

**Exploring the relevance of attachment theory  
to therapeutic communities for addictions:**

**A critical review of the literature**

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**Table of Contents**

Attestation of authorship.....	6
Acknowledgements.....	7
Abstract.....	8
Chapter 1: Introduction.....	9
Substance use: Prevalence and effects .....	10
Attachment theory.....	11
Conclusion.....	15
Chapter 2: Methodology .....	16
Identification of research question .....	16
Epistemology.....	16
Theoretical framework .....	17
Research methodology .....	19
Method .....	21
Literature search process .....	22
Reviewing and critiquing the literature .....	26
Bringing the literature together .....	28
Conclusion.....	29
Chapter 3: Therapeutic communities for addictions.....	30
Introduction.....	30

The evolution of addiction therapeutic communities .....	30
Scope of this review .....	32
Therapeutic communities: Essential elements .....	33
Attachment and therapeutic communities .....	35
Attachment to place .....	38
Attachment to staff and peers .....	38
Group impact on attachment style .....	39
Attachment research in therapeutic communities .....	40
One Norwegian therapeutic community: Inhibiting attachment .....	40
Two American therapeutic communities: A family that cares .....	42
Conclusion.....	42
Chapter 4: Attachment theory and addictions.....	45
Introduction .....	45
Theoretical underpinnings.....	45
The contribution of neuroscience .....	47
Research overview .....	48
Critical overview .....	49
Review, synthesis and critique .....	51
Studies suggestive of attachment issues .....	51
Using recognised tools to determine secure or insecure attachment .....	52

Exploring attachment styles and associated interpersonal strategies .....	55
Phenomenological research .....	62
Conclusion.....	62
Chapter 5: Discussion and conclusion .....	64
Introduction .....	64
Attachment theory and therapeutic community elements .....	65
Clinical implications .....	67
Providing individualised treatment.....	67
Mentalization-based therapy (MBT) .....	68
Clinical guidelines .....	70
Research contexts .....	72
Addiction and attachment theory.....	72
Therapeutic communities .....	72
An alienated society.....	73
Study strengths and limitations .....	73
Further research.....	74
Conclusion.....	76
References .....	78
Appendices.....	98
Appendix A: Literature search results.....	98

Search 1 - Therapeutic communities ..... 98

Search 2 - Attachment theory and addictions ..... 100

Appendix B: Essential elements of therapeutic communities for addictions..... 102

Appendix C: Studies related to attachment style and substance use, abuse and addiction ..... 105

**Attestation of authorship**

I hereby declare that this submission is my own work and that to the best of my knowledge and belief it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the qualification of any other degree or diploma of a university or institution of higher learning, except when acknowledgement is made in the acknowledgements.

Signed: Jyoti Smith

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### **Abstract**

This research project assesses the relevance of attachment theory to the work of therapeutic communities for addictions. It critically reviews the literature on attachment theory and addictions, and on therapeutic communities for addictions, and builds bridges between the two areas. Associations between insecure attachment and addictions have been demonstrated and progress has been made in clarifying which attachment styles are most associated with addiction and why. However, attachment theory has not been comprehensively applied to therapeutic communities for addictions despite the likelihood that most, if not all, their residents are insecurely attached. Six clinical guidelines have been developed on the basis of the findings of this review to summarise how a therapeutic community could encourage the development of secure attachment:

- Respond flexibly to residents in recognition of their attachment needs, for example, negative feedback and sanctions are tailored to be therapeutic for each individual.
- Support senior residents and staff to recognise and respond to attachment needs.
- Create an experience of at least some aspects of a secure base for staff and residents, for example, senior colleagues/residents should be available and reliable.
- Create rules and boundaries to provide containment but ensure they are not so rigid as to be overly controlling or protective.
- Enhance mentalization by ensuring residents are provided with clear information on the values, norms, and standards of the therapeutic community.
- Leaven the intensity of the therapeutic community to help residents and staff maintain mentalization, for example, through humour, games, creative expression, celebrations, etc.

## Chapter 1: Introduction

This literature review assesses the relevance of attachment theory to the work of therapeutic communities for addictions. It begins by reviewing the literature on therapeutic communities and on the application of attachment theory to these treatment contexts. This is followed by a review of the literature on the application of attachment theory to addictions. The findings are then discussed in relation to therapeutic communities.

As recommended by Aveyard (2010), I use the first person form throughout this literature review for the clarity and directness it brings to a piece of work which necessarily refers to a large number of authors. All referencing follows APA 6th style.

As the literature reviewed in this project was written before the release of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-V)* (American Psychiatric Association, 2013a), the terms substance use, abuse and dependence are used rather than the new terminology “substance use disorder”. The word “addiction” is not applied as a diagnostic term in this review but is used to indicate “severe problems related to compulsive and habitual use of substances” (American Psychiatric Association, 2013a, p. 485). I acknowledge the *DSM-V*'s warning that “addiction” has an uncertain definition and potentially negative connotations, however, it is regularly used in the literature and my use signifies the degree of severity of substance use disorder which may benefit from therapeutic community treatment. In addition, despite the potentially negative connotations of the word, the self-help group Narcotics Anonymous uses “addiction” and “addict” in its publicity material, for example, on its website Narcotics Anonymous New Zealand introduces itself as “a global organisation of recovering addicts” (Narcotics Anonymous, 2007, para. 1)

In terms of research context, this literature review is entering new territory: No rigorous and repeatable literature review has been previously undertaken on the application of attachment theory to addictions or to therapeutic communities. This claim is based on Aveyard's (2010) characteristics of a rigorous, repeatable literature review: it needs to detail clear inclusion and exclusion criteria, search strategies, and approaches to undertaking the critique of the literature. All these aspects of this literature review are outlined in the following chapter.

Below, I provide a very brief snapshot of the recreational use of substances in New Zealand to set the scene for this research project. In addition, I provide an overview of attachment theory to contextualize its importance in the understanding of human behavior and set the stage for subsequent chapters.

### **Substance use: Prevalence and effects**

Just over 20% of New Zealanders drink in a hazardous manner and about 10% get drunk every week. The harm caused by hazardous drinking includes health risks, crime, family violence, and other antisocial behaviour (New Zealand Law Commission, 2010).

In terms of illicit drug use in New Zealand, according to 2007/2008 research (Ministry of Health, 2010), 49% of New Zealanders aged 16-64 have used drugs, excluding alcohol, for recreational purposes. The majority (46.4%) have used cannabis, with 14.6% having used it in the past year. BZP party pills, Ecstasy, methamphetamine, and LSD and other synthetic hallucinogens are also frequently used drugs with 5.6%, 2.6%, 2.1%, and 1.3% of adults respectively having used them in the previous year.

A recent literature review found that cannabis use is associated with mental disorders, including psychoses (Degenhardt & Hall, 2012). Similarly, New Zealand research has found that cannabis use at age 18 increases the risk of mental disorder at age 21 (McGee, Williams,

Poulton, & Moffitt, 2000). According to Degenhardt and Hall's review, illicit opioid use is a major cause of death. HIV and hepatitis B and C are potential consequences for people who inject opioids, cocaine, and amphetamines. Other adverse health outcomes such as mental disorders, road accidents, suicides, and violence seem to be increased amongst opioid, cocaine, and amphetamine users. The researchers acknowledge that causality is unclear due to confounding variables. Locally, in the six months from July to December 2011, 127 people were admitted to hospital for methamphetamine-related causes (Department of the Prime Minister and Cabinet, 2012).

New Zealand data is only available on the number of methamphetamines users receiving residential treatment: more than 440 between November 2009 and March 2012 (Department of the Prime Minister and Cabinet, 2012). Some of these treatment facilities would be therapeutic communities as the term is defined in the next chapter. New Zealand data is not available on the total number of people treated in therapeutic communities for addictions.

### **Attachment theory**

Attachment theory has been described as “the mainstay of developmental science for four decades” (Lindberg & Thomas, 2011, p. 329), “a major framework of developmental psychology” (Holmes, 1993, p. 2), and “one of the most solidly founded theories of human development” (Brisch & Kronenberg, 2012, p. 14). It was developed by John Bowlby and has been confirmed and elaborated by substantial empirical research (Karen, 1998).

An individual demonstrates attachment behaviour when they seek or maintain proximity to a particular person, especially when feeling insecure (Bowlby, 1988). As Karen (1998) outlines, secure attachment, developed in a warm, sensitive, and consistent caregiving environment, is essential for a child's psychological development. On the basis of secure

attachment with a caregiver, or a “secure base”, children are able to form satisfying relationships with others (Karen, 1998). Insecure attachment in childhood hinders relationship-building and contributes to “internal working models” that Bowlby (1988) proposed would perpetuate a cycle of poor emotional regulation and unsatisfying relationships in adulthood.

Holmes (1993) describes internal working models as “a set of models of self and others, based on repeated patterns of interactive experience” (p. 78). He gives the example of a securely attached child developing an internal working model of a loving, reliable caregiver and of a self that is worthy of love. This would naturally influence subsequent relationships. In contrast, an insecurely attached child with a punitive or neglectful caregiver may develop an internal working model built on the world as an unsafe place and the self as unworthy of love and care.

A key early researcher and colleague of Bowlby, Mary Ainsworth, was instrumental in giving empirical strength to Bowlby’s theory (Karen, 1998). On the basis of her research, she organised infant attachment into three categories; secure, ambivalent and avoidant. These three categories have since been modified and elaborated, and applied to adult attachment patterns, as have the methods used to measure them (Lindberg & Thomas, 2011).

Attachment theory proposes that, if all goes well, infants and their caregivers will form close emotional bonds because both parties are biologically predisposed to do so as an evolutionary protection from predation (Bowlby, 1979). Later work suggests that the primary goal of attachment is to enable infants to learn how to regulate their emotional experience, at least partially through the development of the ability to mentalize, that is, to think about their own internal states and the internal states of others (Fonagy et al., 2010). This formulation highlights the commonalities between attachment theory and psychoanalytic theory (De Rick, Vanheule, & Verhaeghe, 2009). It has also been instrumental in the development of

mentalization-based therapy (Fonagy, Bateman, & Luyten, 2012), a therapeutic stance which I draw on in chapter 5 when I discuss the clinical implications of this research project.

Of particular relevance to this research project is the finding that it is not just children who seek and need attachment figures: “Attachment and dependency, although no longer evident in the same way as in young children, remain active throughout the life cycle” (Holmes, 1993, p. 81). It is therefore a “lifelong developmental issue” (Brisch & Kronenberg, 2012, p. xxv).

