likened to the person feeling that something is missing, they are discontented, and feel what they have in not enough.

Many people with addiction and associated problems commonly experience chronic discontentment, and substance use is one of many strategies that they may employ to attempt to alleviate it (e.g. excessive working, exercise, and spending money). Unfortunately, problematic substance use will usually interfere with these needs being met through healthy channels, for example, by costing the person their job, or resulting in a relationship breakdown.

> *Examples of discontentment trigger (type 4):*
>
> *Michael was a 32 year old who was managing a bar. He had grown up in rural Australia and had never had many friends. His siblings were much older than him, and most of his childhood companions were adults. Michael reported low self-esteem, and had few peer friends and was very lost in his life. He described that he had difficulty with people, and spent much of his time alone.*

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[37] Maslow A. H. (1943). A Theory of Human Motivation. *Psychological Review*, 50, pp370-396.

[38] Alderfer, C. P.,(1972) *Existence, Relatedness, and Growth; Human Needs in Organizational Settings,* New York: Free Press.

[39] Bowlby, J., (1969). *Attachment and loss: Vol 1 Attachment*. New York: Basic Books.

[40] Flores, P.J., (2003). *Addiction as an Attachment Disorder*. US: Jason Aronson

He demonstrated a low level of social skill development as well as a poor understanding of the principles of peer relationships (e.g. he would reveal inappropriate information and ask intimate questions with relatively new people). As a result, he had a chronic low lying depression that medication had been unable to fix, but which had lifted at the few times in his life when his core needs had been met and he had felt socially connected (in particular on one school trip). He found that cannabis helped to fill the hole he felt inside him.

Discontentment can trigger substance use in a three different ways. First, **the person may come to rely upon substance use as a way of alleviating this discontentment, such as by drinking to the fill the void** [41] [42]. Substance use, though, is not the only way some people try to manage discontentment. For example, when they stop using drugs, other compulsive behaviours such as gambling, food, work, internet, keeping busy etc. may appear or reappear.

Second, **the person may form an attachment to the drug as a substitute for human relationships**. This second type can occur because of the soothing and calming nature of many substances, especially depressant ones, and as a result, if they are the primary source of soothing, the person may deeply attach to them as a substitute for healthy human relationships. This is likely to contribute to the grief-like reactions that many people experience when they stop using their drug of choice.[43]

These people may then seek out another object of attachment, which itself may be appropriate (e.g. a recovery group) or may not be appropriate (e.g. another obsession such as excessive work or exercise). Mobile communication devices such as smart phones can be examples of strong attachments to inanimate objects, with distress experienced by some people when they break or are lost.

Third, the person may start to engage and remain in a particular substance-using lifestyle as **a direct way of meeting core needs** such as belongingness, friendships, and purpose. For example, a disconnected young adult may find a sense of shared belongingness and intimacy amongst heroin users, or a drinker may find mateship at his local pub.

Chapter 10 - Well-being and contentment triggers provides more information about these primary needs, as well as treatment responses which are summarised below:

1. Focus upon identifying which needs are going unmet.
2. Explore what barriers are blocking them (e.g. social anxiety, low self-esteem, or poor interpersonal skills).

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[41] Flores, P.J., (2003). *Addiction as an Attachment Disorder.* US: Jason Aronson

[42] Alcoholics Anonymous (2001) *Alcoholics Anonymous, 4th Edition*. NY: AA World Services

[43] Bowlby, J., (1969). *Attachment and loss: Vol 1 Attachment*. New York: Basic Books.

3. Stabilise the basic needs first (home, money and health) before exploring the social and existential needs.
4. Where the person may have developed an interpersonal attachment to the substance (like a "best friend"), grief work may be needed.
5. Where the rebuilding is going to take time, interim objects of attachment and ways of managing the feelings of discontentment should be considered.

Summary

Human beings have core needs, divided into practical, interpersonal and existential. Contentedness is usually a product of these needs being met. When a person has an inability to get these needs met, a chronic state of discontentment may arise which can be very distressing. Problematic substance use can create obstacles to their needs and the person's ability to get them met.

Some people may attempt to manage this distress through a variety of mood altering behaviours such as shopping, eating, or substance use. They may also get their needs met, albeit unsustainably, through a drug-using or drinking lifestyle. Others, particularly in the case of tobacco or alcohol, may even use their drug itself as a substitute object of attachment (the 'best friend').

Whereas relief/coping triggers result from the presence of undesirable emotional, psychological or physical experience, these discontentment triggers are the result of the absence of desirable and necessary core needs.

Rebuilding the person's core needs is a critical treatment goal, and discontentment is a common feature behind relapse.

2.1.5 - Biofeedback/Confused

This fifth and final type of psychological trigger is a result of biofeedback (brain's interpretation to physiological signals). In this type, the person's brain is confusing physiological signals it is receiving from the body, and mistakenly creating urges to take substances in response.

These confused triggers have not received much attention in the literature, but can be clearly identified in clinical practice, and fall into two broad subtypes.

Subtype A - A physiological sensation that is similar but unrelated to withdrawal, triggers an urge to use.

This first subtype occurs when the person who has previously been dependent upon a substance, experiences physical sensations in sobriety that are similar to withdrawals symptoms. The person may have even been abstinent for some time, however their brain mistakenly interprets these sensations as withdrawal and generates powerful cravings as a result.

> *Example of a subtype A confused trigger.*
>
> *Keira, a 28 year old, had been doing very well since stopping her heroin use. She had rebuilt relationships with her family, she was looking for work again, her health had improved considerably and she had exited counselling. Shortly afterwards she phoned in a highly distressed state, having relapsed.*
>
> *She agreed to come in for a talk about what had happened, and she drew a blank as to what had caused it. She said that she had been feeling a bit run down, which had developed into a full-blown cold. She could not understand why it had triggered such overwhelming cravings.*
>
> *The discussion highlighted that the previous several hundred times that she had woken up with chills, aches and pains, it had been caused by heroin withdrawal. Even though these same sensations were now being caused by a virus, her inner brain, based upon its past experience assumed she was in withdrawal and so created strong craving to use.*

Another example of this type of trigger may be the after-dinner cigarette, identified by many smokers as being one of their strongest cravings. Nicotine withdrawal is perceived subtly within the body, however the sensation for some people can be similar to that of a full stomach pressing on the solar plexus. As a result, even though they may have just had a cigarette a few minutes earlier, the feeling of a full stomach after a large meal is so similar to nicotine withdrawal that they experience a powerful craving nonetheless.

Subtype B – A trigger for one substance is misinterpreted as being a trigger for another substance. Some people with substance use problems are poor at recognising their body's signals, especially with regards to thirst and genuine hunger. Many drinkers gain most of their calories and water from alcoholic beverages so whenever they are hungry or thirsty, their body calls out for the 'food' that usually provides them with calories and water, for example, beer. A similar experience may also occur for some coffee drinkers, and some tobacco smokers may have almost deliberately learned to crave a cigarette in response to hunger as a strategy for weight loss. So their brains are mistakenly craving alcohol or some other substance in response to their thirst or hunger.

Example of a subtype B confused trigger:

David was in early recovery for his problematic alcohol consumption. He stated that he never paid much attention to his health and was having lots of cravings. He had noticed that many people in the rehab he was attending were walking around with bottles of water. Following a session about this type of trigger, he gave increasing his water intake a go. After a couple of days he commented how much he was now craving water, and never realised that he must have been so dehydrated all that time. He also reported that although he was still having cravings to drink alcohol, they had significantly reduced.

Summary

The body is constantly producing sensations and signals which, for most people, most of the time, are correctly interpreted by the brain.

However, for some (especially formerly heroin dependent persons), illnesses such as influenza are so similar to the symptoms of drug withdrawal that the person mistakenly believes they are in withdrawal and experience a strong urge as a result.

Another type of confusion in the brain can also occur, especially in the case of alcohol dependent persons, where the need for food or water mistakenly results in the urge for alcohol.

2.1.6 - Review of Psycho-Social Triggers

This section has reviewed five of the most common motivators for using substances. These can be:

- **pleasure**, such as enjoying the taste of a glass of wine, or peer engagement. In this case the person feels fine though without the behaviour, and so they do not *need* it.
- **relief**, where the person is feeling uncomfortable or in pain, whether it is physical or psychological. These day-to-day issues can trigger the person due to limited basic life skills; or the person may have significant mental health challenges such as trauma or personality difficulties. Problems are likely to occur when the person either (i) has no alternative coping mechanisms to using substances or problematic behaviours, and/or (ii) the person's base-line state in sobriety itself is unpleasant or distressing, and so they have no alternative but to engage in these behaviours.

- **habit**, where the repetition of the behaviour has caused the brain to make automatic associations between the substance and one of seven types of trigger: people, places, things, times, situations, weather, or positive emotions.
- **discontentment,** the person's fundamental and essential human needs are not being met (typically the interpersonal ones). The person may be having urges to use a substance as a way of coping with the feelings of discontentment, or because they are using the drug itself as a substitute object of attachment.
- **and biofeedback,** here the person's brain is misunderstanding signals it is receiving either by confusing drug withdrawal for something that feels very similar, or by confusing craving for something necessary (e.g. water) with craving for alcohol or food.

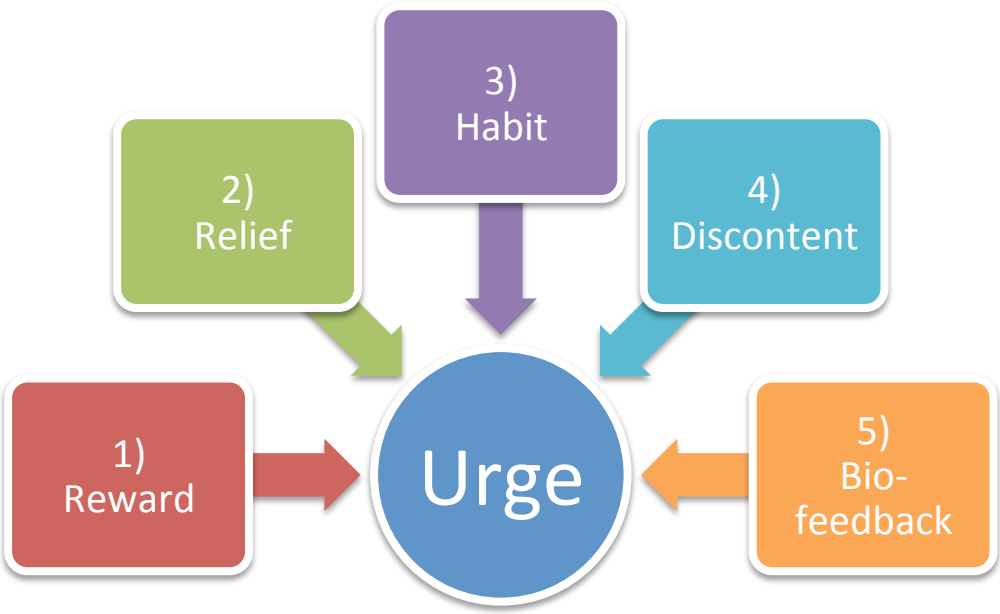

Figure 2 - The five key types of psychological trigger

Most substance use is characterised by episodes of intoxication followed by days, weeks, or longer periods of sobriety, and the above five trigger types adequately explain most people's substance-using behaviour, whether it is problematic, or it is still within social and health norms.

However, there are also those who are 'top-up' consumers of substances, such as the person who needs to smoke first thing in the morning; those who uses amphetamines every day; people who cannot function without a

couple of cups of coffee; or those who need a morning and evening dose of heroin in order to feel comfortable.

Then there is also the person for whom, once they start drinking, they cannot control how intoxicated they get. These people often or usually end up more drunk than they had intended, driven by a seemingly insatiable thirst.

These patterns are accounted for by the last two types of trigger described next, and which are physiological in origin.

2.2 - Physiological Triggers

The previous section focussed upon five psycho-social, learned classes of motivator for substance use as well other compulsive or addicted behaviours. These can occur when the person is clean and sober, as well as when they are in a using episode.

However, there are also two physiological drivers specific to substance use only, and these only occur when the person is currently using. These are 'withdrawal/dependence' (the 6th type of trigger) and 'substance-induced' (the 7th type).

2.2.1 - Dependence/Withdrawal

The term 'dependence' is commonly used to describe some patterns of substance use, and there can be lack of clarity about the difference between physiological dependence, addiction, and psychological dependence.

Psychological dependence describes a person being reliant upon substance use or some other behaviour as their primary and usually only available psycho-social coping mechanism, particular regarding the relief and discontentment triggers described earlier.

Physiological dependence describes a person's body chemistry which has adapted to the continued presence of a substance. The physiologically dependent person not only needs increasing amounts to get their desired effects, but they also experience considerable or even life-threatening symptoms when their blood concentration levels of the substance drops below a critical level. Physiological dependence is central to the medical understanding of problematic substance use, and although the mechanisms behind this process are complex and not fully understood, the following description offers a simplified approximation.