In particular, long-term romantic relationships were seen by Bowlby as an adult manifestation of attachment behaviour (Holmes, 1993; Karen, 1998). Later research has confirmed that attachment bonds are transferred from parents to romantic partners, using the four defining features of these bonds: proximity maintenance, separation distress, safe haven (care provision) behaviours, and secure base (from which to explore) behaviours (Zeifman & Hazan, 2008). Research has also found that non-romantic relationships with peers contain some of the four attachment criteria above (Zeifman & Hazan, 2008) and that attachment relationships with one’s mother, one’s father and one’s partner can be very different (Lindberg & Thomas, 2011), and can change over time, although attachment styles tend to be stable (Feeney, 2008).

Attachment theory has also been applied to the therapeutic alliance that ideally develops between client and psychotherapist (Bowlby, 1988; Brisch & Kronenberg, 2012; Fonagy, Gergely, & Target, 2008; Holmes, 1993) and the relationships that develop between members of psychotherapeutic or support groups (Flores, 2001). The implications of this latter application are discussed in more detail below.

Another major theme of Bowlby’s work is loss, grief and mourning (Holmes, 1993). Bowlby’s research with children convinced him that separation and bereavement in childhood can have long-lasting effects, particularly if children are not encouraged to feel and to express

their feelings. However, Tennant (1988) found that the effect of childhood loss on adult psychiatric disorder is not as significant as Bowlby proposed, with disruptions in parenting proving to be a much more significant factor in later disorders than loss itself.

Just as children tend to seek out their primary attachment figures when they are anxious, ill, tired or frightened, stress activates attachment behaviours in adults (Holmes, 1993). The clinical implication is that “an individual’s attachment system opens up during crisis” (Flores, 2001, p. 72). In addition, Bowlby and subsequent researchers found that when attachment needs are met, a child’s ability to explore the world is enhanced: “The essence of the secure base is that it provides a springboard for curiosity and exploration” (Holmes, 1993, p. 70). This is also true of adults (Heard & Lake, 1986) and has been applied clinically to the therapeutic relationship in which a secure base enables clients to explore their internal worlds (Brisch & Kronenberg, 2012; Holmes, 1993). Naturally, an individual seeking psychotherapeutic help may have had difficulty in forming a secure base in the past so the establishment of a secure base within psychotherapy can be seen as both the means and end of treatment (Holmes, 1993).

Importantly, Karen (1998) reports that internal working models are malleable. This can have adverse consequences; for example, unresolved loss or other trauma in adulthood can detrimentally affect attachment style, but relatively secure relationships in adulthood can positively modify internal working models. In particular, Karen reports that therapeutic relationships and committed romantic partnerships have the potential to transform attachment styles from insecure to secure. He emphasises that, for this to occur, the losses, disappointments and traumas of the past need to be remembered, reflected on, and worked through.

**Conclusion**

This literature review is breaking new ground in its systematic consideration of the application of attachment theory to the work of therapeutic communities for addictions. New Zealand data indicates that alcohol and other substance use is widespread with adverse effects on individuals, families, and society.

Attachment theory is empirically validated and has illuminated why and how some individuals' developmental trajectories are impeded. While attachment style tends to be formed in childhood, it is malleable to change in later life provided healthy attachment relationships allow for remediation of internal working models. Subsequent chapters lay the foundation for exploring how therapeutic communities might provide the context in which this healing can occur.

## **Chapter 2: Methodology**

This chapter outlines the research approach to this study of attachment theory, addictions, and therapeutic communities. It gives a full account of the development of the literature review including the identification of the research question, the epistemology and theoretical framework underpinning the review, the rationale for choosing a critical literature review as an appropriate methodology, the methods, and the process by which the information was brought together.

### **Identification of research question**

At the time of developing the research question, I was a newly-minted psychotherapist beginning my career in a therapeutic community for addictions. The parallels between family life and this residential treatment context quickly became apparent: both are social contexts in which psychosocial development will occur if all goes well for the children or residents. As attachment theory is concerned with how social and emotional development occurs in children and adults, I became curious as to if and how it had been applied to the theory and method of therapeutic communities. A brief review of the literature revealed a substantial body of work on attachment theory and addictions but very little referring to attachment theory in the context of therapeutic communities. This, therefore, suggested an opportunity to make links between these two fields, leading to my research question: What clinical implications can be drawn from attachment theory for therapeutic communities for addictions?

### **Epistemology**

Epistemology is concerned with how we know what we know and therefore underlies any meaning-making project. Moving beyond implicit assumptions to explicit descriptions of epistemology is critical in determining how research should be undertaken and presented (Crotty, 1998). Crotty outlines three fundamental epistemological positions: objectivism,

constructionism and subjectivism. As one moves through these positions the validity given to the concept of a neutral observer of a knowable reality decreases: at one pole, objectivism views truth as existing independent of the perspective of the observer; at the other, subjectivism proposes that reality does not exist outside the observer's experience. Positioned between them is constructionism, the epistemology guiding this literature review, with its recognition that knowledge is created through interactions between subject and object. Constructionism is often called social constructionism as it recognizes that societal perspectives are inseparable from how meaning is made (Scott & Morrison, 2006). Knowledge, therefore, can never be seen to be independent of society and culture; it is both real and produced (Law & Urry, 2004).

Constructionism is therefore appropriate for this project which is concerned with our social world, interactions between individuals, and the interpersonal contexts in which healing can occur. However, it is worth noting that while constructionism guides my approach, it is not necessarily the epistemology of the literature being reviewed. In approaching this literature from a constructionist stance, I am acknowledging my impact on the meanings I discern in the literature. I am also acknowledging that the literature related to addictions, attachment, and therapeutic communities has been generated in particular social and cultural contexts. As Law and Urry (2004) point out in relation to social investigation, the process involved in the creation of the literature also contributes to the creation of social realities and social worlds. Similarly, I acknowledge that in bringing together two previously distant relatives – attachment theory and therapeutic communities – I am involving myself in the creation of our social world.

### **Theoretical framework**

How one thinks about a topic also shapes the approach and methods used to understand it (Graue & Karabon, 2013). The theoretical framework underpinning this critical review of the

literature is interpretivism. This is consistent with constructionism as it is concerned with how people interpret and make sense of their lives and of reality (Holloway, 1997). Ponterotto (2005) contrasts interpretivism with positivism which seeks to understand reality by proving or disproving hypotheses, usually through quantitative research methods. Interpretivism, on the other hand, assumes that meanings are socially constructed, multiple, and hidden so require care and thought to reveal.

Interpretivism is appropriate to this review of diverse bodies of literature based on different epistemologies, theoretical frameworks and methodologies. It is through interpreting this literature that greater understanding can be achieved of the relationship between attachment theory and therapeutic communities for addictions. By positioning this project within the interpretivist research framework, I am acknowledging that I can only hope to illuminate some of the multiple perspectives and meanings associated with the topic.

Constructionism recognises that a researcher's values and experience cannot be completely eliminated from the research process and may be fruitfully used (Ponterotto, 2005). Therefore I am prompted to acknowledge my own potential biases, outline the strategies I have taken to minimise their footprint, and recognise their uses. For example, my enthusiasm for attachment theory and my day-to-day work in a therapeutic community for addictions enables me to match the literature against my own experience, creating the opportunity for a commonsense check on the findings.

The use of the first person form throughout this review also aligns with interpretivism by acknowledging that the research inevitably contains some degree of subjectivity.

However, the compass provided by the constructionist epistemology compels me to recognise the paramount importance of the literature being reviewed. Constructionism demands

that I bring the two poles of objectivity and subjectivity together (Crotty, 1998). This can be compared with what Crotty describes as the “rampant subjectivism” (p. 48) of much qualitative research: “Constructionism is not subjectivism. It is curiosity not conceit” (p. 52).

An important caveat to this outline of the epistemological and theoretical underpinnings of this research project is to acknowledge that I am also drawing on objectivism and positivism in my approach to some of the literature. For example, as described below, I draw on two tools in my critique of the quantitative research in the main chapters of this review (Critical Appraisal Skills Programme, 2010b, 2010c). With their emphasis on validity, generalisability, and objectivity, these tools clearly emerge from a positivist framework (Crotty, 1998). However, as Crotty explains, research conducted in a non-positivist manner is more concerned with interpretation than validity. This is the overall stance taken in this review.

### **Research methodology**

In considering the most appropriate methodology to address my research question within the limits of a 60-point dissertation I clarified that I would need to become familiar with four bodies of literature relating to:

1. Attachment theory
2. The application of attachment theory to addictions
3. Therapeutic communities for addictions
4. The application of attachment theory to therapeutic communities for addictions.

As literature reviews can, amongst other things, build bridges between related topic areas (H. M. Cooper, 1989), this presented itself as an appropriate methodology for answering a research question which draws on literature from related but somewhat distant fields. In

addition, this project resonates strongly with two of Hart's (1998) reasons for reviewing the literature:

1. To synthesise and gain a new perspective
2. To identify relationships between ideas and practices.

That is, this project will firstly synthesize the literature on attachment theory and addictions and on therapeutic communities for addictions, in order to gain a new perspective on both areas, and, secondly, bring the ideas of attachment theory to the practices of therapeutic communities for addictions.

Importantly, Aveyard (2010) states that "a literature review that is carried out systematically is a research methodology in its own right" (p. 19). This methodology has been explicitly employed in post-graduate research at the Auckland University of Technology (AUT) Faculty of Health and Environmental Sciences (Jackson, 2011; Naser, 2011) and elsewhere (LaRossa, 1996; Salvat, 2010). This systematic approach can be contrasted with the traditional or narrative review which is less rigorous (Cronin, Ryan, & Coughlan, 2008) and is not easily repeatable (Aveyard, 2010). However, different bodies of literature require different review strategies (H. M. Cooper, 1989) and, as discussed in more detail below, the theoretical literature revealed in the literature search process was approached more in the manner of a traditional or narrative review.

Petticrew and Roberts (2006) highlight some limitations of literature reviews, including difficulties in locating and synthesizing appropriate contextual information and in incorporating results of qualitative research. However, H.M. Cooper's (1988) Taxonomy of Literature Reviews provides a model for approaching different research methods and contextual information, while the Centre for Reviews and Dissemination (CRD) (2009) states that qualitative and quantitative

research can be synthesized. Therefore, a critical review of the varied literature on attachment theory and addictions holds the promise of shedding new light on the practices of therapeutic communities for addictions and highlighting opportunities for future research.