Addiction is a distinct concept from both psychological and physiological dependence and will defined later in this chapter. However, it is very common for all three to be present in a client, which may be why they may have been mistakenly used interchangeably.

How physiological dependence occurs

Most biochemical systems in the body operate within an optimal range, and the body ensures this through a process called 'homeostasis'. Psychoactive drugs push certain aspects of the person's biochemistry out of this optimal functioning range. For example, alcohol depresses the person's arousal state, slows their neurological functioning, and reduces their core temperature. Cannabis relaxes and reduces motivation, and can cause the person to fall asleep; and heroin relaxes the muscles, slows the breathing, and dries up the mucous.

When there is a period of sustained substance use over a period of time (usually daily use for longer acting drugs such as heroin, or multiple times per day for short acting drugs like nicotine or cocaine), the body recognises that it is being pushed consistently out of its expected functioning range. As a result, it launches counter-measures to offset the effects of the drug and restore homeostasis. So in the case of daily alcohol use these could include producing more stimulant chemicals and less natural depressant chemicals, 'speeding up' neurological functioning, and warming the body.

This process of launching countermeasures in response to prolonged exposure to a drug is called 'neuro-adaptation'. These countermeasures are complex, but the mechanisms are likely to include these three strategies:

- **Reducing the production of some of the chemicals that the substance is mimicking**; so regular caffeine users may produce less of the body's own 'natural stimulants'. As a result, they may find it harder to wake up in the morning without a coffee. Regular cannabis users may produce reduced levels of natural 'sleep chemicals', and so find it difficult to fall asleep without a smoke.
- **Increasing the production of natural chemicals that offset the substance's effects**; if the first strategy is not enough, the body may need to actively counteract the substance being used. So this could result in more natural stimulants being produced if the drug is a depressant like alcohol or heroin, or more natural depressants being produced where the drug is a stimulant like amphetamines or caffeine.
- **Increasing speed and efficiency with which the body is able to metabolise and/or excrete the drug**; alongside the first

and/or second strategies, the body may learn to clear the drug from the blood more quickly. For example, the liver of a regular drinker produces more amounts of alcohol metabolising enzymes than a non-drinker and these can be identified through a liver function test.

Tolerance

The consequence of these countermeasures is that person will need more of the substance to get their desired effect (i.e. push their brain and body out of homeostasis). This is because more and more of the substance's effects are being offset by the countermeasures.

At this point, the person is said to developing 'tolerance' to the substance, e.g. they may need to increase the amount they drink from a couple of glasses of wine, to a bottle, in order to get the same degree of effect. As long as the increase is slow and steady, tolerance can increase so the person is using quantities that may be harmful or even fatal to a non-user.

This is especially the case for drugs like opiates that have low toxicity, i.e. they do not *directly* cause damage to the body. However, for the more toxic drugs (like alcohol or nicotine which can directly damage the body), a ceiling effect is often observed and it is rare to see a client who can tolerate more than four or five litres of wine in a day, no matter how long they have been drinking.

Cross-tolerance can occur to related drugs of a similar class (e.g. diazepam and alprazolam). It may also be found where drugs have similar mechanisms of action; for example, a regular and heavy drinker may develop tolerance to diazepam, a benzodiazepine with some similar effects to alcohol.

Withdrawal

When a physiologically dependent person abruptly ceases use there can be significant physiological consequences. With nothing now to offset the body and brain's countermeasures, they are 'revealed', and are experienced as unpleasant or painful symptoms, commonly referred to as 'withdrawal'. Being *counter*measures, these symptoms are usually the opposite to the substance's effects, and the table below illustrates this, with example of drug effects, the body or brain's countermeasures to that effect, and the withdrawal symptoms experienced.

Table XX Examples of substance effects, countermeasures, and withdrawal symptom.

Substance's Effect	Countermeasure	Withdrawal Symptom
Alcohol		
Slower Neurological Functioning	'Speed up' nervous functioning	Tremors/ Seizures
Reduce core temperature	Increase heat production	Sweating
Cannabis		
Reduces motivation	More natural stimulants	Restlessness
Causes sleep	Not produce 'sleep chemicals'	Difficulty falling asleep
Heroin		
Depressed Arousal	Increase arousal	Agitation
Muscle relaxant	Increase muscle tone	Cramps

Withdrawal can often exacerbate other pre-existing issues that the person may be experiencing. For example, people commonly commence taking benzodiazepines for anxiety. However, if they become dependent through daily use of 2 to 3 weeks or more, then when they stop they will enter withdrawal and can experience even higher levels of anxiety than before.

The term 'withdrawal' itself is a misnomer, as the person cannot feel the substance leaving their body (that process is painless and not noticeable). Instead, the painful symptoms are the brain and body's countermeasures, and these take a few days to reverse and return to substance-free homeostasis. Therefore, 'reversal of neuroadaptation[44]' is the correct name for this process, however the term 'withdrawal' is so widespread in treatment services that it will continued be used in this manual.

For most substances it can take 4-6 days for homeostasis to return. For some long-acting drugs (e.g. methadone or diazepam) this process can take longer, and for short acting drugs (e.g. caffeine or nicotine) withdrawal is usually quicker. For alcohol and benzodiazepines these symptoms can be life-threatening and can trigger seizures and other problems (e.g. Delirium

[44] Kenny, P., Swan A., Berends, L., Jenner, L., Hunter, B., and Mugavin, J. (2009) *Alcohol and Other Drug Withdrawal: Practice Guidelines 2009* Fitzroy, Victoria: Turning Point Alcohol and Drug Centre

Tremens) and so withdrawal from these substance must always be medically supervised.

Withdrawal-triggered urges

Withdrawal can be very uncomfortable or painful and can progress rapidly in just a few hours. The person's brain, in response to this increasing distress, learns to generate large amounts of motivation allievate this distress by drinking/using, and this is the sixth type of trigger.

Example of Physiological Dependence trigger (type 6):

Kim was a 28 years old who had been dependent upon heroin. Some time into his recovery, he was asked at what point he knew he was hooked. He replied that this was easy for him to recall. It was about four years previously, and he remembers that morning waking up with aches and pains and sweats. He had been using heroin for a few months, but had stepped up to daily use over the last two weeks. That morning he felt so unwell that the last thing he wanted to do was to get out of bed and go and use drugs… he just wanted to curl up and wait for his cold to pass.

His mate, with whom Kim had been using, called wondering where he was. When Kim told him that he was unwell, his mate had replied "you aren't sick, you're hanging out (meaning in withdrawal). Have a taste – that will fix you up". Although the last thing Kim wanted to do was to use drugs, but with his friend's persuasion, he agreed. Within a few seconds of the injection, Kim felt restored to his normal self, and from that moment on, whenever he felt withdrawal symptoms, he described how he experienced an overwhelming compulsion to follow through and use.

Carly could not get going in the morning without a drink. She would wake up shaking, feeling severe nausea, with the sheets wet from sweating in the night. Carly was just 28 years old, but already was alcohol dependent.

She described how she would have to drink a mug of wine first thing in the morning, but would often throw it straight up. This process may be repeated three or four times until she was able to hold it down. She would then brush her teeth to try to mask the smell, and drive into work. At work she would hide a bottle in her desk and make two or three trips to the bathroom to drink. She never got drunk at work, however she needed to maintain a base level of intoxication in order to prevent withdrawal.

Dependence

As a result of **tolerance and withdrawal, it is said that the person is physiologically dependent upon the drug**. In other words, they now need the drug in order just to feel 'normal'. A dependent smoker smokes so that they can feel like a non-smoker. An alcohol-dependent person will need a minimum amount of alcohol just to stop shaking and vomiting, and a heroin-dependent person will need a hit to stop the sweating and cramps.

The term 'dependence' is widely used in addiction, however for the purposes of this text, this term is used only to refer to **physiological dependence**, the process outlined above, rather than to a **psychological dependence** upon the effects of the drug.

This is not to suggest that physiological dependence is more serious than psychological dependence. Rather, from a treatment point of view, psychological dependence is accepted to be more difficult to address and often requires extended and intensive interventions. Most people will learn at some point how to complete a withdrawal (breaking their physiological dependence), however learning without any substances to cope with the world, its people, and their feelings can be a tougher and longer journey.

Dependence versus Addiction

Some people are physiologically dependent upon a medication that has the potential for addiction, but have no difficulty stopping. For example, a person may be prescribed high strength opiate-based pain relievers after complex surgery, but they may not go on to develop problems related to use and control of the medication. Once the issue for which they were prescribed the medication has been addressed, they are able to stop.

Conversely, not all people with problematic substance use are physiologically dependent. For example, many people compulsively use in response to the five types of psychological trigger described above, however because their use is not daily they have not developed physiological dependence.

It is not clear why this difference occurs, and the reasons are likely to vary from individual to individual, however three things may play a factor in the opiate medication example above.

First, it may be influence by the degree to which they are using the medication for mood-altering purposes, rather than solely for pain management. Second, the person is likely to be slowly stepped down gradually so they never experience full withdrawal symptoms. Third, apart from when they are in severe pain crisis, the person may not have been allowed to self-administer the drug, rather it was administered continuously through a drip, or by nursing staff on a schedule.

Nonetheless, dependence and problematic substance use do have a significant area of overlap, however it is important that it be recognised that they are not interchangeable concepts.

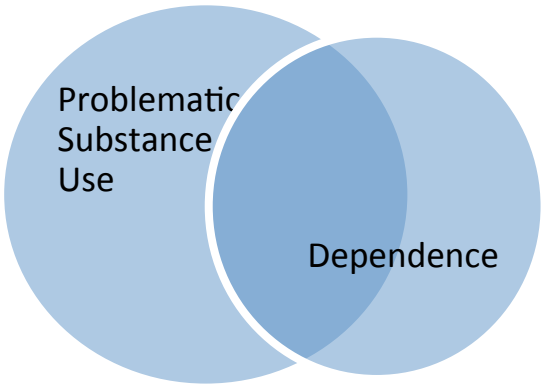

Figure 3 - Illustration of the overlap of problematic substance use and dependence.

Whilst tolerance has been described for some non-substance compulsive behaviours (e.g. sex, gambling, or shopping), this may be more related to the idea of habituation, where an incentive can lose its appeal the more it is experienced. Withdrawal-like symptoms when ceasing gambling or compulsive sexual behaviour have also been described, however these may reflect the 'masked' emotional needs previously being met by the addicted behaviour, as well as motivational frustration [45] [46].

It is likely that tolerance, withdrawal, and dependence will occur for some food types, especially fat, salt or sugar if consumed in excessive quantities on a daily basis[47]. Because their body has adapted to the increased levels of this nutrient, if consumption levels suddenly changes (e.g. the start of a healthier eating plan), the person may experience withdrawal symptoms for a few days until homeostasis is restored.

Treatment for dependence involves either withdrawal from the substance in question, or replacing it with a substitute that is either a longer-acting or a controlled-release version (substitution pharmacotherapy). Both of these options are discussed in detail in Chapter 7 - Medical AOD Interventions.

[45] Blaszczynski, A., Walker, M., Sharpe, L. & Nower, L. (2008). Withdrawal and tolerance phenomenon in problem gambling. *International Gambling Studies*, 8(2), 181-194.

[46] Block, J., (2008) Issues for DSM-V: Internet Addiction. *Am Jour of Psychiatry*, 165, 306-307.

[47] Garber & Lustig, (2011). Is fast food addictive? *Current Drug Abuse Review* 4: 146-162

Summary

Sustained use of a substance can result in tolerance, whereby the brain and body work to offset the effects of the drug with countermeasures including: decreased production of the body's own natural analogue; increased production of the natural opposite; and/or improved metabolism or excretion of the substance itself.

As a result of **tolerance**, the person needs to use a greater amount of the substance in order to achieve their desired effect, and so consumption may increase. If they stop consumption, they experience **withdrawal** symptoms, which are the body's countermeasures being revealed. These symptoms can be very uncomfortable or even life threatening, and generate very strong levels of motivation to continue substance use.

A person who experiences tolerance and withdrawal is said to be physiologically **dependent** upon the substance. They will need to maintain a minimum blood concentration level just to feel normal.

Although many people with addictions are also physiologically dependent upon the substance, the two do not always occur together.

2.2.2 - Substance-Induced

When someone experiences an urge to use a drug, consumption of that drug usually satisfies him or her until the next trigger occurs. This describes the social use of substances, as well as problematic use including heroin, tobacco, cannabis, and alcohol. Once the person is experiencing their desired level of intoxication, the urge to use reduces or dissipates until the substance's effects start to wear off, at which point a new urge may start to develop.

However, there is subset of problem drinkers in particular, whose consumption does not fit this pattern, and who usually consume well beyond their pre-intended amount. They report the episodic uncontrollable binges typical of this seventh type of trigger, which may or may not be interspersed with periods of abstinence.

Disinhibition or Compulsion?

There is no definitive explanation for this phenomenon and there are likely to be different causes for different people. Of course, some people are intentionally drinking to severe intoxication in the first place. This may be

particularly common amongst young adults experimenting, severely depressed people, or in environments such as some sporting clubs where heavy drinking are encouraged. However, this is a behaviour that most adults grow out of because of the increasing costs and problems associated with severe intoxication.