While I am not undertaking a systematic literature review, a brief explication of this approach provides a context for this review. According to Petticrew and Roberts (2006), a systematic literature review adheres closely to a set of scientific methods in order to limit error by identifying, appraising and synthesizing all the relevant studies to answer a particular question. The Cochrane Collaboration has detailed the most well-known method of conducting a systematic review, however, this process is extremely time consuming (Aveyard, 2010; Centre for Reviews and Dissemination, 2009; Parry, 2000). The CRD (2009) also recommends that at least two reviewers, ideally more, undertake a systematic literature review. Therefore, in order to reflect its relatively narrow scope due to its sole authorship, the current review is described as a critical review of the literature. However, Aveyard (2010) advises that even if a sole researcher cannot meet the stringent requirements of a Cochrane Collaboration style review, it is still necessary to be systematic in reviewing the literature to ensure a rigorous approach.

## **Method**

In considering the appropriate method for a literature review, the type and quantity of literature is a key consideration (McLeod, 2001). A thematic analysis, as undertaken by Jackson (2011) within the literature review methodology, is more suited for qualitative research and creates an opportunity for close engagement with a relatively small number of publications (McLeod, 2001). My initial literature search revealed a large body of different types of literature, including many quantitative studies. As discussed above, a traditional literature review lacks rigour (Cronin et al., 2008) and is not easily repeatable (Aveyard, 2010). Therefore,

the method for this research project follows Aveyard's (2010) guidelines for a critical literature review. While this may appear to be a conflation of method and methodology, it aligns with Hart's (1998) view that the distinction between the two is artificial; methods naturally emerge from methodology. Therefore, in drawing on Aveyard's assertion that a literature review is a methodology in its own right, the only determinations I need to make regarding method are the most appropriate ways to approach, review and synthesise the various bodies of literature.

#### *Literature search process*

When the initial review of the literature revealed relatively little literature on the application of attachment theory to therapeutic communities, it became apparent that two separate literature retrieval processes were required: the first for literature on the application of attachment theory to therapeutic communities for addictions, the second for literature on the application of attachment theory to addictions per se. It also became clear that this critical review of the literature included three of the four foci in H.M. Cooper's (1988) Taxonomy of Literature Reviews: research outcomes, theories, and practices or applications. This is discussed more fully below.

The search results for both topics are detailed in Appendix A. Four databases were searched:

1. PsycINFO
2. Proquest Central
3. Proquest Dissertations and Theses – Full Text
4. Psychoanalytic Electronic Publishing (PEP).

The PsycINFO database is published by the American Psychiatric Association and contains more than three million references to peer-reviewed literature in behavioural science and mental health (American Psychiatric Association, 2013b).

ProQuest Central is one of the world's most comprehensive collections of digital information with full text for over 13,000 journals including 640 psychology titles (ProQuest, 2011).

The Proquest Dissertations and Theses database contains more than two million entries with over 70,000 new dissertations and theses added each year (ProQuest, 2012). This database of unpublished work was included in the search to ensure I gained a thorough grasp of the literature and was well placed to decide what to include in the synthesis (H. M. Cooper, 1989). As H.M. Cooper elucidates, publication is not necessarily a guarantee of quality and a set of published studies tends to emphasise only research with significant results.

PEP is a digital archive of many of the major works of psychoanalysis, including 50 psychoanalytic journals (Psychoanalytic Electronic Publishing, 2013). As the searches detailed in Appendix A show, the PEP searches only revealed two pieces of literature. This can be understood in the light of the psychoanalytic community's resistance to Bowlby's attachment theory (Holmes, 1993) and the theoretical basis of therapeutic communities for addictions being outside the psychoanalytic framework, variously described as atheoretical (Norton & Haigh, 2002) and, more commonly, as based on social learning theory (Bell, 1994; De Leon, 1995).

***Inclusion and exclusion criteria.*** In conducting a literature search, clear inclusion and exclusion criteria are critical to identify which literature will and will not address the research question (Aveyard, 2010). For PsycINFO the inclusion criteria were English language and all journals, and for Proquest Central English language, scholarly journal, and article. Only the

former applies to the Proquest Dissertations and Theses database search. For the PEP searches, English language was the only inclusion criteria due to the low search success rate.

Qualitative research was included in the review as it is suited to the discipline of psychotherapy (Fonagy, 2003), is now recognized as relevant in assessing health interventions, and can be synthesized with quantitative evidence (Centre for Reviews and Dissemination, 2009).

In terms of exclusion criteria, I heeded H.M Cooper's (1989) warning that the individuals being studied in the retrieved literature may not represent all individuals in the target population of the literature review. However, the searches revealed studies on many more specific target populations than anticipated. In order to impose a reasonable limit on the scope of the review, I excluded literature relating to therapeutic communities for special populations, for example, for prisoners, for children or adolescents, in relation to specific psychiatric diagnoses, for mothers and babies/children, for sex addiction, internet addiction or eating disorders, specifically co-existing disorders, and the effect of therapeutic community treatment on homelessness. In relation to the search for literature on addiction and attachment, literature not related to substance addiction was excluded as was literature solely concerned with specific populations, for example, those with co-existing disorders.

As the search progressed, it became apparent that different inclusion and exclusion strategies were required for the different topics. For example, for the search on attachment and addiction, I followed the example of Schindler and colleagues (2005) and excluded the many studies that use the term "attachment" as an indication of the quality of relationships unless the study was particularly pertinent to the review. However, for the search on attachment and therapeutic communities, the terms needed to be broadened. For example, as only two studies

were retrieved which explored attachment mechanisms in therapeutic communities for addictions (Brieland, 1983; Ravndal & Vaglum, 1994), they were both included despite their imprecise use of the term “attachment”. Likewise, in attempting to identify literature exploring the possibility of attachment to people or place the search term “therapeutic communit\*” was broadened to include “hospital” and “institution”.

As this literature review is concerned with treatment in therapeutic communities for addictions, the target population is individuals with substance addictions. However, I also included studies related to substance use/abuse in the expectation that findings about the attachment styles of people who use and/or abuse substances may be useful. This distinction is made explicit throughout the chapter 4 which synthesises the research evidence on attachment and addiction. Similarly, in this chapter I justify, with reference to the literature, my decision to include studies with adolescent samples.

As seven months had elapsed between the literature search and the final stages of preparing this literature review, I replicated the original literature search and retrieved one new article (Burkett & Young, 2012) and one I had overlooked in my previous search due to its minimal reference to attachment theory (Bell, 1994).

**Keywords.** Keywords were initially identified by the PsycINFO mapping tool, the Proquest Central Thesaurus, and by trial and error, with new keywords identified as the search progressed and my understanding of the topics grew. This progression is apparent in the table documenting the search process (Appendix A). The search was undertaken systematically, and results recorded as it progressed. The eventual repetition of the same references within and across databases confirmed that I was accessing the relevant literature (Aveyard, 2010).

The most relevant references were identified by reading the title and then the abstract. Aveyard (2010) warns that the title alone is not sufficient to determine relevance, however, I found that it can clearly indicate irrelevance.

As 23 of the articles revealed by the search were not available in full text through the four databases, I used the AUT library interloan service to access them.

As recommended by Aveyard (2010), I also reviewed the reference lists of the key articles, searched the websites of relevant journals, particularly those which were not available through the AUT databases, and searched by publisher and author name as I identified the key publishers and authors in the fields. This was particularly fruitful in the search for literature on therapeutic communities and revealed a number of books which I accessed through the AUT library and its Borrow Direct service. If cited journal articles were not available through the AUT library, I endeavored to locate them by searching the internet and/or contacting the author(s) directly. I also located a number of otherwise unavailable books on the internet.

#### *Reviewing and critiquing the literature*

The next step was to become familiar with the literature in order to determine its relevance and assess its quality (Aveyard, 2010). This involved reading and re-reading the literature with my research interest in mind. My focus became clearer as I became more familiar with the literature and the sets and sub-sets of topics emerged: attachment theory, addiction and attachment, substance use/abuse and attachment, the development of therapeutic communities, the key elements of therapeutic communities for addictions, and attachment in relation to therapeutic communities and other institutions.

H.M. Cooper's (1988) list of the four potential foci of research reviews provided a framework for approaching these multiple topics. The foci are:

1. Research outcomes
2. Research methods
3. Theories
4. Practices or applications

Much of the literature on attachment and addictions and, to a lesser extent, attachment in therapeutic communities falls into the first category of research outcomes. The search process for this literature was the most intensive as was the critical appraisal. Within the third category is a review of the key theories on attachment and addiction which provides a context for the entirety of the review. As with a traditional literature review which presents "a comprehensive background for understanding current knowledge" (Cronin et al., 2008, p. 38), I approached this theoretical literature less systematically, although, my search process is well documented. Finally, this project also fell into the fourth category with a review of the literature describing the practices of therapeutic communities for addictions. Again, I took a systematic approach to retrieving this literature and quickly discovered that the bulk of this material appears in books and web-based guidelines.

In order to review and critique the research literature on addiction and attachment I prepared a paragraph summarizing each study. This information was further distilled into the table in Appendix C which provided an invaluable reference tool as the data mounted. Inevitably, I excluded some studies which had initially appeared promising. For example, I excluded four studies (J. P. Frank, 2001; Hannan, 2005; Lotter, 2001; Seewer, 2009) which were solely concerned with the effect of attachment styles on addiction treatment outcomes.

As the quantitative studies were case control or cohort studies, I referred to the relevant CASP tools (Critical Appraisal Skills Programme, 2010b, 2010c) to guide my critique. These tools contain a series of 11 and 12 questions respectively. For example, the questions include:

- Was exposure accurately measured to minimise bias?
- What confounding factors have the authors accounted for?
- What are the results of the study?
- Can the results be applied to the local population?

Similarly, the CASP tool for qualitative studies (Critical Appraisal Skills Programme, 2010a) provided guidance in my critique of the small number of such studies retrieved.

### **Bringing the literature together**

The literature retrieval process for chapter 3 on attachment and therapeutic communities garnered a wealth of information on the development of therapeutic communities and their practices. This was the basis for determining what type of therapeutic community this literature review was concerned with and the key elements or practices of therapeutic communities for addictions. Another body of literature summarized and integrated in chapter 3 relates to the application of attachment theory to therapeutic communities for addictions.

As the project progressed, it became clear that the majority of the critique and synthesis of the literature would be contained in chapter 4 on addiction and attachment. A body of literature exploring the key theories on attachment style and addiction was identified, as well as 33 studies with this as one of their themes. I initially summarized and synthesized the theoretical literature, and then began the process of summarizing the research literature. This involved tracking the chronological development of ideas and assessment tools, identifying themes, and comparing results. Naturally, I continued to deepen my understanding of the strengths and

weaknesses of each study at this stage of the process. As discussed in chapter 4, the overall presentation of the research evidence was guided by chronology, with thematic ordering often taking precedence in order to illuminate findings related to one target group or to a particular development in the understanding of attachment styles.