A second explanation relates to young adults who are relatively inexperienced in their alcohol consumption. Although they are becoming severely intoxicated, they did not necessarily intend to drink to that point. They may have actually stopped drinking at their desired level, but, being inexperienced, they had not yet learned that there is alcohol in their stomach that is still to be absorbed. However, this group usually learn to moderate their drinking.

A third possible explanation suggests that this pattern is the result of the disinhibiting effects common to many recreational substances. Particularly common again amongst young adults, this disinhibition can result in the person continuing to drink or use until the supply runs out. The person's consumption may to continue whilst supplies are available, however once their substance runs out, they are comfortable just stopping.

However, for some people, as they become increasingly intoxicated, their desire to drink actually escalates, becoming an active compulsion (rather than being satiated). If supplies run out, they may described being compelled to find more alcohol, often drink driving or resorting to theft.

As a result of this compulsion, this group usually overshoot their intended level unless there is something to block them. The extreme amount of alcohol that they consume can result in 'blackouts'. These are not periods of unconsciousness – rather the person seems to be lucid and functional. However, in an alcohol-induced blackout the person is no longer creating and storing memories; the following day they will have no memory of many hours of the binge, during which they may have engaged in high-risk behaviours.

The person may try many strategies to try to control how much they drink and may have varying degrees of success. However, controlled drinking is not usually enjoyable for them; this type of person finds that they cannot ***both control and enjoy*** their drinking.

For many, this compulsion occurs whether they are happy or sad, and is unrelated to other motives for drinking, and is unrelated to whether or not they are dependent drinkers. Furthermore, this reaction can get stronger over their drinking career, and that the blood alcohol level required to trigger this reaction may decrease, so that even one drink may set them off on a binge.

This therefore is the seventh type of trigger for substance use – that the presence of alcohol itself in a person's blood stream triggers a compulsion to consume more. An example of this type of trigger is:

Kevin is a 32-year-old male who described the following incident that was typical of what happens whenever he drinks.

He came out of his blackout in a car at a petrol station. It was night-time, and he neither recognised the car, nor the petrol station… but he was behind the wheel and apparently was the driver. The last thing he remembered was going out for a couple of drinks six hours earlier, with no intention of making it a big night.

Turning, he saw that there were three of his mates in the car with him. He asked them where they were and what they were doing – they replied that they were not sure, they were just going along for the ride and that this was his idea. He noticed that one of his mates was covered in blood and asked what had happened. His mate replied, "Don't you remember – you punched me… but I got you back good". Kevin looked in the rear view mirror to see his own face was bruised with a cut. Kevin promptly threw up outside the car, and once he had finished retching he remembered that the only thing that mattered was to get another drink into him.

This type of reaction to alcohol does not always result in a blackout, nor is it always as intense as the example described above. There are factors that can sometimes, but not always, moderate the response, including:

- controlled drinking strategies,
- having to stay in control for another person or some other very important reason,
- tiredness or illness,
- lack of money,
- lack of access (e.g. having run out but the bottle shop is closed).

However, many clients who experience this type of compulsion describe that it is usually easier for them to have nothing to drink, than to have a couple of drinks and stop.

The cause for this response to alcohol is not yet understood. Theories posited so far include a 'priming dose effect', which has been found in a few classes of drugs[48]; genetic variations (e.g. the gene RASGRF2 may make some people find alcohol more rewarding than others[49]); or endogenous alkaloids (the effects and presence of tetrahydroisoquinoline mediating

[48] Curran, H. V., Bolton, J., Wanigaratne, S., & Smyth, C. (1999) Additional methadone increases craving for heroin: a double-blind, placebo-controlled study of chronic opiate users receiving methadone substitution treatment. *Addiction*, 94, pp665 – 675.

[49] Stacey, D,et al (2012) *RASGRF2* regulates alcohol-induced reinforcement by influencing mesolimbic dopamine neuron activity and dopamine release. *Proceedings of the National Academy of Sciences of the USA*.

alcoholics' response to alcohol[50]). Irrespective of the cause, it is clear from observation that once this group hit a certain blood alcohol level, a compulsion is triggered and this phenomenon is now receiving growing recognition within the literature[51].

This seventh trigger type corresponds closely to the 'allergic reaction' first described in the 1930s by Silkworth [52] - the medical director of a New York clinic which specialised in the treatment of alcoholism. He described a subgroup of problem drinkers who, once they take a drink, experience an overwhelming craving or compulsion to keep drinking. He proposed that this reaction is involuntary, and is triggered by the presence of alcohol in the bloodstream - something that that never occurs in 'normal' drinkers. As a result, even if they can control their consumption, they are unlikely to find controlled drinking enjoyable.

This seventh type of trigger formed the one of the two criteria in Alcoholics Anonymous's definition of the alcoholic. The other criterion is that the person has a personality structure that makes sobriety itself unsustainable - the chronic relief and discontentment type triggers described earlier. AA further specifies that an alcoholic may or may not be a continuous hard drinker (i.e. may or may not be dependent - the sixth type of trigger described earlier).

The person's inability control their rate of consumption once they have had the first drink is behind AA's notion of powerlessness over alcohol, and the slogans: 'it's the first drink that gets you drunk', or 'you take a drink; the drink takes a drink; the drink takes you'.

However, those people who report that this reaction to alcohol is not under their voluntary control may first have to manage it through very low level drinking. If though, controlled drinking strategies have proven unsuccessful, such as those for whom the 'switch' has become very sensitive, then complete abstinence may be indicated. Note that AA does not profess abstinence for all types of problem drinker; rather it only recommends abstinence for those with this seventh type trigger, and for whom other methods have failed.

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[50] Haber, H., Dumaual, N., Bare, D., Melzig, M., Mcbride, W., Lumeng, L., Li, T. (1999). The quantitative determination of R- and S-salsolinol in the striatum and adrenal gland of rats selectively bred for disparate alcohol drinking. *Addiction Biology*. 4 pp181-189,

[51] Hodgson, Rankin & Stockwell. (1979). Alcohol dependence and the priming effect. *Behaviour Research and Therapy*. 17 pp379-387

[52] Alcoholics Anonymous (2001) *Alcoholics Anonymous, 4th Edition*. NY: AA World Services

Summary

For some drinkers, consuming even a small quantity of alcohol can trigger an active compulsion to drink beyond their intended level of intoxication. This does not occur in all problem drinkers, however for those who do experience this reaction, it is likely to occur more often than not. Where they are able to still control their drinking levels, it is unlikely that they would be able to enjoy controlled drinking.

Individuals with this reaction to alcohol and for whom controlled drinking strategies have proven unsuccessful may require abstinence.

2.3 - More About Triggers

The urge to use substances, whether it is recreational, problematic, or addicted, can be triggered by one or more of seven primary types of trigger in the figure below.

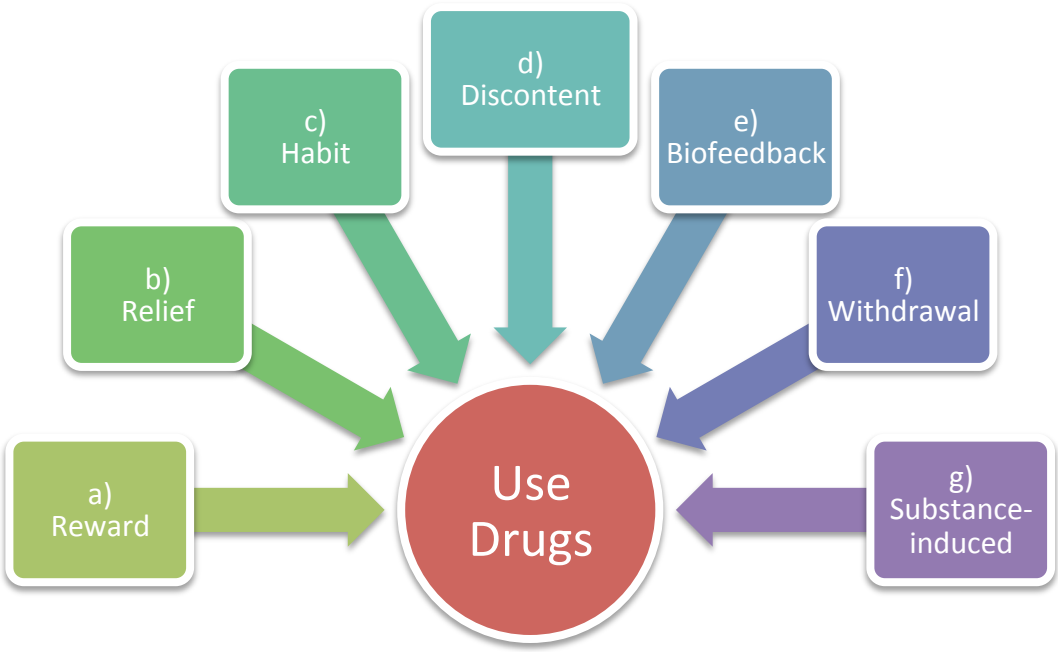


Figure 4 - The seven primary drivers of substance use.

Having more complex needs, and having a longer substance-using career, makes the person more likely to have several of these types.

Four of these triggers are psycho-social in origin and apply to substance use and non-substance using behaviours (pleasure, relief, coping & discontentment).

The other three are physiological and relate to substance use only. The 'confused' type seems to be more relevant to alcohol and heroin, and the 'substance-induced' seventh type seems to be more specific to alcohol.

Effective treatment identifies which types of trigger are present and each type requires a different therapeutic intervention.

These seven trigger types seem to integrate into a single framework most of the key theories behind substance using behaviour as illustrated in the table below.

Table xxx: mapping the seven trigger types against the most common models of substance use and addiction.

	Moral	Psychosocial	Medical	AA
1) Pleasure	X	X		
2) Relief		X		X
3) Habit		X		
4) Discontentment		X		X
5) Confused		X		
6) Dependence			X	
7) Substance-induced				X

Questions for Supervision:

What are my biases in terms of theories of substance use and addiction? Which of these do I accept, which do I dismiss? Why?

Taking the example of a specific client, think about which of the above seven factors are likely to be influencing their substance use?

1. Reward
2. Relief
3. Habit
4. Discontented
5. Confused
6. Withdrawal
7. Substance-Induced

2.4 - Addiction

The size of the urge that a person may experience is usually proportional to the size of the trigger. For example, the more anxious a person may be feeling, the stronger their urge for a drink or cigarette.

Furthermore, where two or more craving triggers are occurring simultaneously (e.g. feeling anxious – relief type - and it is Friday evening-habit type) then their effects are likely to compound, thereby increasing the size of the urge to use.

With most substance use, there are costs, and once these costs start to outweigh the benefits, then the substance use becomes problematic, and in most people, it is moderated or stopped altogether, usually with no clinical intervention.

Where the substance use is being exacerbated by problems, discontentment, or physiological dependence, then interventions can help to address the triggers (e.g. anxiety, social disconnectedness, or withdrawal). Once these triggers are addressed, the substance use ceases or returns to non-problematic levels.

However, clinical experience suggests that there is a significant group of people for whom their compulsive use is not related to 'underlying issues'. For example, not all addicted cigarette smokers have co-existing psychological or other problems. Many are just 'addicted' and cannot control their smoking. When finally they are able to quit for good, this also does not necessarily include any psychosocial interventions or therapy.

There are also those for whom the size of the urge can be highly disproportionate to the size of the trigger (e.g. having a devastating relapse simply over a parking ticket or an argument). Furthermore, even severe consequences (e.g. the loss of custody of children, incarceration, or risk of death) fail to offset the limited benefits and moderate the behaviour.

> *Jake had been a cigarette smoker for 25 years, and had been trying to quit for the past 15. The longest time smoke-free he had achieved was about 2 months, but had found it very difficult. His current attempt had been 6 weeks and things had been going reasonably well. He was enjoying the extra money, as a large amount of his disability pension went on tobacco. He was feeling healthier and was beginning to notice a significant increase in energy levels.*
>
> *However, one day when he was feeling positive, he returned to his car from the shopping only to find that he had gotten a parking ticket. Although he did not understand what then happened, he reported that within minutes he had bought a packet of cigarettes and was back smoking again*

> *Kathy was a 19-year-old female referred to outreach services by child protective services because of her heroin use. She lived with her mother who was supportive, and had just been reunited with her 2-year-old daughter on the proviso that her mother was always home supervising the relationship.*
>
> *Kathy was required to provide urine drug screens on a weekly basis and had regained temporary custody of her daughter after having produced several weeks of clean screens. She was clearly a devoted mother, and had a warm and supportive relationship with her own mother and step-father.*
>
> *Kathy describes no knowledge of her own father, and no longer had a relationship with the father of her child. She reported no significant trauma in her past, rather describing how her heroin use commenced through peer experimentation.*
>
> *She stated that she was determined to stop and could never see herself returning to use.*

Two months later Kathy relapsed simply in response to seeing her dealer's car drive past and this, as expected, resulted in her losing custody of her daughter who was placed into care. She was utterly distraught and had fallen into a cycle of intensive use.