Chapter 5 brings together the syntheses of the various bodies of literature and evaluates the significance of the research for therapeutic communities for addictions. This includes an exploration of how the key elements of therapeutic communities for addictions might relate to attachment styles. For example, I consider how the structured, hierarchical nature of therapeutic communities might help build secure attachment. In addition to summarizing, synthesizing and critiquing the literature on a particular topic or topics as outlined above, a critical literature review also provides the basis for identifying future research opportunities (Aveyard, 2010; Cronin et al., 2008; Randolph, 2009; Torraco, 2005). These are discussed in chapter 5.

## **Conclusion**

As outlined above, in conducting this critical literature review I endeavoured to approach a topic of personal interest systematically and with a degree of objectivity. My underpinning epistemology and theoretical framework demand that I acknowledge my own perspective and potential impact as an observer while maintaining my focus on the literature. I therefore relied on a closely documented, systematic approach which involved returning to much of the literature many times. Rigour was also enhanced by Aveyard's (2010) guidelines and the framework provided by H.M. Cooper's (1988) Taxonomy of Literature Reviews.

### **Chapter 3: Therapeutic communities for addictions**

#### **Introduction**

This chapter begins with a brief history of therapeutic communities in order to define the principles and practices of therapeutic communities for addictions and determine the scope of this literature review. I then review the literature on the application of attachment theory to therapeutic communities for addictions.

#### **The evolution of addiction therapeutic communities**

Internationally, contemporary therapeutic communities for addictions can trace their historical and theoretical antecedents through two lines of evolution. The first influence was born out of “the revulsion against the degenerated life of the over-populated nineteenth century asylums” (Hinshelwood, 2001, p. 171). This strand emerged in England during the Second World War when a number of psychoanalysts undertook the Northfield Experiment to treat soldiers recovering from war trauma. Their treatment included a discussion group “to study its own internal tensions” (Whitely, 2004, p. 237), group therapy, and the concept of the “hospital-as-a-whole” (p. 238). At Northfield, Maxwell Jones drew on his experience of working in a military hospital to develop his ideas for the psychiatric institution of the future which would include a flatter staff hierarchy, daily community meetings, and democratic decision making (Whitely, 2004). He further tested and developed his vision at Henderson Hospital. This approach, pioneered by psychiatrists in hospital settings, has been referred to as the psychoanalytical, milieu, environmental or democratic therapeutic community (Hinshelwood, 2001). It has been called the first generation of therapeutic communities (Broekaert, Vandavelde, Soyez, Yates, & Slater, 2006) and has influenced psychiatric hospitals in the United Kingdom, Europe and America (Broekaert et al., 2006).

The second generation, called “concept therapeutic communities”, was developed in America to treat alcoholics and drug addicts, starting with Synanon community in 1958 and further elaborated at Daytop, Phoenix House, Odyssey House and others (Broekaert et al., 2006). Broekart and colleagues cite Ottenberg and Kooyman (1993): “A concept TC [sic] is a drug-free environment in which people with addictive (and other) problems live together in an organized and structured way in order to promote change and make possible a drug-free life in the outside world” (p. 2). Staff were often ex-residents and the emphasis was on self-help. Synanon disintegrated in 1991 due to controversy surrounding its leadership and practices but by then the concept therapeutic community model had spread throughout America, Europe and the rest of the world (Broekaert et al., 2006).

In Europe, therapeutic communities for addictions were influenced by the American concept therapeutic community, the democratic therapeutic community initially developed in the United Kingdom, and European educational theories and social learning initiatives (Broekart et al, 2006). Yates, Rowlings, Broekart, and De Leon (2006) report that the democratic model was not suitable for addicts although, in Europe, traces of the model remained even after the concept therapeutic community was imported. More recently, Perfas (2012) indicates a continuing distinction between democratic and concept therapeutic communities, reporting that the hierarchical organization of concept therapeutic communities is well suited to clients with addictions as “populations with histories of serious disregard for formal rules and authority figures” (p. 9) require a hierarchy of peers to regulate behaviour and maintain order.

Perfas (2012) reports that the World Federation of Therapeutic Communities was established in the mid-1970s and concept therapeutic communities are now used to treat addictions worldwide. Under the Federation’s guidance, staff from more than 30 countries have

received training in running concept therapeutic communities (Bunt, Muehlbach, & Moed, 2008). Concept therapeutic communities in New Zealand include Higher Ground Drug Rehabilitation Trust and Odyssey House.

While the effectiveness of addiction therapeutic communities is not directly relevant to this literature review, it is worth noting that De Leon's (2010) review of the research on treatment effectiveness found that addiction therapeutic communities offer evidence-based treatment that is effective for substance abuse disorders. In coming to this conclusion, De Leon surveyed the evidence from seven field effectiveness studies, eight randomised control trials, and six published statistical meta-analytic studies. Similarly, three decades of research by the National Institute of Drug Abuse (2002) found that participation in addiction therapeutic communities had many positive outcomes including lower levels of drug use, criminal behaviours, unemployment, and indicators of depression than before treatment.

### **Scope of this review**

This brief history of therapeutic communities sets the stage for defining the parameters of this literature review. It will largely confine itself to exploring the application of attachment theory in the context of concept therapeutic communities except when the literature on democratic therapeutic communities can make a valuable contribution to the topic. I have made this decision due to my work in a concept therapeutic community and because almost all the literature on addiction therapeutic communities relates specifically or implicitly to this environment.

Concept therapeutic communities have been modified and adapted to operate in a wide range of settings and with a wide range of client groups, for example, with prison inmates, adolescents, women and their children, homeless people, HIV victims, and people with co-

existing psychiatric disorders (De Leon, 2000). While all therapeutic communities inevitably treat some or all of these client groups, literature devoted specifically to modified treatment in these contexts will not be discussed unless it has a particular bearing on the topic. Similarly, literature related to non-residential therapeutic community treatment, for example, outpatient clinics (De Leon, 2000), will not be reviewed unless it directly pertains to the topic.

### **Therapeutic communities: Essential elements**

In order to explore how attachment theory pertains to addiction therapeutic communities, it is necessary to determine what an addiction therapeutic community is. The literature agrees that the fundamental essential element of a concept-based addiction therapeutic community is the use of a peer community to achieve change (Soyez & Broekaert, 2005). De Leon phrases this “community as method” (2000), and Hinshelwood “community as analyst” (Hinshelwood, 1979). This perspective was also acknowledged by the democratic therapeutic communities in the phrase “community as doctor” (Rapoport, 1960). Likewise, the Australasian Therapeutic Communities Association reports that a key aspect of the therapeutic community model is community as method (2012).

Many attempts have been made to define exactly what a concept therapeutic community comprises, largely for auditing and evaluative purposes (Community of Communities, 2007; De Leon, 1995, 2000; Lees, Manning, & Rawlings, 2004; Melnick, Leon, Hiller, & Knight, 2000). These lists of therapeutic community elements are variously referred to as essential elements (De Leon, 2000; Goethals, Soyez, Melnick, De Leon, & Broekaert, 2011; Melnick & De Leon, 1999); essential experiences of change (De Leon, 2000); treatment characteristics (Broekaert, 2001); basic concepts (Australasian Therapeutic Communities Association, 2012), and themes of treatment (Edwards, 2002). They include qualities such as “safety and trust” (Soyez & Broekart,

2005) and “feeling cared for” (Edwards 2002), and descriptions of practices such as “planned treatment duration” (De Leon, 2000) and “activities to increase self-competence” (O’Brien & Perfas, 2004). See Appendix B for more detail.

A review of De Leon’s work (1995, 2000, 2001) shows his influence on the development of what appears to be the most thoroughly researched list of treatment elements, those used in the Survey of Essential Elements Questionnaire (SEEQ) (Goethals et al., 2011; Melnick & De Leon, 1999; Melnick et al., 2000). The SEEQ was developed on the basis of De Leon’s theoretical framework (Melnick & De Leon, 1999), in consultation with American therapeutic community programme directors, before being tested amongst American and European therapeutic communities. De Leon’s work is also credited as the primary source in American training material for addiction therapeutic community staff (Substance Abuse And Mental Health Service Administration, 2006). However, another set of standards has also been developed on the basis of comprehensive consultation. The Service Standards for Addiction Therapeutic Communities (Community of Communities, 2007) was developed in consultation with representatives from 120 European and Australasian therapeutic communities. These standards include a list of 16 core standards (see Appendix B) and further lists describing the physical environment, staff policies, treatment programme, etc.

Close reading of these lists naturally reveals many commonalities despite their differing terminology and the different theoretical, behavioural, and organisational arenas to which they refer. As this modified literature review is concerned with how community as method can be seen through the lens of attachment theory, the explicitly therapeutic elements (e.g., therapeutic groups) are of less concern than the community milieu. For the purposes of this literature

review, I have prepared the following paragraph summarising the most common elements listed in Appendix B.

A concept TC offers a hierarchical, structured, and emotionally safe environment in which work, open communication, self-help and mutual help are instrumental to healing. Peers and staff role-model community values and norms which are reinforced by sanctions and privileges.

### **Attachment and therapeutic communities**

O'Brien and Perfas (2005) report that the therapeutic community traces its beginnings to the healing potential of community.

When a person suffers from social or mental maladies, that person finds healing not in isolation but in communion with another human being. This is why therapy heals. Using the contact between two people or a group of people, it brings to bear the social context to alter thinking, feeling, and behaviour (p. 614).

This, like many other descriptions of the healing potential of therapeutic communities, is resonant of attachment theory but does not directly reference it.

For example, De Leon (1995, 2000) describes the essential social healing experiences provided by a therapeutic community as identification, empathy, and bonding. He asserts that the "bonding histories" of substance abusers in therapeutic communities are an aspect of their relational problems, and, without referencing attachment theory, suggests that therapeutic communities promote bonding by encouraging residents to drop their defences and masks, become emotionally vulnerable, and take risks.

New individual and collective attachments counter the historically self-defeating influence of negative peer groups. They also reverse the disaffiliation and personal

isolation that characterize many chemical abusers. Attachments teach those recovering how to positively use people to interrupt personal crisis or stress that could lead to relapse (2000, p. 232).

Cancrini, De Gregorio and Cardella (1994) also refer to “bonding”, explaining that the pleasure of the group bonding experience provided in Italian therapeutic communities for heroin addicts must be adequate “to defeat ‘the memory of the pleasure’ of taking heroin” (p. 642).

Similarly, Bell (1994) makes passing reference to attachment theory in his article on the importance of connection in therapeutic communities. He lists caring, empathy, responsibility, trust, and openness as contributing towards the development of connection which is critical to successful treatment. In addition to outlining “connection theory” (p. 538) rather than drawing on the learnings of attachment theory, Bell’s failure to clearly differentiate between psychiatric therapeutic communities, concept therapeutic communities for addictions, and democratic therapeutic communities for addictions limits the applicability of his work to this literature review.

Literature related to democratic psychiatric therapeutic communities is more informed by attachment theory. For example, Whitely (2004) writes that a feature of treatment in psychiatric therapeutic communities is the successful attachments that patients make. “He (sic) will test out, act-out, but finally take the risk of attaching to the community as a whole, to the staff and to other patients” (p. 243-244). Attachments are made to the actual place, to peers, and to staff with the goal being to eventually “make stable and mutually satisfying attachments to individual others” (Whitely, 1998, p. 275). Haigh (1999) too writes of the importance of patients in psychiatric therapeutic communities developing secure attachment.

Many writers liken therapeutic communities to family-of-origin experiences. For example, writing from a New Zealand democratic therapeutic community for psychiatric patients, Ashburn Hall, Schimmel (1997) describes an experience of secure attachment as one of the major dimensions of therapeutic community treatment. While not explicitly elaborating the attachment mechanisms at play, he describes the therapeutic community as a surrogate family which recreates aspects of family of origin relationship patterns. Similarly, the Australasian Therapeutic Communities Association (2012) lists “healthy family-like relationships” among its eight basic concepts of a therapeutic community and Yates and Wilson (2001) describe an addiction therapeutic community as a substitute family where staff re-parent residents. Brieland (1983) loosely draws on attachment theory in describing an addiction therapeutic community as a second family, with staff as parents and peers as siblings. She suggests that therapeutic communities can meet basic human needs that have not been provided in early life: protection and safety, to feel loved and respected, and to experience a sense of belonging.

Tolmacz’s (2003) work on attachment in a therapeutic community for severely disturbed adolescents may shed some light on the application of attachment theory in therapeutic communities for adult addicts. He believes the main function of this type of therapeutic community is for the adolescent to experience it as a secure base; a difficult task as an adolescent whose attachment needs have not been adequately met as a child will project his or her distress onto others, particularly authority figures. Thus therapeutic community staff are likely to take on roles from the adolescent’s familial context. If this occurs staff cannot be a secure base but, on the other hand, if the adolescent cannot project their distress, they will inevitably experience it more fully and painfully themselves. For adult addicts who have never had a secure base and have used substances to avoid their suffering, the situation may be similar.

*Attachment to place*

The literature cited above refers to the potential for a therapeutic community, including its staff, the residents, and the place itself, to provide a secure base for its residents. How this occurs is not explored. In relation to place, Adshead (1998) proposes that an institution, including its built landscape, can provide psychiatric patients with a secure base, and Fried (2000) suggests that the physical quality of a place may contribute to community attachment. This is of relevance to this literature review as “community separateness” is one of De Leon’s (2000) components of a therapeutic community, replicated in the Substance Abuse and Mental Health Service Administration (2006) training material.

*Attachment to staff and peers*

In relation to therapeutic community staff and peers, while attachment theory was originally based on work with mothers and children later research revealed the role of extended family in providing kinship-bonds, and friendships and romantic relationships in providing affectional bonds (Ainsworth, 1991). The elements of early attachment are not necessarily all present in later attachments, however, if some are present, attachment relationships can form between adults, as is well recognised in relation to the therapeutic relationship, and also with peer groups (Höfler & Kooyman, 1996).

In his work on group therapy for addicts, Flores (2001) draws on Walant’s (1995) term “immersion” to describe how a group can become a secure base, creating the affiliative relationships that are critical to long-term recovery. As an individual’s attachment system opens up during times of crisis (Flores, 2001), a therapeutic community which inevitably presents newcomers with new people, a new social culture, and an unfamiliar set of values and norms seems likely to precipitate just this readiness for a new attachment experience. “Once the self

has been activated through an attachment relationship, the emergence, evolution, and consolidation of a new self can be completed – if the environmental responses remain consistently nurturing and reparative” (Flores, 2001, p. 79). Whiteley (1994, 1998, 2004) relates the therapeutic community attachment experience to Winnicott’s potential space in which mother and child experiment with closeness and distance, separation and togetherness. Thus, the intense emotional interaction encouraged by a therapeutic community is a route to attachment and the establishment of a secure base (Whiteley, 1994).

#### *Group impact on attachment style*

Research suggests that attachment style can change as a result of participation in a group. For example, Smith and Tonigan (2009) found that people involved with Alcoholics Anonymous (AA) had more secure attachment styles and better interpersonal relationships than prior to their AA involvement. However, retrospective report bias is a possibility as the research required participants to report on their relationships prior to their AA involvement. Markus’s (2003) work amongst addicts in recovery, the vast majority of whom were affiliated with 12-step groups (e.g. AA and Narcotics Anonymous), found that those with more than 10 years abstinence had more secure attachment styles than those with less than 10 years abstinence. Of course, it is unknown whether those with more secure attachment are more likely to remain abstinent or whether involvement with 12-step programmes improves security of attachment. In contrast, Frank’s (2009) research in a therapeutic community found no improvement in attachment after six months of addiction treatment. However, Frank’s sample group was small (nine women).

**Attachment research in therapeutic communities**

The role of addiction therapeutic community practices and approaches in activating a resident's attachment system and improving attachment style has not been well elaborated. However, two studies shed some light on the matter. One took place in a Norwegian therapeutic community, Phoenix House (Ravndal & Vaglum, 1994), and the other in two American therapeutic communities, Daytop Village and Gateway Houses (Brieland, 1983). As discussed below, they hint at the potential for therapeutic community practices to ameliorate or deepen insecure attachment.

*One Norwegian therapeutic community: Inhibiting attachment*

Ravndal and Vaglum's (1994) study in a Norwegian therapeutic community is concerned with attachment to the programme, peers and staff rather than with building secure attachment. This suggests a non-technical definition of attachment, particularly as the authors did not use attachment measures, relying instead on a researcher acting as participant-observer.

Notwithstanding this limitation, as one of only two studies of actual therapeutic communities that refer to attachment, this study is noteworthy. Ravndal and Vaglum (1994) identified several aspects of Phoenix House's approach that were not likely to build attachment to the programme. For example, new residents, most of whom had poor social skills and relationship problems, were often not given the care they needed, partly due to the hierarchical structure which has "an inbuilt danger of misuse of power and harassment" (p. 48). Negative feedback and sanctions were often applied without explanation by senior residents. As acceptance by peers is critical to the healing of addicts whose developmental needs were unmet (Flores, 2004), the finding that senior peers "functioned in the role of unpredictable parents" (p. 48) is damning. In addition, the staff who had the most contact with new residents had the least

training and experience, and tended to hold rigid attitudes. “This was repetition of earlier trauma for many of the residents, in experiencing that no safe adults were there to help them when they needed them most” (Ravndal & Vaglum, 1994, p. 49).

Whether Ravndal and Vaglum’s (1994) conclusions can be applied to other concept therapeutic communities is questionable. Assessed against the definition developed above Phoenix House appears to include most of the common elements of concept therapeutic communities, although it is not clear whether open communication is seen to be instrumental to healing, and the study suggests that this therapeutic community is not an emotionally safe environment.

In summary, while of only limited value to this literature review due to the limitations outlined above, Ravndal and Vaglum’s (1994) study hints at the potential dangers of slavishly adopting the concept therapeutic community model as described in many of the lists in Appendix B. In particular, a hierarchical, structured environment while suggestive of a supportive family situation in which secure attachment is encouraged is also reminiscent of repressive, authoritarian, and punitive families, institutions, and societies.

However, while the lists in Appendix B help indicate the core elements identified by the literature, they exclude many of the other more specific recommendations found in the literature. For example, the service standards for therapeutic communities developed by the UK-based Community of Communities (2007) include a number of standards relevant to the issues highlighted by Ravndal and Vaglum (1994). One advises that community members who are involved in directing therapy (presumably in groups) receive individual and group supervision, another that staff are adequately trained, and another that staff have regular forums to reflect on their work. Similarly, O’Brien and Perfas (2005) suggest that therapeutic community staff

receive supervision, and the United States training material includes a module on how to promote healthy relationships between residents (Substance Abuse And Mental Health Service Administration, 2006).

*Two American therapeutic communities: A family that cares*

Like Ravndal and Vaglum (1994), Brieland (1983) uses some attachment theory terminology but does not explore its theoretical basis or implications. She draws instead on Yalom's (1975) curative factors to analyse treatment in two American therapeutic communities. However, her contribution brings another perspective based on her experience as participant-observer in Daytop Village and Gateway Houses. She describes them as leading therapeutic communities internationally and her description suggests they meet the definition developed above.

Brieland (1983) reports being surprised to experience a feeling of freedom in the "highly controlled, conformity-demanding environment" (p. 82). She suggests that the "corollary of safety and security is freedom" (p. 82) and likens this to the exploratory capacity of securely attached children compared with their fearful peers. As Flores puts it: "Secure attachment liberates" (2001, p. 72). Brieland does not disclose her own attachment style or addiction status making it hard to assess whether her experience might be representative of the therapeutic community client group. However, she does report that residents experienced the therapeutic communities as being physically and emotionally safe, as if they were in a family that cared.

### **Conclusion**

The theory, model and methods guiding concept therapeutic communities for addictions have been well elaborated although universal agreement has not been reached on their essential

elements. For the purposes of this literature review, close study of the lists included in Appendix B led to the development of the description above of a concept therapeutic community.

Very little of the literature reviewed above specifically refers to the application of attachment theory to addiction therapeutic communities. This is perhaps unsurprising given that social learning theory is widely cited as underpinning therapeutic communities (Bell, 1994; De Leon, 1995) whereas, in developing attachment theory, Bowlby drew on psychoanalytic theory and ethology (Holmes, 1993). Social learning theory emphasises the role of cognitive capabilities in facilitating social behaviour (Bandura, 1977). In contrast, whereas attachment theory explicates the cognitive component of attachment behaviour in terms of internal working models, it is primarily concerned with the affect-laden, proximity-seeking behaviour that defines attachment style and exploratory capacity (Holmes, 1993).