Her feelings of low-self esteem were heightened by her belief that she must be a terrible and selfish person for putting drugs ahead of her own daughter.

Kathy had known the consequence of using, and this had kept her clean. Furthermore, she was enjoying being clean, and the positive relationship she had been developing with her mother. Yet, for a brief moment and in response to a mild trigger, she did something that was to have a devastating effect upon her life.

For people like Kathy, substance use has developed beyond a simple trigger and urge model. It has become an involuntary compulsion in its own right that seems to temporarily highjack control. For this group, rather than their substance use being driven by underlying causes, they seem to have developed an addiction in its own right, which perpetuates the behaviour whether they are feeling good or bad, and no matter the consequences.

A helpful metaphor here can be diabetes. At first, dealing with the underlying causes (eating habits) can control the diabetes. However, once the person crosses a critical point, their diabetes becomes an illness in its own right and weight loss and dietary management (addressing the triggers) are no longer an adequate treatment on their own. Their diabetes now is an illness in its own right, and the person will also need to be regularly checking their blood sugar and injecting insulin.

2.4.1 - Additional Motivating Force

Many people relate to this seemingly irrational loss of control over their substance use. They experience compulsive urges that are not proportional to either the trigger or the reward, and which do not seem to be blocked by devastating costs, as in Kathy's story above.

For many it is not just big events that have triggered a relapse; rather it is so often something trivial that resulted in an about turn. They describe how they felt a compulsion to act; that the negative consequences which had been so motivating just hours earlier, now seemed to be irrelevant; and how they could not recall the pain and suffering that resulted from their last relapse.

This behaviour also cannot be explained simply as a matter of mental discipline and impulsivity. Many people with loss of control over their substance use can still display very high levels of mental control, restraint and discipline in other areas of their life (e.g. work, sport etc.).

This subset of problematic substance users, the group who have seemingly lost control of their use, share the following experiences:

- the strength of their urges is not proportional to the size of the trigger – even minor triggers can result in overwhelming urges to drink or use,
- addressing the key triggers for their substance use does not result in their substance use stopping,
- increased costs associated with the behaviour do not seem to moderate the behaviour; rather they can sometimes have the opposite effect,
- reasons to change that for most people are irrefutable, such as loss of children, incarceration, or high risk of immediate death, consistently fail to motivate or sustain change.

2.4.2 - Craving

In order to understand what is happening, it is helpful to recognise that there are many decision-making pathways in the human brain. The majority of human behaviour is moderated through the first pathway, by the neo-cortex or 'human brain'. Here sensory information is assessed against emotional responses, learned experience, and other factors, and a preferred behavioural response is the result.

Humans also have a second mechanism for generating motivation that can bypass the neo-cortex, and this occurs directly within the primal centres of the 'animal brain'. This is the way that most animals' food and sex-seeking behaviour is controlled, and involves the craving mechanism.

Craving may be what motivates human infants, as well as most animal species to engage in many key survival behaviours. However, for reasons that are not yet fully understood (probably because there are many possible pathways) this mechanism can mistakenly become focussed upon substance-using or other addicted behaviours. This could be a key difference between those with loss of control of their substance use (i.e. addictions) compared with the broader group of problematic substance users.

Cravings are a distinct state of physiological arousal[53] and have long been understood to be a central defining feature of addiction[54]. They are common across both substance (e.g. alcohol) and non-substance related

[53] Robinson, T., & Berridge, K., (1993) The neural basis of drug craving: an incentive-sensitization theory of addiction. *Brain Research Reviews*. 18, pp247-291

[54] Tiffany, S., (1997) New Perspectives on the Measurement, Manipulation, and Meaning of Drug Craving. *Human Psychopharmacology*, 12, ppS103 – 113

addictions (e.g. gambling) and can occur in response to any of the seven types of trigger described in the previous section. The literature also shows a well-established link between the frequency of cravings and the likelihood of a relapse[55].

Whilst cravings have been discussed extensively[56] [57], there is variability in how the term is used[58], and so for the purposes of this text, cravings will be considered as follows:

> *"A state of physiological arousal and psychological functioning generated by the inner brain[59]. This state is not a direct consequence of substance use or withdrawal[60] and has the following three key characteristics:*
>
> 1. *an increasing sense of restlessness and anxiety resulting in a compulsive need to do something[61]*
> 2. *an uncontrollable obsessive-like focusing down of thoughts onto performing the behaviour in question[62]*
> 3. *as the urge becomes a craving it disrupts the striato-thalamo-orbitofrontal circuit resulting in reduced:*
>   a. behavioural inhibition,[63]
>   b. ability to incorporate emotion to evaluate pros and cons (e.g. conscience and rational decision-making)[64], and
>   c. expectation of reward and punishment (consequential thinking)[65].

---

55 Litt, M., Cooney, & N., Morse, P., (2000) Reactivity to alcohol-related stimuli in the laboratory and in the field: predictors of craving in treated alcoholics. Addiction, 95, pp889 – 901.

56 Wise, R., (1988) The Neurobiology of Craving: Implications for the Understanding and Treatment of Addiction. Journal of Abnormal Psychology. 97, pp118-132

57 Shiffman, S., Elash, C., Paton, S., Gwaltney, C., Paty, J., and Clark, D. (2000) Comparative efficacy of 24-hour and 16-hour transdermal nicotine patches for relief of morning craving. *Addiction*, 95, pp 1185 - 1196

58 Sinha, R., & o'Malley, S., (1999) Craving for alcohol: findings from the clinic and laboratory. *Alcohol & Alcoholism,* 34, pp223-230.

59 Koob, G., (1999) The role of the striatopallidal and extended amygdala systems in drug addiction, *Ann N Y Acad Sci,* 29, pp445-60

60 Robinson, T., & Berridge, K., (1993) The neural basis of drug craving: an incentive-sensitization theory of addiction. *Brain Research Reviews.* 18, pp247-291

61 Robinson, T., & Berridge, K., (2000) The psychology and neurobiology of addiction: an incentive sensitization view. *Addiction,* 95, ppS91-S117

62 Modell, J., Glaser, F., Cyr, L., Mountz, J., (1992) Obsessive and compulsive characteristics of craving for alcohol in alcohol abuse and dependence. *Alcoholism: Clinical & Experimental Research*. 16, pp272-274.

63 Lubman, D. I., Yücel, M. and Pantelis, C. (2004), Addiction, a condition of compulsive behaviour? Neuroimaging and neuropsychological evidence of inhibitory dysregulation. *Addiction*, 99, pp1491–1502

64 Ibid

65 Volkow, N, Fowler, J, (2000). Addiction, a disease of compulsion and drive: involvement of the orbitofrontal cortex. *Cerebral Cortex,* 10, pp318-325.

In practice, this suggests that when a craving is triggered, the person enters an altered state of consciousness. Instead of operating in the outer, rational, 'human' part of the brain, control has shifted to the instinctual inner brain areas. The person may report that, depending upon their drug of choice, the obsessive thoughts mean that they can almost 'taste' the beer or alcohol, or feel a tingling at their injection site, or feel the smoke in their lungs.

They become seemingly powerless to resist, and it is this neurological shift that may explain why cravings are so powerful, and can result in seemingly irrational 'choices' and behaviours that violate the person's own moral code.

Once the person has performed the behaviour, the craving dissipates and rational thought returns, accompanied all too often by feelings of regret, remorse and confusion around what just happened.

This process whereby control is cycling from the rational human part of the brain, to the instinctual animal craving centre, can result in the person feeling as though they have 'two minds', and this is the characteristic pattern of addiction.

Therefore, for the purposes of this manual, addiction can be defined as:

> *"Any behaviour for which a person experiences cravings, excluding normal human primal needs expressed within biological and cultural norms."*

As a result, although treatment for most problematic substance use would focus upon addressing the triggers, in addiction, treatment also needs to include strategies for how to manage cravings themselves (discussed in Chapter 8 - Managing Urges and Cravings). This is because of (1) in addiction all the 'small' triggers can be a risk of relapse but it is unrealistic to be able to address them all in advance, and (2), some triggers take time to address (e.g. emotional regulation skills), and so in the interim the person will still experience cravings in response to those triggers.

Even cravings, like urges, do not always result in the person following through and using their drug of choice. This is because there are moderating factors that can offset the urge (in problematic substance use) or the craving (in addiction). Of course, these factors need to be much stronger in the case of addiction than in the case of just problematic substance use. Seven of the most significant moderating factors are discussed in the next section.

2.4.3 - Summary

For most people, any of the seven types of trigger described in the previous section can result in the urge to drink or use drugs. This urge is

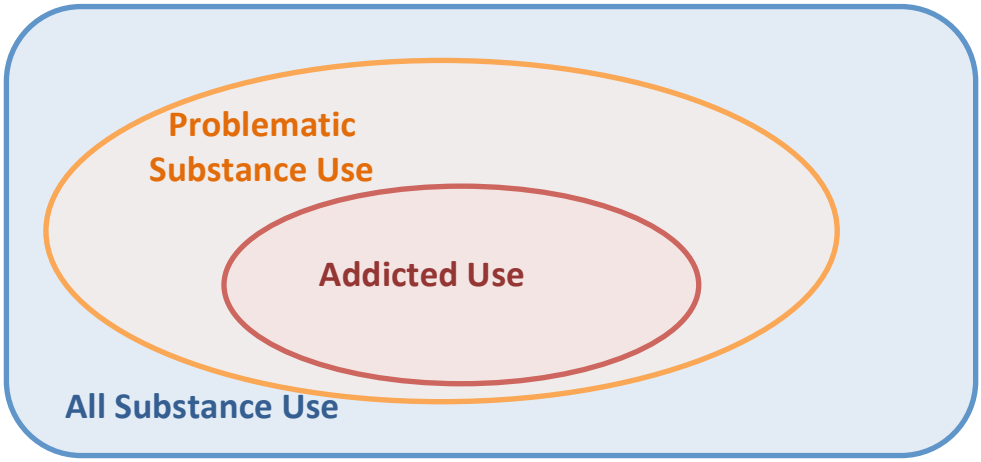
proportional to the trigger size, and is assessed by the 'human' brain (neocortex) against other factors such as costs and consequences.

Once the subjective costs and consequences begin to outweigh the subjective benefits, the behaviour may be considered to be 'problematic substance use'. At this point it may be either moderated or cease altogether, although some professional help may be necessary where there are particularly strong triggers (e.g. severe anxiety).

However, and for reasons not fully understood, in some people these same triggers generate cravings rather than just urges. The size of these cravings is not always proportional to the size of the trigger, with even minor triggers resulting in overwhelming cravings. This results in a loss of control over substance use and can be considered to be what differentiates addiction from problematic substance use.

It can be suggested that all problematic substance use is a subset of substance use in general, and addicted use is a subset of problematic substance use as per the figure below.

Figure 5 - The relationship between different levels of substance use



Craving is an altered state of physiological arousal, originating from the inner 'animal' brain. Craving generates not only a strong compulsion to consume the addicted drug, but it also interferes with the 'human' brain centres responsible for behavioural inhibition, consequential thinking and moral reasoning. This results in the person having dramatically reduced ability to resist the craving.

Treatment interventions that focus solely upon triggers are unlikely to be successful because of (1) the sheer number of potential triggers, and (2) that many of the more problematic triggers cannot be completely or immediately eradicated. Therefore, in addition to work addressing the triggers, in addiction the person also needs to learn to control the craving mechanism, as well as enhancing the moderating factors.

Questions for Supervision

Does my practice with my clients assume that substance use is just a product of motivation, and that if I address the triggers, the substance use will cease?

Am I more comfortable addressing one type of trigger over the others?

Which clients seem to have socially appropriate substance use, which have problematic substance use, and which most likely have an addiction?

2.5 - Moderating Factors

In the previous section it has been suggested that people with substance use problems experience urges or cravings to drink or use, depending upon how far their substance use has progressed. These urges and cravings all require a trigger, however, they don't always result in a person following through and using drugs or alcohol. Rather, there seem to be factors that moderate the person's substance use, making it more, or less likely that they will act on an urge or craving. When treating clients who have crossed the line into addiction, these moderating factors become all the more important, because cravings are much more motivating than urges.

These moderating factors have been found to have a critical role in recovery from substance use, and are central to what has become known as the 'recovery' approach, which includes mutual-aid programs. Seven of the most commonly considered moderating factors are described in this section.