The more generalised approach to attachment taken by some authors can shed light on the application of attachment theory to therapeutic communities. For example, writers emphasise the importance of social context (O'Brien & Perfas, 2005), of a sense of belonging (Brieland, 1983), of connection (Bell, 1994), and of empathy, identification and bonding (De Leon, 1995, 2000).

The perspectives provided by Ravndal and Vaglum (1994) and Brieland (1983) highlight some of the challenges involved in creating and maintaining a community which complies with auditing and regulatory requirements, and meets therapeutic objectives. Ticking off a list of essential elements may not create community. As Al-Khudairy (2000) cautions, a therapeutic community could have all the prescribed features but not provide the sense of belonging in which therapeutic change can take place.

The dearth of literature exploring if and how addiction therapeutic communities might be instrumental in ameliorating insecure attachment raises the question as to whether attachment style bears any relationship to addictions. This is addressed in the next chapter which reviews, synthesises, and critiques the literature on attachment and addiction.

## **Chapter 4: Attachment theory and addictions**

### **Introduction**

Attachment theory has been the focus of substantial research, such that “a complete overview of the current state of empirical attachment research is hardly possible” (Brisch & Kronenberg, 2012, p. 13). However, the paucity of literature on the application of attachment theory to therapeutic communities for addictions raises the question as to whether attachment theory has any contribution to make to the understanding and treatment of addictions. In this chapter I endeavour to answer this question by reviewing, synthesising, and critiquing the theoretical and research literature exploring associations between attachment style and addictions. As is shown below attachment theory has been applied to addictions in both theoretical literature and research contexts since 1984 with an increasingly nuanced understanding developing as theoretical models have been enhanced, and research tools refined and applied to different demographic groups.

### **Theoretical underpinnings**

The substantial foundation of research underpinning attachment theory provides a strong rationale for investigating and understanding connections, if any, between early caregiving deficits and addictions (Cook, 1991; Flores, 2004). However, the etiology of addictive disorders is difficult to determine and can include genetic and biological as well as psychosocial factors (Cook, 1991; Flores, 2004; Wong, Mill, & Fernandes, 2011).

Addiction treatment specialists highlight the links between early attachment experiences, adult attachment style, and addiction. For example, Flores (1997) describes an inverse relationship between a child’s experience of positive caregiving and the propensity to turn to substances to compensate for missing or damaged relationships. Therefore, in order to cease

fruitless attempts at self-repair via substances, the individual must learn to alleviate their loneliness through healthy, nourishing relationships which provide the missing secure base. Similarly, drawing on her own clinical work and the work of attachment theorists, Walant (1995) wrote that “... at the root of addiction is a pervasive, deeply felt sense of detachment and alienation” (p. 147) borne out of unempathic parenting. Karen (1998) too linked insecure attachment, loneliness and addiction. “The lack of a secure base seems to leave one struggling with a profound and painful loneliness” resulting in “a hungry search for a sense of internal goodness” (1998, p. 383). However, this relatively early work needs to be read in the light of more recent research. The research reviewed below shows that it may not be so much loneliness per se that leads to addiction as an inability to regulate painful affect, whether it arises from isolation and alienation or other interpersonal crises.

This is hinted at by Cook (1991) who proposes that the antithesis of a secure base or sense of internal goodness is internalised shame. Repeated breaks in the child/caregiver relationship without sufficient opportunities for repair result in a magnified shame response in the grown-up child. Intense negative emotional states are frequently the experience of such adults, particularly in contexts in which attachment behaviour is triggered. The addict therefore, is addicted to experiences which ameliorate this deeply painful shame affect. In his review of the literature related to early caregiving and addiction, and his own research, Cook found that internalised shame and insecure attachment were widespread amongst addicts. However, he acknowledges that the research does not show that shame and insecure attachment are present in all people with addictions. Similarly, a critique of Cook’s work is his inability to demonstrate a causal relationship between shame and addiction. Addiction undoubtedly leads to situations which could provoke shame but whether shame is the cause of addiction is harder to determine.

The efficacy of addictive substances in temporarily alleviating the painful affects of unhealthy and unsatisfying interpersonal relationships is evident (Khantzian, 1995), however, one of the diagnostic criteria of substance use disorder is the diminishing effect of the substance over time (American Psychiatric Association, 2013a). Therefore, substances do not provide a long-term solution to painful affect, and the subsequent addiction serves as a further obstacle to developing the attachment relationships that could provide a long-term solution. Flores (2001) describes a spiral of increasingly exploitative and manipulative relationships as an addict's already inadequate interpersonal skills are further eroded by prolonged substance abuse "leading to a heightened reliance on substances, which accelerates deterioration and addictive response patterns" (p. 69). Brisch and Kronenburg (2012) reflect that the relatively easy availability of addictive substances and the difficulty insecurely attached people experience in creating a secure base combine to perpetuate addiction. This makes treatment very difficult to access as developing a secure base within a therapeutic context is generally much more difficult and stressful than using one's drug of choice (Brisch & Kronenberg, 2012).

### **The contribution of neuroscience**

Pharmacological studies support links between attachment and addiction. A recent review of research (Burkett & Young, 2012) found significant overlap between the brain regions and neurochemicals associated with both social attachment and addiction with nearly every neurochemical system involved in addiction also participating in attachment processes. In particular, dopamine and opioids are involved in addiction and in attachment behaviour associated with caregiving and pair-bonding, while corticotrophin-releasing factor is involved in addiction and in pair-bonding attachment. While Burkett and Young's review was not systematic, their findings are consistent with other literature I retrieved. For example, in chicks

attachment is mediated by an addictive response to endorphins, suggesting that attachment to a caregiver may be functionally and physiologically similar to addiction to an opiate (Panskepp, Villbert, Bean, Coy, & Kastin, 1978). Similarly, Insel's (2003) review of neurobiological research found that attachment and drug addiction involve overlapping regions and processes of the brain. In relation to the downward spiral of addiction discussed above, Burkett and Young (2012) suggest that substances may subvert attachment systems to create addictions that are just as powerful as natural attachment.

### **Research overview**

This review provides a synthesis of the literature on the relationship between attachment styles and substance use, abuse and dependence. The 33 articles I review, synthesise and critique below use a variety of instruments to assess parental relationships and/or attachment as detailed in Appendix C. These different measures use different terms, are not well associated with each other, and are difficult to compare (Crowell, Fraley, & Shaver, 2008; Schindler et al., 2005). They have also been critiqued for ignoring sexual arousal and intimacy issues, generalising across all relationships, and not including malingering and social desirability checks (Lindberg & Thomas, 2011). However, for the purposes of this literature review, they have the potential to suggest and begin to explicate any links between attachment and addiction.

As my literature search revealed a heterogeneous set of studies which used different tools and approaches to measure attachment and/or family relationships, different terms to describe degrees and types of attachment, and sample groups with differing degrees of substance use and abuse, I reviewed and critiqued the studies below in loose chronological order to indicate the progression in understanding of the relationship between attachment and addiction, and the progression in the development of assessment tools and attachment categories. A chronological

presentation is useful in examining the emergence of a topic over time (Cronin et al., 2008).

However, when themes related to the studies' methodologies or findings are highlighted, I have dispensed with chronology in favour of clarity. I have endeavoured to retain the terminology used in the studies themselves unless some translation is required for the purposes of comparison.

Only three of the studies took a qualitative approach; Sayre's (1994) research amongst adolescents in treatment and their parents, Stoops' (2011) study of women addicts, and Kizhakumpurath's (2012) study amongst the Naga people of India. Of the remaining 30 studies, 25 used recognised attachment measures.

### **Critical overview**

Six of the studies were solely with adolescents (M. L. Cooper, Shaver, & Collins, 1998; Golder, Gillmore, Spieker, & Morrison, 2005; McGee et al., 2000; McKay, Murphy, Rivinus, & Maisto, 1991; Schindler et al., 2005; Searight et al., 1991). The inclusion of these studies could be queried on the basis that experimental substance abuse amongst adolescents can be seen as exploratory behaviour based on secure attachment (Schindler et al., 2005). However, Schindler and colleagues report that about 10% of adolescents have patterns of substance use which tend to persist into adulthood. These studies may therefore shed light on the antecedents of future addiction. Another potential critique is that the research with adolescents relied on their views of their relationships with their parents. However, research shows a fairly strong correlation between adolescent and parent views of attachment or closeness (Thornton, Orbuch, & Axinn, 1995). Interestingly, one research project cited below with four adolescent addicts and their parent(s) found that the adolescents rated attachment security more accurately than their parents did (Sayre, 1994). If this could be generalised, which is doubtful due to Sayre's small survey

sample, it would lend further weight to findings that insecure attachment amongst adolescents is associated with substance abuse. Another criticism that could be levelled at the studies with adolescents is that they rely on the young people's honesty and accuracy of recall regarding their substance use. However, Marcos and Bahr (1995) found that adolescent reports of substance use are reliable and valid.

Most of the studies with adults could be subject to the some of the same criticisms. In particular, almost all of them rely on self-report and retrospective recall of events and subjective states. However, Gerlsma's (1994) work shows that memories of perceived parenting tend to be stable and unbiased over time. Many of the researchers (Golder et al., 2005; Kassel, Wardle, & Roberts, 2007; Markus, 2003; Molnar, 2004; Schindler et al., 2005; Sicher, 1998; Thorberg & Lyvers, 2006) acknowledge that their research does not confirm causal connections between insecure attachment and problem behaviour but that the results are consistent with theoretical predictions. However, the authors of two of the studies (De Rick et al., 2009; Molnar, Sadava, DeCourville, & Perrier, 2010) suggest finding a causal relationship between insecure attachment and high-risk alcohol use. Many of the researchers also warn that their findings are not necessarily generalisable to a wider population (Elk, 1999; Kassel et al., 2007; Markus, 2003; Mottola, 1984; Schindler et al., 2005; Sicher, 1998).

Some of the earlier research used assessment tools that had not been specifically designed to measure attachment as described by attachment theory. This is a substantial criticism in the context of this literature review, however, the findings of this earlier research do suggest an association between particular styles of parenting and addiction. The first four studies fall into this category and the next one is also included here as, although more recent, it also did not use a recognised attachment measure.