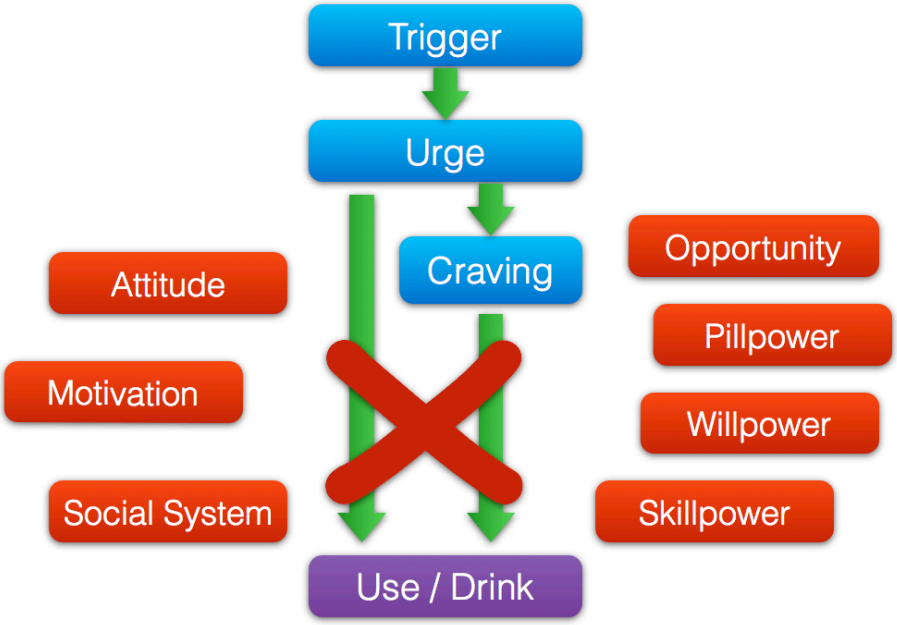


Figure 6 - An example pathway with seven key moderating factors

2.5.1 – Motivation

In order to initiate a change in behaviour, the subjective costs of a person's substance use needs to outweigh the subjective benefits – i.e. they either want to, or need to change.

Motivation is not a sufficient component, but it is an essential component where the person is attending treatment of a voluntary nature. Even involuntary clients, for whom the motivation is primarily external, still need to develop an internal motivational preference if they are to sustain the change after the coercive influence has been removed.

However, positive outcomes are not just about the quantity of motivation, rather they also about the quality of motivation the person is experiencing, and this has an impact upon both their attitude to treatment and the quality of their recovery.

Motivation is a critical component to any addiction or substance use treatment program, and so Chapter 3 – Motivation – focuses upon motivation in general, and also explores specific tools and issues to consider.

2.5.2 – Attitude

Irrespective of the strength of motivation to change, there are three hurdles a person in recovery is likely to have to address. These relate to the attitude the person has around their substance use, change, and treatment.

First, the person needs, at least in part, to be able to acknowledge that their substance use is problematic in terms of not only the costs, but also their ability to control it. Second, they need to be open to the idea of change, and that life without the problematic substance use could become not just bearable, but preferable or even enjoyable in its own right. Third, they need to be willing to make changes to their lifestyle, and any other actions that may be necessary for a successful outcome (e.g. changing peer group, attending counselling, etc.). More about this is discussed in section 3.3 - A Task-Based Model of Motivation.

2.5.3 – Social system

One of, if not the most significant factors indicated in recovery from substance use disorders, relates to the person being connected in a supportive social environment. Most people with substance use disorders are highly reactive to their immediate surrounds, and the significant influence of a counselling session can become offset within minutes or hours by life's crises, other influences, as well as hostile internal dialogue.

Positive role models and an environment where their recovery is encouraged, with affirming interpersonal connections, opportunities to get one's core needs met and building healthy relationships, all greatly impact upon a person's ability to attain and maintain sobriety. These issues are discussed in greater detail in Chapters 10 - Well-being and contentment triggers, 11 – Mutual-aid interventions, and 12 - Working with families and non substance-using clients.

2.5.4 – Access/Opportunity

As well as being a trigger in its own right, one of the most common risk factors for lapsing is having access to the drug itself, (e.g. still keeping alcohol in the house, or another person presenting a opportunity). Whilst some people do successfully sustain their behaviour change with drugs or drug use around them, for many the ease by which they can access drugs is a significant risk factor that is often best avoided. This is discussed in greater detail in section 8.2 - Opportunity and Refusal Skills.

2.5.5 – Pillpower

There are a variety of medications available today that have been demonstrated to have a significant impact upon the urges and cravings people with substance use problems can experience. These are discussed in greater detail in Chapter 7 - Medical AOD Interventions.

2.5.6 - Willpower

Willpower can have many different definitions, but in the context of this manual it will be used to describe a person's ability to maintain voluntary control over their behaviours irrespective of what their thoughts and feelings may be telling them. Some people learn to discipline their minds through meditation, academic study, or other forms of focussed activity. They may have calm and focussed thinking styles by nature. However, others have little control over their thoughts whether this is because they have never learned this aspect of self-discipline, or they have a disorder (e.g. ADHD or mania) that makes it challenging.

There are a variety of factors that impact upon an individual's ability to maintain mental control over thoughts and prevent urges becoming cravings. These are discussed in Chapter 8 - Managing Urges and Cravings.

2.5.7 – Skillpower

Cravings have been identified as a core feature of addiction and central to the person's experience of loss of control. As a result, it can be helpful to learn strategies to identify early warning signs of cravings, and techniques for dealing with them when they occur. These are referred to in this manual as 'skill-power' and some suggested approaches are presented in Chapter 8 - Managing Urges and Cravings.

2.5.7 - Summary

Whether the person is experiencing problematic substance use, or has progressed onto addicted behaviour driven by cravings, there are moderating factors that can inhibit the urge or craving and stop it resulting in a lapse. These include motivation, attitude and opportunity, as well as willpower and skillpower. In many instances though, probably the most significant of all these factors is the social system, being an essential and sometimes sufficient condition for recovery.

2.6 - Substance use, addiction, & moderating factors.

The previous three sections have described a general understanding of substance use, problematic substance use, and addiction. This can be summarised as follows:

1. People experience urges to use drugs or alcohol,
2. These urges can be weak or strong, or anything in between. However, in the case of a person with problematic substance use, these urges are likely to be strong,
3. Urges are proportional to trigger size, and triggers can add together to make stronger urges.
4. Urges usually have one of seven types of trigger:
    1. Reward
    2. Relief
    3. Habit
    4. Discontentment
    5. Confused
    6. Withdrawal
    7. Substance-induced.
5. These triggers can be addressed in treatment, and Chapter 9 - Trigger Prevention - focuses upon strategies that can help to prevent these triggers resulting in urge to use or drink.
6. Urges are moderated by the frontal cortex, so when the cost outweigh the benefits, in most cases, the urge is overruled.
7. Sometimes people experience highly irrational urges.
8. These urges cannot be adequately explained by impulsivity.
9. Cravings are a particular subtype of strong urge that seems to have a different physiological basis, eliciting a modified state of consciousness.
    1. an increasing sense of restlessness and anxiety resulting in a compulsive need to do something,
    2. an uncontrollable obsessive-like focusing down of thoughts onto performing the behaviour in question,
    3. as the urge becomes a craving it disrupts the striato-thalamo-orbitofrontal circuit, preventing rational decision-making through hindering the use of emotion to evaluate pros and cons (e.g. conscience); reducing behavioural inhibition; and blocking consequential thinking.

10. Cravings are not proportional to trigger size so even minor triggers can result in a relapse.
11. Cravings can easily overwhelm the person, and are likely to be a key factor in loss of control, especially where there seem to be overwhelming motivators against using/drinking.
12. For the purpose of this manual, the presence of craving driving the person's substance use can be a clinically useful way to differentiate problematic substance use from addiction.

13. Urges (including cravings) do not always follow through into substance use. This is because there are moderating factors that facilitate or block the behaviour.
14. Because cravings are much more motivating than urges, the role of moderating factors is even more important if the problematic substance use has progressed into addiction.
15. There are seven factors that seem to have a particularly strong effect in moderating substance use. These are
    1. Motivation
    2. Attitude
    3. Social System
    4. Access/opportunity
    5. Pillpower
    6. Willpower
    7. Skillpower
16. Effective treatment needs to target not only the triggers and reasons for using, but also these moderating factors.

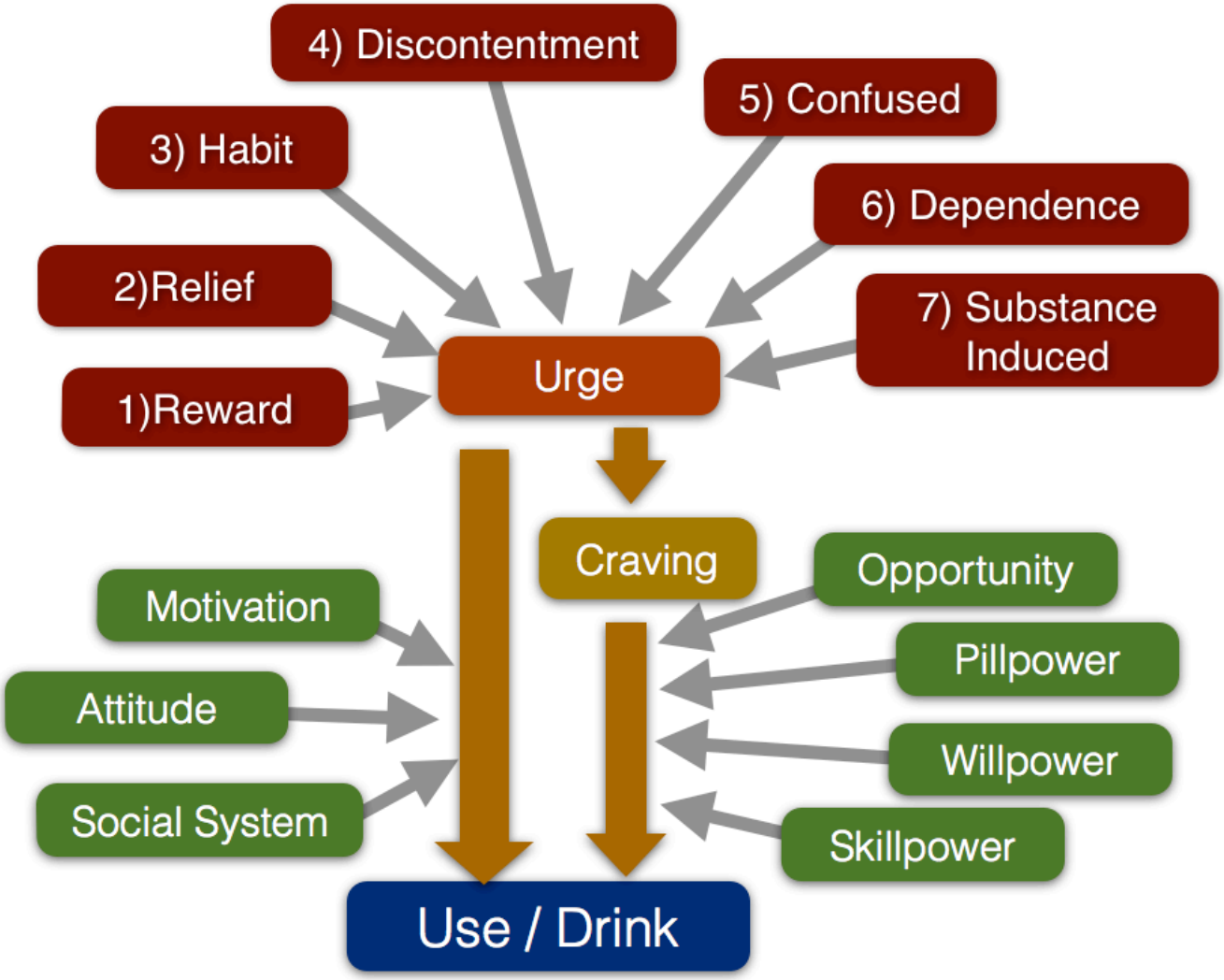


Figure 7 - Four of the most common sources of motivation

10 - Well-being and contentment triggers

To be happy and contented is one of the most sought after goals in life, however, although much research has focussed upon treating and addressing illness, there has been considerably less attention in understanding what are the 'causes' of happiness and well-being. What is for certain though is that, after treating someone for a substance use disorder, they do not automatically pop out the other end, 'happy'.

There are no definitive frameworks and theories either for understanding or for defining happiness and contentment, and it is not likely that any single theory will ever be able to do this. However there are some common principles that have been drawn into a framework. This can be used to help clients with substance use problems to understand what it takes to be happy and content.

10.1 Innate needs

Human beings have innate needs, which, when they are being met, result in a sense of contentment. These were described in 1959 by Hertzberg who called these core needs 'hygiene' factors: essential human needs whose absence motivates, but whose presence has no obvious effect other than to generate contentedness (for example, a safe and secure home will not make a person happy, however not having a safe and secure home will make a person unhappy)[103]. They are things that, when taken away, result in a person becoming dissatisfied and discontented, and motivated to act to get them back.

This motivating state can be a sense of restlessness and emptiness, like an inner hunger or need. If these absent hygiene factors continue to go unmet then the person may become frustrated, irritable, angry, and their mood can become so low that it could be mistaken for a severe depression. However, unlike a truly organic/melancholic depression, once a discontented person's core needs are met, their mood will return to normal.

[103] Herzberg, F., (1959). *The Motivation to Work*, New York: John Wiley and Sons

10.1.1 Core needs and substance use

Some people may not have learned to recognise their primary needs, and so when they experience discontentment, they are left with an uncomfortable or distressing feeling, but with no idea of what they should do about it.