**Review, synthesis and critique***Studies suggestive of attachment issues*

Three studies published in 1989 and 1991 illuminate a relationship between controlling, critical, uncaring, or disengaged parenting and substance abuse. Schweitzer and Lawton's (1989) research on parental bonding and addiction found that drug abusers tended to describe their parents as being controlling and uncaring. The authors describe this style of parenting as "affectionless control" (p. 312). A 1991 study found associations between family inability to experience and share feelings and increased levels of substance abuse amongst adolescents (McKay et al., 1991). Another 1991 study (Searight et al., 1991) found that families of adolescent drug abusers were critical and emotionally distance, with poor communication and low respect for personal boundaries.

A carefully constructed retrospective case-control study of 225 male narcotic addicts explored whether family structure and functioning were associated with subsequent addiction (Nurco & Lerner, 1996). This study contrasted the addicts with men with whom they had been associated at age 11, and with men from the same community who were not their close associates. It found that from age 12-14 living in a household with one's natural parents who both assist with parenting, and strong attachment to one's father are both positively associated with avoiding later addiction. Instead of using a recognised attachment measure, this study relied on five questions about each parent, for example, "How much did you love your mother" (p. 1023), suggesting a generalised definition of attachment.

Interestingly, much later Finnish research used attachment theory as a theoretical frame but due to the study's design could not use a recognised attachment measure (Veijola et al., 2008). This research involved 3020 infants who were separated from their families for an

average of 218 days in order to protect them from tuberculosis from 1945 to 1965. The infants lived in “Christmas Seal Homes” with nurses each caring for several infants. A strength of this research is its socio-economic blindness as this separation policy applied to the entire Finnish population. Reference subjects were chosen at random from the Finnish population register, and addiction status was established from hospital records. This 28-year follow-up research found that the separated infants were more likely to have been treated for addictions than the reference group. The researchers report a suggestive link between separation and addiction but it is worth noting that the research does not confirm a causal connection between insecure attachment and addiction.

Research with Latino and African-American women also suggests links between insecure attachment and addiction (Lackings, 2009). In interviews with 50 women in residential or after-care addiction treatment, Lackings used Emotional Cutoff Scale (ECS) to measure their intimacy with their parents. The ECS is based on Bowen’s family systems theory which proposes that addiction arises from dysfunctional family systems and unresolved attachment issues. The research showed that most of the women had issues with their parents that affected their later relationships, that is, they had “cutoff attachments disorder” (p. 64). Lackings does not explain why she used the ECS tool rather than a more widely accepted measure of attachment. This is a substantial shortcoming of a study that sets out to measure the links between addiction and insecure attachment, particularly at a time when attachment measurement tools had proven their worth.

#### *Using recognised tools to determine secure or insecure attachment*

The earliest research sourced in this literature review which used a recognised, albeit modified, attachment measure found little relationship between childhood loss (suggestive of

insecure attachment) and alcohol or drug abuse (Mottola, 1984). Mottola's sample group comprises 25 residents in a drug treatment programme. The control group comprises 25 members of a church group who did not meet drug abuse criteria. Mottola reports that the sample groups were matched, because: "Subjects in the church group have attached to the church and each other while subjects in the drug abuse group have attached to drugs" (p. 56). This is an unexpected statement and suggests an unsophisticated understanding of attachment theory. No further rationalisation is provided, although Mottola acknowledges that the findings suggest that the church group may be anxiously attached to each other. Mottola modified the Attachment History Questionnaire in order to solely gather information about childhood experiences of actual or anticipated separation from caregivers. She reports that the validity of this research tool had not been established, however, later researchers used the same tool (without modifications) with very different results.

For example, Sicher (1998) used the Attachment History Questionnaire to compare the quality of attachment of 62 substance abusers in treatment with 57 community controls, finding that the sample group had poorer attachment at every life stage. For example, as adults, they had significantly more difficulty in initiating and maintaining attachment and many did not feel loved or that they belonged. A strength of this research is the use of three attachment assessment tools (Attachment History Questionnaire, Parental Attachment Questionnaire, Revised Adult Attachment Scale).

Another study using the Attachment History Questionnaire found a significant relationship between insecure attachment and addiction (Markus, 2003). Markus compared the attachment scores of 206 recovering addicts with at least one year's abstinence from alcohol and

other drugs with a general population attachment norm. This methodology can be critiqued on the basis that no attempt was made to match the sample and control groups.

Sayre's (1994) primarily qualitative research with four adolescents in residential treatment and their parent(s) found that all the adolescents and their parents were insecurely attached. Similarly, research by Frank (2009) amongst nine women in residential treatment found that they were all insecurely attached. The small sample sizes of these two studies limit the reliability and generalisability of their findings.

Another study with adolescents includes the only New Zealand data discovered by this review (McGee et al., 2000). This study drew on the Dunedin Multidisciplinary Health and Development Study (DMHDS), finding that cannabis use prior to age 18 is associated with poor parental attachment. Admittedly, most adolescent cannabis users do not progress to dependence (Weinberg, Rahdert, Colliver, & Glantz, 1998), but those who continue to use into early adulthood have higher risks of drug and alcohol dependence than non-users (Degenhardt et al., 2010). While the DMHDS promises the advantage of being a longitudinal study, Weinberg and colleagues' research uses measures of parental attachment and cannabis use taken during adolescence, limiting conclusions about causality.

In contrast, Elk (1999) found no relationship between MDMA (Ecstasy) use and security of attachment in 424, mainly female, university students. "Users" were defined as those who had used MDMA more than twice in the past year. The choice of this as the minimum usage rate appears to be arbitrary and Elk acknowledges that it is probably conservative. As outlined above, experimental substance abuse amongst adolescents can be seen as exploratory behaviour based on secure attachment (Schindler et al., 2005). In addition, the preponderance of women

amongst the sample group greatly limits the generalisability of Elk's findings as addiction develops and is expressed differently amongst men and women (Lechliter, 2008).

Other research continued to build the evidence base for associations between insecure attachment and addiction. For example, Swedish researchers administered three attachment assessment tools to 81 addicts in a methadone maintenance programme and to 81 controls, finding the addicts were less likely to be securely attached (Andersson & Eisemann, 2004). Later research investigating associations between attachment styles, anxiety, personality disorders and other factors also found a relationship between insecure attachment and alcoholism with 67% of subjects in an alcohol detox unit being insecurely attached. This compares with a general population norm of 33% (Wedekind et al., 2013).

#### *Exploring attachment styles and associated interpersonal strategies*

Other researchers were also exploring distinctions within attachment categories to further unpick the associations between insecure attachment and substance use. For example, a study with drug-using men found an association between avoidant attachment style and addiction (Finzi-Dottan, Cohen, Iwaniec, Sapir, & Weizman, 2003). Similarly, a study amongst 241 young women found that avoidant attachment style was associated with frequency of alcohol use and illicit substance use, while anxious attachment style was not. (Golder et al., 2005). The authors proposed that the young avoidant women used risky behaviours to help regulate their emotions. A limitation of this study in the context of this literature review is its dichotomous measure of illicit substance use with no differentiation between experimentation, abuse and addiction.

In contrast, an earlier study found that anxiously attached adolescents had experienced significantly more drinking problems in the preceding six months than secure or avoidant adolescents (M. L. Cooper et al., 1998). A limitation of this study is the use of an attachment

measurement scale that largely relies on subjects' experiences of romantic relationships. Within a sample group aged 13-19, many individuals would presumably not have any experiences to recall. In, addition, in the context of this literature review, reports of alcohol problems in the preceding six months are only tangentially suggestive of a likelihood of developing substance addiction.

However, similar findings emerged from a study amongst methadone users, with anxious attachment being related to severity of addiction while avoidant attachment was not (Brummet, 2007). Addiction severity was measured by gathering data on psychiatric status, family/social problems, and substance use. As the link between avoidant attachment and substance abuse had been consistently demonstrated (Schindler et al., 2005), Brummet's findings, like those of M.L. Cooper and colleagues (1998), were surprising. Brummet suggests that avoidant individuals' tendency to detach and turn inward means they need less substances to self-medicate attachment trauma. Two other explanations relating to his methodology seem more plausible: (1) Those with avoidant attachment under-report when answering questions on family/social problems just as research has found they tend to devalue attachment figures, idealise themselves and report unrealistically high levels of confidence in mood regulation abilities (Cloitre, Stovall-McClough, Zorbas, & Charuvastra, 2008), (2) Anxious attachment, rather than substance use, is the cause of some of the psychiatric and family/social problems measured by the addiction severity test.

A study of psychiatric patients diagnosed with a personality disorder found that all those who also had a substance use disorder were insecurely attached but did not find any association with the different categories of insecure attachment (Lechliter, 2008). Only sampling individuals diagnosed with a personality disorder is a weakness of this study as the etiology of addiction amongst individuals with a character disorder is complex; either one could precede and

contribute to the other or a shared factor may contribute to the development of both (Flores, 1997). Another weakness is a failure to distinguish the severity of the substance use disorder.

A number of somewhat contradictory studies have drawn on a distinction between fearful and dismissive attachment styles which are both categorised as avoidant in the models previously cited. The former suggests a negative view of self and a positive view of other and the latter a positive view of self and a negative view of other (Bartholomew & Horowitz, 1991). This distinction has since been validated by substantial research (Feeney, 2008). The six studies summarised below all found some associations between fearful attachment and substance use/abuse, with two also finding an association with preoccupied attachment style (corresponding to anxious attachment in the models previously cited) and one with dismissive attachment style.

Schindler and colleagues (2005) interviewed 71 drug-dependent adolescents and 31 siblings who were not drug-dependent, providing a control for family background and socio-economic status. They found that the drug-dependent group were more likely to be fearfully attached than the control group. This attachment category implies a longing for intimacy alongside avoidance of close relationships for fear of rejection. A strength of this study is its inclusion of only drug-dependent adolescents, eliminating experimental users. In addition, attachment status was determined by interview rather than by self-report. A limitation is the use of an adolescent sample group, raising questions about generalisability to adults.

A study amongst 90 Australian students found that fearful attachment was associated with alcohol dependence amongst males (Reis, Curtis, & Reid, 2012). However, as only 14 males participated in this study the findings are not robust. The authors did not find the expected association between attachment style and problematic alcohol use for the female subjects despite

using two recognised attachment measurement tools and a recognised measure of problematic alcohol. Limitations of this study include self-report measures and a relatively small and homogenous sample group.

A study with 49 drug addicts found they were more likely to have preoccupied (anxious) or fearful attachment than the general population norm (Doumas, Blasey, & Mitchell, 2007). The preoccupied (anxious) and fearful addicts also had more interpersonal problems and higher levels of anxiety and depression than the patients with a positive view of self. The authors suggest these individuals use substances to cope with negative affect. Similarly, research amongst college students (McNally, Palfai, Levine, & Moore, 2003) found that those with preoccupied or fearful attachment experienced more drinking-related problems. As was proposed in relation to Brummet's (2007) study above, this finding could show a correlation between attachment style and inter-personal problems without the assumed mediating effect of alcohol.