Others may recognise what the need is (e.g. connection to friends), but have barriers to getting it met. These may be intrapsychic (e.g. social anxiety), systemic (e.g. an abusive partner not allowing them other types of social contact) or environmental (e.g. geographical remoteness in the outback).

The resulting discontentment can trigger substance use in a few of different ways.

To mask their discontentment

First, **the person may come to rely upon substance use as a way of relieving this discontentment, such as by drinking to the fill the void**. Substance use, though, is not the only way to try to manage discontentment. Instead, a person may also try to fill this emptiness with substitutes such as wealth, gambling, spiritual obsession, dating, excessive exercise, enhancing looks, sex, work, eating, promotions, gadgets, social climbing, shopping, or fame[104].

Whilst these things are fine as 'wants', problems may occur for people who believe that they 'needs' and the person believes that they cannot be happy without them. In this case, these things are probably being substitutes for the true core needs. For example, a person may begin to believe that, in order to be happy and contented, they need to upgrade their car, to have even more money, to begin a new relationship, to be two dress sizes smaller, and so on, and the person starts to obsess about them.

Whilst achieving or obtaining these goals may deliver a temporary state of 'relief' happiness, because these substitutes are not meeting the true underlying need, the emptiness and discontentment again return. This leaves the person back a few hours or days later where they began, looking for something more or something else to try to plug that hole.

Substance use, as well as some of the other strategies described above, can have a detrimental effect on needs that are already being met in a healthy way. For example, it may cost a person their job, they may lose meaningful relationships, or be evicted from where they are living.

[104] Ibid

As a means to their core needs

Conversely, for some people, **substance use may also be a means to getting their needs met albeit not always in a healthy and sustainable way**. For example, a drinker may gain a sense of connectedness and community through their fellow drinkers at the pub, or having to make money and then find heroin may give a person a sense of something to do each day. This type of person is likely to feel an increase in discontentment in early recovery as their level of contentment initially drops, before being rebuilt.

To directly meet their core needs

As well as using drugs as a substitute for their core human needs, **the person may form an interpersonal attachment to the substance itself as a substitute for human relationships**.

This can occur if the drug is a primary soothing mechanism, as humans have a tendency from childhood to attach not only to people who sooth them, but also objects (e.g. a child and their comforter). This may in part explain why many clients describe alcohol as their 'best friend', is will therefore contribute to the grief-like reactions that many people experience when they stop using their drug of choice.

10.2 - Models of Core Human Needs

Several theorists have proposed models of adult core needs, and two are summarised below. Perhaps the most well-known of these is Abraham Maslow's 1954 Hierarchy of Needs[105].

At the base of his hierarchical pyramid and underpinning all the rest are the basic physiological needs common to all living creatures. Then the further up the evolutionary ladder a species lies, the more complex its needs become, including safety, belongingness, self- and social-esteem, and finally the highest need, unique to human beings, self-actualisation.

[105] Maslow, A. 1954. *Motivation and personality*. New York: Harper and Row.

Figure 20 - Maslow's 1954 Hierarchy of Needs

In his 1972 ERG theory (an acronym of Existence, Relatedness, and Growth), Clayton Alderfer[106] classifying core needs into three hierarchical categories. His hierarchy begins with 'existence' needs representing those things required for physical well-being. Then he describes 'relatedness' needs, which represent the social aspect of humanity and the importance of interpersonal and intra-societal relationships. Finally, he describes 'growth' needs, which he refers to as being the development of competence and realisation of potential.

[106] Alderfer, C. 1972. *Existence, relatedness, & growth*. New York: Free Press.

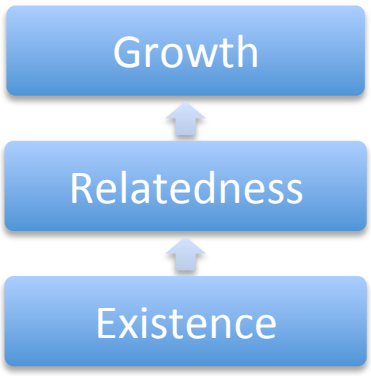


Figure 21 - Alderfer's 1972 ERG theory

10.3 - The Four Pillars

The Four Pillars[107] model draws together these and other theories into a combined framework of ten key human needs, clustered into four groups or 'pillars'. These pillars are also arranged in a similar hierarchically to Alderfer's ERG, with the survival needs at the base, above which can be found the social needs, with the fourth pillar, containing the existential needs of 'purpose' and 'growth' at the top.

Of these areas, social needs have received increasing interest in the addiction literature, much of which evolved as a result of Attachment theory[108], and a relationship between poor attachment styles and substance use is now well established[109].

In the Four Pillars model, Alderfer's social needs are split into two groups: the nuclear family, and other relatedness needs, both of which share the same 'rank' in the hierarchy.

[107] Berry, M., (2008) *Four Pillars of Happiness and Contentment.* www.4pillars.info
[108] Bowlby, J., (1969). *Attachment and loss: Vol 1 Attachment*. New York: Basic Books.
[109] Flores, P.J., (2003). *Addiction as an Attachment Disorder*. US: Jason Aronson

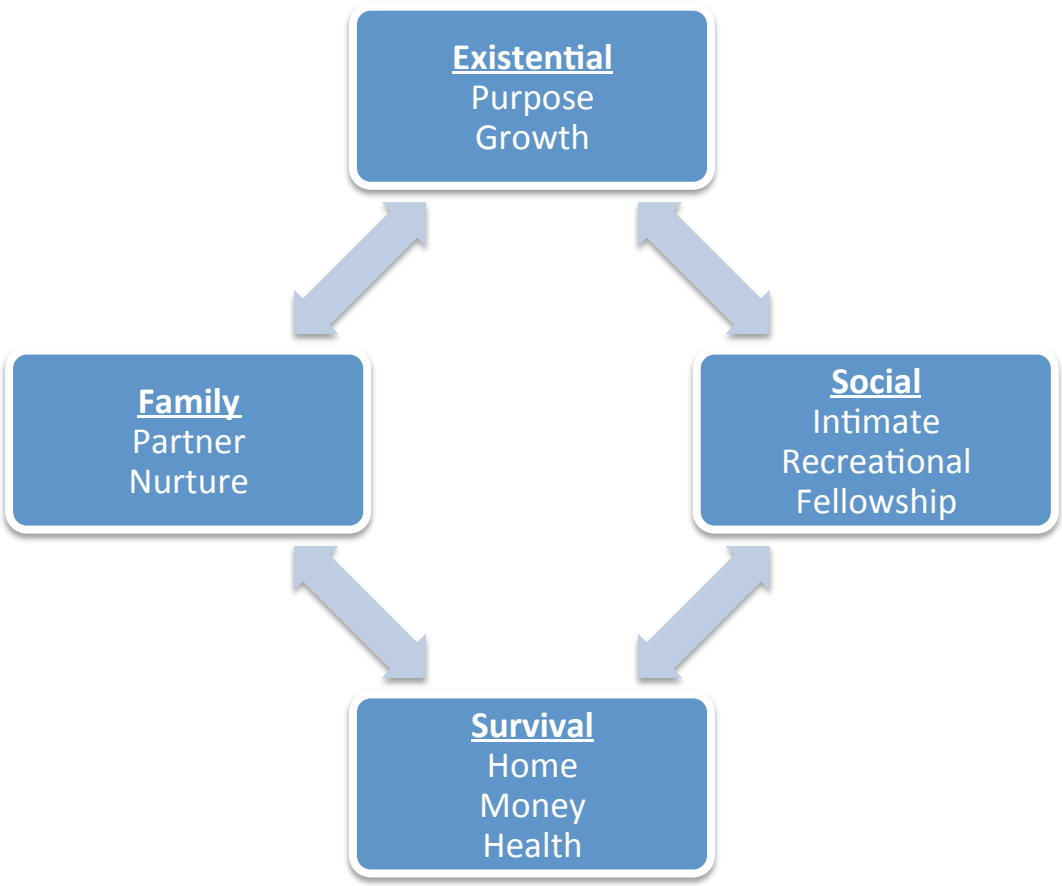


Figure 22 - The Four Pillars containing ten core adult needs.

The following section describes each of the ten needs that form the four pillars, and this model can be useful for a clinician during assessment, as well as in treatment planning.

10.2.1 - Pillar 1 - Survival Needs

The first three needs are common to all living creatures and form the first and most fundamental pillar. These needs are for nourishment (usually in the form of food, oxygen and water), health, and the right environment in which to live. However, in modern human society it can be easier to think of these three needs as being Money, Home, and Health.

i) Money:

The first question is about how much does a person need to be happy? It is well known that more money does not automatically equate to greater happiness with studies suggesting that there may be a ceiling effect (in the

US it is estimated at approximately $75,000) [110]. Although above that limit they may self-appraise their life more favourably, there is no evidence that more money translates into increased happiness. Furthermore, even up to that ceiling, income seems to only contribute in part towards well-being, and if the person doubles their income within that ceiling, their level of happiness increases by around 10%[111].

This suggests that as a person moves out of poverty they are likely to experience a partial increase in contentment as more of their basic survival needs are met. However, once the person has achieved a basic sense of financial stability, money will now only become a reward type motivator, rather than hygiene motivator. This means that it does not further increase the person's fundamental level of contentment. In practice, chasing money may instead have a paradoxical effect, reducing overall contentment because other needs such as growth and social relationships can be neglected in the pursuit of wealth.

Financial counselling to help deal with debts as well as teaching the client to budget is an important part of any treatment plan where the client has financial difficulties. Furthermore assistance with employment or welfare benefits should be a priority, given the impact that financial security can have upon emotional well-being.

ii) Home:

Social and welfare services have long recognised that there is a significant difference between a house and a home, and there are six important features that seem to make that difference for most adults. When assessing a client's accommodation it is important to consider these features, and if not enough are being met, finding some alternative accommodation should form part of the treatment plan.

a) Safety

To meet the need for a home, a residence needs to be a safe space, both from external threats, and internal danger, such as family violence.

b) Privacy and Space

People need to have privacy and a space of their own in a home; a place where they can have a time-out or where they can securely keep private items. This does not necessarily mean that they need a room of their own, although this certainly makes privacy easier.

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[110] Kahneman, D., & Deaton, A., (2010) High income improves evaluation of life but not emotional well-being. *PNAS,* 107, pp16489–16493
[111] Ibid

c) Reflects the person's identity

A home needs to match the person's style and preference. Some prefer darker or older styles, others prefer bright and modern. Some like open plan and white, others colourful and cosy. This aesthetic preference not only relates to the structure, but also to the décor and furnishing, which, of course, is usually easier to adapt to one's preference.

d) Shelter from the elements

If the house is too hot in the summer or too cold in the winter, or it has drafts and leaks, it will be unlikely to feel homely. Rather a home needs to provide its occupants sufficient shelter from the elements in order for them to be comfortable.

e) Stability

It takes a few weeks for a place to start to feel like a home, and this is most noticeable after moving. This is why even the most luxurious hotel rarely feels homely because, no matter how nice the fit-out, the resident is not usually there long enough. As a result, a sense of stability is another important characteristic.

f) Furniture/ appliances

The final requirement for somewhere to feel like a home is that it has the basic conveniences of that person's particular culture. This includes adequate furniture and the customary appliances and household items.

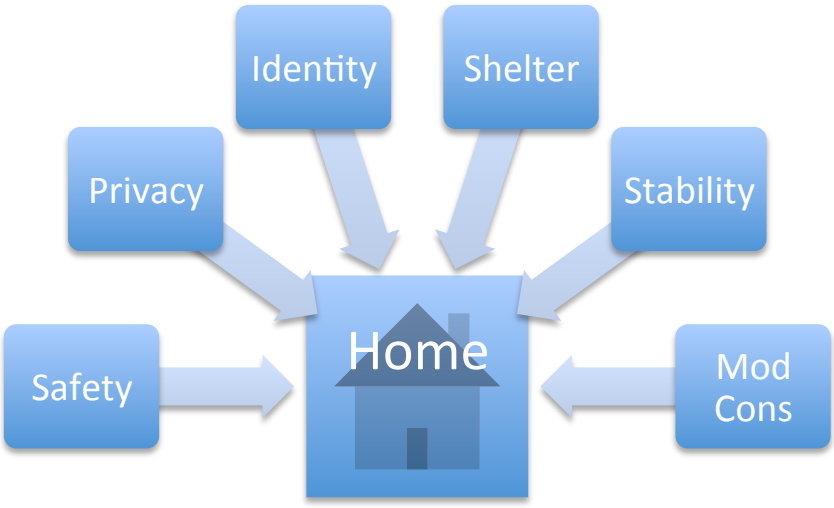

Figure 23 - Six characteristics that help make a house into a home

iii) Health

The third and final need in this first pillar is adequate health, including physical health, emotional health, and psychological health (spiritual well-being is discussed later). This does not have to be perfect health or high-level fitness, as these do not necessarily have a bearing on contentment. Rather, this need relates to adequate health to enable the person to undertake their essential day-to-day activities, especially those that help them meet the other nine needs.

Ceasing drugs use will in most cases result in a significant improvement in health, however natural sleep, exercise, and nutrition will also have positive effects.

10.2.2 - Pillar 2 – Immediate Family

As mentioned previously, adults' interpersonal needs are split between the second and third pillars. The second pillar incorporates two needs that relate to the nuclear family: a partner to share their life with, and the need to nurture/care for others. The third pillar includes broader social needs such as social and recreational relationships as well as group affiliation.

iv) Partner

Human adults have evolved to benefit from having a relationship with a person with whom the person can share their life, and this type of relationship is quite different from other social needs. The love that people experience for their partner (what is called being 'in love') is unique to that type of relationship, and because it can take time to mature and develop, people often work hard to try to sustain these relationships. Of course this is not to say that a person cannot be completely contented and happy if they are single, and more about this is discussed later. Nonetheless, the drive for adults to form relationships is a strong and universal urge across all cultures.

The partner need is not automatically met just by being in any relationship. Rather, the relationship should be, amongst other qualities, fair (within cultural norms), honest, and supporting, and this should flow both ways. As a result, relationships based upon, for example, rescuing or being rescued, or controlling or being controlled are less likely to fulfil the person's core needs and so may not contribute to meaningful contentment.

Furthermore, as was described earlier in the explanation about money, an all-consuming intense relationship can also paradoxically result in a

reduction in overall contentment because other social needs can become neglected.

Of the ten primary needs, this is the only one that cannot deliberately be met. Whilst counselling can help address unhealthy relationships, for the single person it is just a matter of preparedness and time to meet an ideal partner.

v) Nurture

The second need in this pillar is the need to nurture and develop others, usually met in the form of having children. However, people without children, or those whose children have left home, still have this need and are able to meet it through other types of nurturing and caring relationships. For example, this can be through caring for younger relatives, the elderly or disabled, or pets. Engaging in altruistic activities such as voluntary work where there is direct interaction with the people being helped can also assist in meeting this need[112].

Where this need is not being met, counselling can focus upon exploring opportunities for voluntary work, especially those that are tied into the person's key interests. Where the voluntary work is as part of a team, it may have the added benefit of broadening their social network.

10.2.3 - Pillar 3 – Extended Social Relationships

Human beings are a social species and there are a variety of different types of relationships that adults need beyond those within the nuclear family. These social needs can be met by friends and/or our extended family (rather than nuclear family) so if the person is lacking in one, they can usually adequately compensate with the other. Cultural background does have a strong bearing upon whether a person's social needs are met by friends (e.g. more typical of northern European cultures) or by extended family (e.g. more typical of southern European cultures).

Through adolescence and into adulthood, the person must learn the key elements, or social intelligence, required for healthy social functioning. They also need to learn how to get their social needs met, and some of these are discussed in section 10.3 - Interpersonal Skills.

Many types of relationship seem to be primarily functional – for example, learning how to interact with one's employer is only relevant if one is

[112] Casiday, R., Kinsman, E., Fisher, C., & Bambra, C. (2008). *Volunteering and Health: What Impact Does It Really Have?* Lampeter, University of Wales.

employed. However, three types of relationship are likely to be necessary for contentment and well-being, and these are the sixth, seventh and eighth core needs that make up the third pillar.

Interpersonal relationships are highly complex to manage, and many people have difficulty attaining, sustaining, developing or even tolerating some or all of these types of social connection. This may stem from past trauma, developmental issues, lack of modelling in the family of origin, or other causes. The result can often be that the person avoids social contact, or over emphasises just one of the five social needs described in pillars two and three in an attempt to compensate for others which are not being met.

This difficulty is quite common amongst substance-using populations, with clients often reporting a marked instability in their capacity to form appropriate, stable, healthy and reciprocal relationships with peers. Some examples around how this difficulty can manifest include:

- engaging in back-to-back relationships to avoid friendships,
- having a series of intense but short-lived 'best' friendships,
- surrounding themselves with people, who may be more interested in what they can get from the client, or who are always kept at arms length,
- avoiding any contact and ending up alone and isolated.

But the fact that a person can feel 'loneliness' shows that they are not a loner by *nature*, rather they have an underlying but unmet need for social relationships, and therefore could be considered to be a loner by *behaviour*.

vi) Intimate relationships

This does not refer to sexual intimacy; rather intimate relationships are the types of relationships where the person is able to be interpersonally intimate. This can be defined as the ability to share and show on the outside exactly what they are thinking or feeling on the inside, without having to filter or present a façade. Of course, most types of social interaction require significant amounts of filtering as per social custom, however people need a handful of relationships where they can be vulnerable and put down the mask and just truly be themselves.

In intimate relationships there is a deep level of mutual trust, and ideally there are no secrets that the person has not shared with at least one of their intimate circle (although not all secrets are shared with all intimate friends).

The level of trust involved in such relationships, as well as the skills to maintain them, indicates why, of the three types of relationship forming the third pillar, this is perhaps the one that many people with substance use problems have the most difficulty attaining and maintaining.

These types of relationships are essential, contributing towards good psychological health by:

- helping the development and promotion of self-esteem and self-acceptance. By sharing with another during both good times and bad, the person's self-esteem is strengthened through continued acceptance, especially if disclosing things about which they may feel shame or guilt.
- reducing separateness and perceived difference. By sharing 'flaws and failings' the person gets to either normalise them by hearing that others are the same or similar, or at least gains some perspective through external acceptance or validation.
- reducing stress and coping. Regular and current contact about the small things means that the confidant is aware of the back-story behind major issues when they arise, and so they are easier to discuss. Although the confidant may not be able to help with the problem itself, just talking things through with someone who understands the context can help a person cope with adversity.

Some people may have what they describe as 'best friends' but have never been truly intimate in the sense described above, having someone with whom they are able to share and show all of their feelings and problems *as they happen*. As a result, one of the first times a client in recovery may experience this type of relationship may be with a counsellor or sponsor. Although a counsellor or sponsor can be a safe starting point for learning about intimacy, for this need to be met the relationship would ideally involve two-way intimacy, with both parties being equally honest, open and supportive.

Some people may assert that they have no need for these intimate relationships because their partner provides them with all the support that they need. This may be fine while they are comfortable sharing all of their feelings with their partner. However, if things start to go wrong in the relationship, the person may have no one else to turn to.

Because of the regular investment required to sustain these relationships, it is unlikely that an average person would not have time for more than three intimate relationships with friends or members of extended family. This forms a problem for people who are void in this area, such as those in early recovery or who have moved to a new city. Most of the people they

meet will probably not have any 'vacancies' in their intimate friendship circle, no matter how much they may like the new person. It can be helpful to emphasise this point, especially for clients with lower self-esteem so that they do not take 'rejections' personally.

For most adults, it can take time for this need to be fulfilled, and the starting point should be to explore the client's current and past social networks for intimate relationships that could be rekindled. However, for those starting from scratch, a rough guide of building one new intimate relationship every 6-12 months can be a realistic indicator for clients. During this time, their counsellor or sponsor may be a necessary interim substitute. The client can be advised to try to engage others in a similar position to themselves of having vacancies, such as other new arrivals to the city, or others early in recovery.

vii) Recreational Relationships

This next type of core relationship can, like the intimate type described above, be met by friends or extended family. Whereas the primary function of intimate relationships is more related to support, these relationships have a greater focus upon enjoyment and fun.

Human beings tend to experience emotions more strongly when in a group than when alone, so whilst solitary activities can be enjoyable, the experience is usually amplified if shared with others who have the same interest. This is one of the reasons why live sport, concerts and the cinema remain so popular, and why, for example, people are often more likely to laugh out loud when in the audience of a live show, than if watching that same show on television alone at home.

However, a person may have many interests that are not shared by their partner (pillar 2) or their intimate friends. Therefore people also need recreational relationships with whom they can share these activities.

Recreational relationships tend to be context-specific, such as sports friends or movie mates. Most people develop many more recreational relationships than intimate relationships, and the number is likely to be influenced in part by the nature of activities in which they engage.

Those clients who are lacking in this area, but who have adequate social skills, can over a few months meet this need by taking up social activities that they enjoy. Examples include taking up a group or team sport, joining a couple of hobby groups, as well as rekindling relationships from the past.

In this process of rebuilding both the intimate and recreational relationships, one of the challenges that people with low interpersonal skills face is learning to recognise the difference between the types, and modify their behaviour accordingly (i.e. not to inappropriately disclose about personal issues with recreational mates). The same also applies for

the difference between intimate relationships and partner (pillar 2) relationships.

viii) Fellowship/ Group Affiliation:

In addition to the two types of relationship that have been described under this pillar, most people will also have need for fellowship or affiliation, that is to belong and feel a part of a community. Human relationships are not just one-on-one, but rather there is also the need to form one-on-many relationships, to be a part of a group. This group belongingness is often reflected in how the person grooms or dresses.

In some cultures this need may met by extended family. In small rural settings, group affiliation is likely to be met geographically. In larger communities, groups tend to evolve based upon shared interests or beliefs (e.g. the local football club, CWA, rotary, or church). In isolated locations there may not be enough people to meet this need, as well as many of the other social needs, contributing towards high levels of depression.

Clients who do not have a sense of affiliation or group belongingness can be helped by relinking with family, if the family is a positive influence. However, where this is not an option, past groups can be explored to see if any remain available and of interest to the client. Another very accessible option are 12-step fellowships, and clients can be encouraged to seek out a home group, which is a meeting they attend weekly, help out with the running, and make an extra effort to get to know that meeting's other regular members.

Development of Social Needs

These three needs, *intimate relationships, recreational relationships*, and *group affiliation* are not present at birth. Rather the primary interpersonal need of any child or infant is the need to attach to the parent, especially the mother.

As the child grows, these needs develop, and the first to evolve is the need to form *recreational relationships*. Around the age of 2-4 most children have begun to show a preference at times for playing with each other when in group settings rather than on their own (parallel play). *Intimate relationships* become more commonplace by the age of 8 (best friends with whom secrets are shared).

The last of these needs, *group affiliation*, can be seen to become a dominant motivator throughout adolescence and the teenage years, with the school classroom fragmenting into the different sub-groups around this time. Many teenagers display a powerful drive to detach from their family of origin, and start to affiliate with a desirable peer group. Then, ideally by

the late teens or early 20s, these three needs have reached a point of balance, with no one dominating the others.

10.2.4 - Pillar 4 - Growth and Meaning

Once the person has their survival (first) pillar in place and have begun to develop and strengthen their extended social (third) pillar, then the two needs from this last pillar come into play whether or not the second pillar needs have been met. Whereas the previous eight needs are common to many animal species, these two are probably unique to human beings, and can be considered as being defining characteristics. They are derived from Maslow's self-actualisation and are the need to grow/learn/achieve (the 9th need), and the need to have meaning or purpose (the 10th need).

ix) Growth

Unlike animals, who, once they reach adulthood, no longer *have* to grow and learn, human beings seem to continue to have a drive for growth that remains throughout adulthood with studies suggesting that continuing to study increases longevity in the elderly. It probably does not matter in which setting the growth occurs, whether it is home life, recreation/hobbies, social life or career. Growth can happen in different areas of ability, and six common examples are illustrated below:

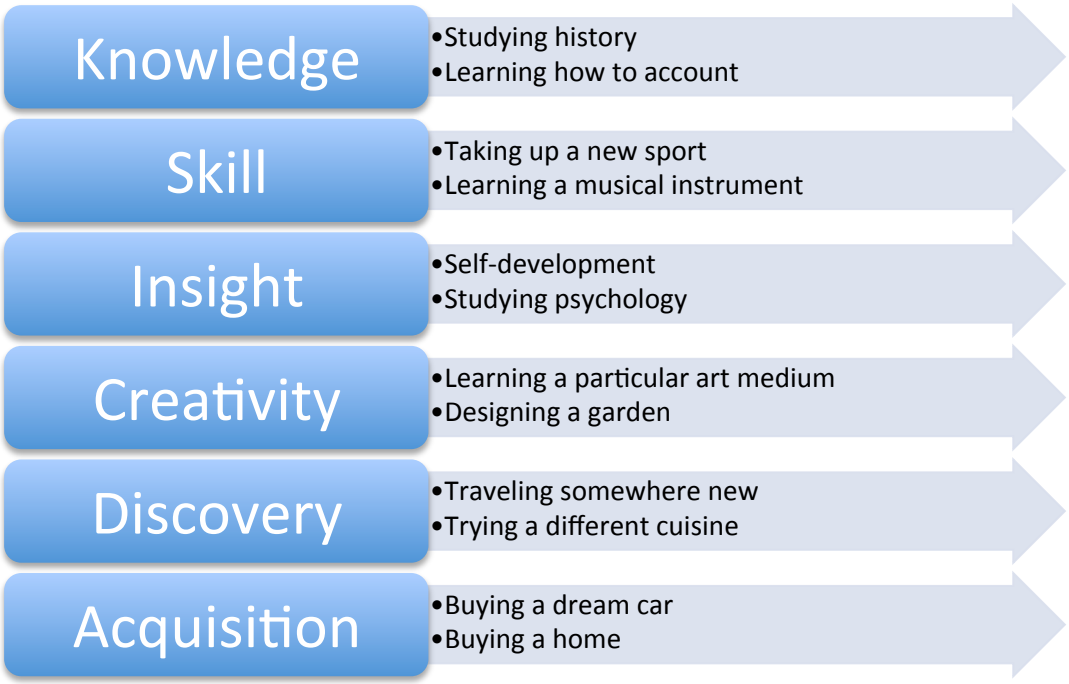

Figure 24 - Six examples of life areas for growth

For many clients in early recovery, engaging in treatment, group programs, or working their recovery can meet their need for growth, as they discover and develop in sobriety.

x) Meaning

The final need, life purpose or meaning, is likely to first appear during the teenage years and is commonly met by religion or spirituality. However, in modern secular societies, money, career, raising a family or even sporting success are increasingly common alternatives to spirituality as a meaningful source of purpose.

These more secular alternatives can adequately fulfil the person's need for meaning and have the advantage of providing very tangible results (e.g. the person sees their children growing up, measures the growth in their business, achieves a new personal best in their sport). These things though are not completely under the person's control (the children may grow up and get into trouble, the business may get hit by a recession, the person may be injured and may have to retire early from their sport), and so this need ceases to be met.

However, if spirituality is developed as a source of life meaning and purpose, such as through a religion or life philosophy, this can result in a more stable source of meaning as no one can impose or remove another person's belief system under normal circumstances. Spirituality is not reliant upon any factors beyond the person's locus of control, and this may be one of the factors behind a growing body of research that suggests that, irrespective of what the practice may be, having a spiritual philosophy to guide and make meaning out of life can improve psychological well-being and contentment for people in recovery from substance use[113].

With clients who have no sense of life purpose, in the short term just to goal to stay sober may be adequate. For the medium to longer term, something more substantial may be required. The counsellor may explore the client's spiritual interests as well as other options for developing a sense of meaning, however, like the need for a partner described in pillar 2, this tenth and final need cannot be forced. Rather, by open-minded and curious exploration, the person may come to discover what works for them, and what, just for today, gives them meaning and purpose.

[113] Poage, E., Ketzenbergerb, K., & Olsen, J., (2004) Spirituality, contentment, and stress in recovering alcoholics. *Addictive Behaviors*, 29, pp1857–1862

10.3 - Interpersonal Skills

Five of the ten core needs described above (pillars two and three) involved interpersonal relationships, and illustrate how essential social intelligence and social skills are for psychological well-being and contentment. Social intelligence can be understood as an individual's knowledge of social norms and ability to recognise social cues from others, whereas social skills relate to the behaviours necessary for building and managing relationships. Both of these concepts are discussed below.

10.3.1 – Drivers of interpersonal difficulty

Interpersonal difficulties may present in one or more contexts, such as group settings, with strangers, in friendships, in the household, at work or play, or in a person's family or relationship. Social difficulties are particularly prevalent amongst problem drinkers given alcohol's ability to increase confidence and disinhibit behaviour. However, social difficulties may be found across people with any type of substance-use problem, especially those with a parent who also had substance use problems, and who may not have modelled healthy social skills in the family home.

Interpersonal difficulties can have multiple causes including:

- Lack of understanding about different types of relationship – the person may, for example, confuse intimate relationships, with partner-type, or recreational relationships.
- Low knowledge of social conventions or ability to read social and emotional signals and cues.
- Poor conversation skills.
- Difficulty communicating needs and negotiating in relationships.
- Inability to trust and feel secure in relationship based upon problematic attachment styles or past experiences.
- Distorted sense of self-worth (too high or too low) resulting in projecting a false appraisal of themselves by others.

As a result, and in order for the client to get their second and third pillar needs effectively met, an emphasis should be placed by clinicians upon identifying deficits in these areas, and then helping clients to develop both their social intelligence and their social skills.

10.3.2 – Social intelligence

Social intelligence encompasses the many types of knowledge required to sustain healthy relationships. These elements are:

- Knowing what are the different types of relationship and how to recognise them (an employee, a manager, best friend, a recreational friend, a parent etc.),
- Knowing what are the cultural norms and expectations within each type (e.g. how to behave as a manager, how intimate to be with mates as opposed to best friends),
- Awareness and understanding of other people's signals and cues regarding their experience, expectations and wants from the relationship.
- Ability to adapt styles of relating and expectations from the relationship to the needs of different people (e.g. introverted types, or young people),
- Ability to adapt style if the current relationship evolves or changes.
- Having the social skills and tools for developing and sustaining healthy relationships.

Figure 25 - Six elements of social Intelligence

10.3.3 - Social Skills

Social skills are the highly complex behaviours that establish, maintain, and develop social relationships. Like other aspects of social intelligence, these are typically learned in childhood through observation and the opportunity to practice in both the family environment and through play with peers. These include:

- Assertive expression of own needs (rather than repressing them or aggressively expressing them).
- Packaging information to make the listener receptive to the speaker's needs.
- Knowing how to ask for help or assistance.

- Knowing how to sincerely apologise and make amends.
- Ability to initiate positive emotional responses in others.
- Initiating and sustaining a conversation.
- Giving and receiving compliments.
- Being thoughtful and considerate.

Again, many clients did not learn these basic skills in their upbringing, and so social skills training in an environment where mistakes will be compassionately tolerated is a component of treatment that can provide considerable benefits to the client.

10.4 - About the Four Pillars

The previous chapters have looked at what most adults need in order to feel contented, as well as reflecting upon how these differ from a child's needs.

A useful exercise that can help clients to see the connection between these needs and their contentedness is to map the state of these needs at the happiest time of their adult life, at the worst time (excluding trauma or grief events where the distress has a particular cause), as well as over the previous seven days.

10.4.1 - How they work

Most people will learn the relationship between contentedness with life and these ten needs when they are pointed out. Furthermore, in those happy times, most people will report that they do not need all four pillars to be fulfilled; rather a combined total of three may be adequate. This reflects the experience of single people who are able to be just as happy as those in relationships. Of course, this also means that friendships and the other needs are likely to be more critical for a single person to remain at three or higher.

However when the person looks at the worst periods of their life, their pillars score was often two, one, or even zero. The lower the score, the worse pain they are likely to have experienced, from mild discontentment through to severe and unbearable depression. This may further increase the person's desire to use drugs or act out in other ways to try to fill the discontentedness or relieve the psychological distress.

These ten needs are distinct, like buckets that do not touch. So if one area gets an increased amount of attention and is overfilled, for example by devoting most of their energy to making money or dating, the excess does

not spill over into the other buckets in the way that water fills an ice tray. Rather the opposite happens, and the person can become increasingly discontent as the other areas are neglected.

These 'buckets' are also leaky, and have to be topped up on a regular basis. The frequency depends upon the person, their priorities and lifestyle, and the particular need, however a loose rule of thumb would suggest that they should be met two to three times per week. It can help to encourage the client to think of this as a life-style shift, beginning each week by mapping out their pillars for the next seven days.

There is also a significant risk where the person uses one source to meet all of their needs. For example, their work provides them meaning, growth, and their social need such as the army, or when a person's partner is also their primary or sole friendship network. In the first example, upon discharge from the army, the person may experience an unexpectedly powerful negative reaction as they loose all of their pillars. In a similar way, in the second example should the person have an argument with their partner, then they lose no just one, but nearly half of their 4 pillars.

It can take time for a person to become convinced of the connection between their level of contentment / discontentment and these core needs being met/unmet. This is because it is not as immediate an effect as, for example, drugs are able to provide. Therefore whenever the client reports having had a better day or week, it can be helpful to reinforce the connection, for example, between their increased socialising over the past three days, and their feeling more contented today.

10.4.2 - Rebuilding

For many people, recovery from substance use also requires repairing and rebuilding their core needs (e.g. debt or loss significant relationships). Other clients may never have had certain needs met in a healthy or sustainable way, even before their substance use. This can often be due to problems in their childhood that meant they never learned to recognise their needs, and/or to develop the skills required to get them met (e.g. social skills).

Sometimes, however, the lifestyle that accompanies some patterns of substance-using may itself go part way to meeting these pillars, for example, a heroin addiction may provide the person with a peer group and daily purpose. As a result, and even though this peer group and daily purpose may not be ideal, when this person commences treatment, they may experience a temporary dip in their contentment until new, healthier ways of meeting their needs are established. Furthermore, for those who have formed a pseudo-personal attachment to the drug or to alcohol are likely to experience a strong grief reaction to stopping.

Considerations around rebuilding the pillars include:

- Work up the hierarchy, and so focus upon the core survival needs of pillar one first, (home, health, and money). This can then be followed by the social needs, specifically pillar three and the nurture aspect of pillar two. The existential needs of pillar four have a very powerful effect upon long-term sobriety and so should not be neglected[114].
- The partner need of pillar two is ideally left until last for a couple of reasons. First, a person is often attracted to a very different type of partner when they are low on pillars compared to when they are travelling on three or more. Second, the social skills required for a romantic relationship are more complex to master than the other types of relationship. Third, losing a relationship and break up can generate overwhelmingly high amounts of pain and can put the client at significant risk of relapse.
- AA and other 12 step fellowships can be particularly useful for clients with low pillar scores as they provide a way to rapidly meet the pillar three needs - intimacy with a sponsor, recreational relationships with other members, and affiliation to a home group; the pillar four needs - growth through working the steps, and developing a spirituality that works for them; and the nurture aspect of pillar two through sponsorship of others.
- Having several things in each pillar increases its stability, as the person is at less risk of losing an entire pillar if, for example, a course finishes, or their best friend moves out of town. Also, if the person knows that a pillar is going to be impacted in such as way in the near future then they should be encouraged to proactively plan ahead with something else to meet this need.
- Grief-type counselling may need to be provided to support the person through the loss of old means of getting their needs met (former peer groups) or even to the loss of the substance itself.
- The person may need to seek out an appropriate interim object of attachment (e.g. a recovery group or sponsor) or else they are likely to pick something inappropriate (e.g. another obsession such as excessive work or exercise).

[114] Berry, M., (2007) *Contentment, Depression and Addiction*. Paper presented at APSAD, Auckland NZ.

Some clients find it helpful in each counselling session to review their pillars for the coming week. It can also be good to get into the habit of, whenever the client feels discontented or depressed, encouraging them to always respond by checking the state of their pillars over the previous couple of days to see if this is the cause.

A final note here to reinforce is that each of these needs arises at a different point during childhood and adolescence. For example, each of the third pillar needs arises at a different point in childhood, and a child's need for privacy and space (pillar 1) is not present at birth. Children have different additional needs (e.g. the child's need for parental attachment, something that no longer is a hygiene motivator in adulthood). Furthermore, the needs may vary in weighting at different points in life (e.g. the need for belongingness is heavily weighted in teenage years, the need for spirituality may be more greatly weighted for someone going through a traumatic time, or at the end of their life).

10.4.3 - Summary

People have a range of what are called 'hygiene' factors. These are core needs, (as described by Maslow, Alderfer and others) which, when they are being met, generate contentedness, but when they are not being met, create discontentment. If they are unmet for a sustained period of time, this can lead to dysthymia and depressive symptoms.

Ten of these core needs can be divided into what are called the Four Pillars. When most of these pillars are met, the person feels contented. However, an overemphasis upon one pillar (e.g. a relationship) will not flow over into the others (e.g. it is not like filling an ice tray). Rather these needs are distinct and focussing too much upon one can result in several others being neglected and the person feeling worse. Having multiple resources in each pillar to meet those needs can increase resilience to change in any of these areas. Conversely, having just one thing to meet multiple pillars' needs can have the opposite effect and increase vulnerability to change.

The clinician can bring the four pillars into a treatment plan in the following ways:

- help the client understand the relationship between a sense of contentment, depression, and their four pillars,
- help the client increase their sense of self-determination and control over their own happiness,
- assess the current state of the four pillars to guide to focus of the intervention, noting in particular those which may never have been met, and exploring what these barriers may be

(e.g. breached parental trust as a child resulting in an avoidance of adult intimate relationships),

- support the person through any grieving that may occur where attachment to the substance ("best friend") may have occurred,
- be prepared that the pillars may initially deteriorate as the person commences treatment, for example, because of loss of old peer networks,

In the rebuilding itself, the clinician should:

- quickly rebuild pillar 1 (money, home, health),
- identify what past relationships can be rekindled, and what resources (e.g. mutual aid groups) are available to rebuild pillar 3,
- determine which aspects of social intelligence are needed to make pillar 3 secure and stable,
- explore how they can develop the nurture aspect of pillar 2;
- plan ways to find growth and to gain a sense purpose in life in pillar 4.

This can then be followed by teaching the client to monitor and maintain their four pillars, and by drawing their attention to the connection between good days, and having had their needs met (as well as to the inverse). Habits such planning ahead how each need is going to be met on a weekly basis can also be effective and very rewarding to the client.