The fifth study was amongst 369 college students and found that both fearful and dismissive attachment styles were associated with alcohol use disorders (Vungkhanching, Sher, Jackson, & Parra, 2004). However, the authors acknowledge that a low number of subjects with fearful and preoccupied (anxious) attachment styles limit their findings.

A Canadian study used the same model to cast more light on the use of substances to cope with negative affect (Molnar et al., 2010). The authors were primarily concerned with examining two motivational pathways to problem drinking; social drinking in which peer pressure is a strong influence, and drinking which serves to avoid aversive affect. They hypothesised that people with fearful attachment would be more likely to follow the social pathway than those with dismissive attachment. Subjects included 696 students who consumed

alcohol and 213 residents of an alcohol addiction treatment facility. As with Schindler et al's (2005) research, this study found that fearful attachment was a risk factor in problem drinking for both sample groups. The data also showed that amongst the clinical population drinking was largely driven by problems in affect regulation while for the student group drinking was motivated by both social and affective factors. The researchers claim that the study suggests a causal link between higher levels of attachment anxiety and high-risk alcohol consumption. However, this study, like the others reviewed, is unable to definitively demonstrate a causal relationship. A strength of this study is its inclusion of young people with and without problem drinking patterns, as well as older alcoholics, revealing that fearful attachment is associated with problem drinking amongst both groups.

Research with 208 adoptees differentiated between secure attachment, earned secure attachment, and categories of insecure attachment to test the hypothesis that those with earned-secure attachment would have had childhood experiences that predisposed them to substance abuse or dependence (Caspers, Yucuis, Troutman, & Spinks, 2006). The researchers report that the hypothesis was confirmed as subjects with dismissive, preoccupied (anxious) or earned-secure attachment were three times as likely to be diagnosed with substance abuse or dependence. However, this research used a very narrow sample group; all were adoptees whose birth parents had antisocial behaviours and substance use problems. Given that genetic inheritance is a contributor to addictive disorders (Cook, 1991; Flores, 2004; Wong et al., 2011), this is a significant confounding factor. The research question posed in this study is valuable in suggesting that childhood experiences that lead to insecure attachment may influence the development of addiction even if secure attachment is built prior to the onset of the addiction. Karen's (1998) claim that internal working models are malleable to subsequent relationship

development challenges its validity. This is backed up by subsequent research which found that individuals with earned attachment security have similar coping resources and abilities to handle psychological stress as those whose attachment was secure from childhood (Moller, McCarthy, & Fouladi, 2002).

Two Australian studies by Thorberg and Lyvers (2006, 2010) indicate the increasingly nuanced understanding of the attachment factors associated with addiction that had been developing for more than two decades. In their 2006 research Thorberg and Lyvers found that 99 addicts in treatment centres were more likely to be insecurely attached than 59 controls. Their 2010 research explored the relationship between attachment, affect regulation, and interpersonal functioning. As predicted by the 2006 research, the sample group of 100 addicts were less securely attached than the control group. In addition, they also had less confidence in mood regulation and higher fear of intimacy, suggesting, say the authors, that some individuals might use substances to help them cope with intimacy. A criticism of the 2010 research is the lack of information about the control group, with only passing reference to two student/community samples. In addition, the attachment measurement tool used does not differentiate between any of the accepted attachment styles making comparisons with other research difficult.

Kassel, Wardle and Roberts (2007) also sought to explore the mechanisms linking insecure attachment with substance use. They hypothesised that insecurely attached individuals have negative attitudes about themselves and others which deplete their self-esteem. This, in conjunction with stress and negative affect, results in increased substance use. It found that anxious attachment is significantly related with both frequency of substance use and stress-motivated substance use, largely as a result of negative attitudes about the self and low self-

esteem. A shortcoming of this study in relation to this literature review is that the sample group comprised psychology students who use nicotine, alcohol, and cannabis. The authors acknowledge that their findings may not be relevant to older people who abuse substances or are substance dependent. However, the study is useful in beginning to elaborate the relationship between anxious attachment, low self-esteem, and substance use.

English research exploring relationships between attachment style, personality disorders and drug use found a significant correlation between avoidant *and* secure attachment and drug use but no significant relationship between insecure attachment and drug use (Davidson & Ireland, 2009). Hazan and Shaver's Attachment Questionnaire was used for this study. Davidson and Ireland claim that their findings were unexpected and raised questions about the questionnaire's robustness. They stated that "researchers have reported low or inconsistent reliability scores when using this measure" (p. 24) but do not explain why they chose to use it or why they did not use additional attachment assessment tools. The study can also be critiqued for choosing as its sample group people using a charity which provides services for individuals affected by drugs or alcohol. The researchers do not report assessing the actual substance use of this group, however, it seems likely that people in need will access whatever charitable services are available regardless of how well they fit the charity's criteria.

In contrast, a Belgian study of 101 alcoholic inpatients which also used Hazan and Shaver's questionnaire found that the majority of the alcoholics had moderate to high attachment deficiencies (De Rick et al., 2009). The researchers claim that this study shows a causal link between insecure attachment and alcoholism as the severity of attachment insecurity did not correlate with severity or duration of alcohol use. This therefore indicates that attachment insecurity was not a result of chronic alcohol use but that it arose before the onset of alcohol

abuse. However, again, a causal relationship has not been conclusively demonstrated as other factors could be implicated in the development of both insecure attachment and alcoholism.

#### *Phenomenological research*

Two recent unpublished phenomenological studies with drug addicts revealed childhood experiences suggestive of insecure attachment. While they do not have the rigour provided by a standardised attachment questionnaire, they partially compensate by the richness of the material gathered. Stoops (2011) interviewed eight women drug addicts and alcoholics in order to gain their perspectives on the developmental factors that led to their addiction. She found that none of the women had felt “love and acceptance with physical and emotional security from either one or both of their parents” (p. 170). Stoops provides numerous snippets from case histories to indicate the extent of childhood trauma and neglect experienced by the women, suggesting that indeed, these women are likely to be insecurely attached.

Kizhakumpurath’s (2012) study of young male addicts in Nagaland, India also suggested poor attachment. The research involved interviews with nine young men at an addiction treatment centre. All the men reported emotional or physical neglect or abuse as children and poor relationships with their primary caregivers. The findings suggest links between poor parenting, insecure attachment, and later addiction, consistent with findings in Western contexts. The cross-cultural validity of attachment theory was confirmed in Van Ijzendoorn and Sagi-Schwartz’s (2008) review of cross-cultural attachment studies.

#### **Conclusion**

This chapter reviewed the literature on attachment and addictions showing a clear association between insecure attachment and addiction, although causality is impossible to demonstrate. Some of the research reviewed above did not use recognised attachment measures

but did suggest a link between poor parenting and the development of addictions. Research using recognised measures found that avoidant attachment style is more likely to be associated with addictions. More recently, avoidant attachment style has been differentiated into dismissive and fearful with the latter appearing to be more likely to be associated with addiction. However, some research suggests that fearful and preoccupied (anxious) attachment styles are both associated with addiction.

Hypotheses regarding the mechanisms linking unmet attachment needs with substance abuse are many, including that substances help manage painful affect, particularly loneliness and alienation; that when dismissive strategies have not been mastered, individuals are likely to use substances; that some individuals may use substances to help them cope with intimacy, and that substance abuse is related to a negative view of self.

The next chapter will explore how therapeutic communities for addictions might be instrumental in building secure attachment in a clinical population that has mastered ultimately destructive strategies in an effort to avoid the painful affect arising from unmet attachment needs.

## **Chapter 5: Discussion and conclusion**

### **Introduction**

In earlier chapters I briefly outlined the history of concept therapeutic communities, emphasised the importance of the community as method approach, and compiled, reviewed, and synthesised descriptions of essential elements of therapeutic communities. I discussed the experiences of participant-observers in three therapeutic communities, revealing a potential discrepancy between, on the one hand, the provision of key therapeutic community elements and, on the other, meeting residents' attachment needs.

I also explored the relationship between insecure attachment and addiction from theoretical and research perspectives. Direct causality cannot be established but a strong association between insecure attachment and addiction has been demonstrated, with recent research evidence pointing towards an association with fearful attachment and possibly preoccupied attachment, both of which are indicative of negative self-view (Bartholomew & Horowitz, 1991).

This review has shown that the community as method approach used by concept therapeutic communities includes elements which could activate a resident's attachment system and potentially begin a healing process through counteracting the detachment and alienation that are hypothesised to lie at the root of addiction (Flores, 2004; Walant, 1995). In this chapter, I explore the implications of the review findings for the delivery of treatment within therapeutic communities. I also contextualise the review, identify its strengths and limitations, and highlight further research opportunities.

**Attachment theory and therapeutic community elements**

In this section I explore relationships between attachment theory and key elements of the therapeutic community context.

Just as therapeutic groups can become a secure base for their members (Flores, 2001), even more a therapeutic community in which residents live and work together has the potential to provide the ingredients which for many residents may combine to create their first ever experience of a secure base. However, while the intensity of therapeutic communities is admirably suited to activating an individual's attachment system, the literature suggests that in order for this treatment context to improve attachment style, the community needs to also have at least some of the qualities of a secure base. These secure base characteristics include: available, responsive, wise, strong (Bowlby, 1998), gratifying, supportive, consistent, reliable, stable, large enough to contain an individual's hostility and ambivalence (Flores, 2001, 2004), and large enough to contain an individual's anxiety and disillusionment (Whitely, 1994). Below, I explore how some of the elements of therapeutic communities potentially include these characteristics and could assist with developing and deepening secure attachment. This exploration is not strictly limited to the community as method approach as other elements of residential living help map the developmental pathway offered by therapeutic communities.

A structured environment with regular stages was amongst the key therapeutic community elements identified in Appendix B. Meals and activities are regular, roles are clearly defined and progressive, while rules, rewards and sanctions tell residents exactly what is expected of them (Australasian Therapeutic Communities Association, 2012; Community of Communities, 2007; De Leon, 2000; Goethals et al., 2011; Melnick et al., 2000; Perfas, 2012; Substance Abuse and Mental Health Service Administration, 2006). This structure and

predictability suggest a context which is consistent, reliable and stable; three of the secure base characteristics identified above.

Another element of a residential therapeutic community is the visibility and accessibility of staff, including counsellors/therapists. For example, the Substance Abuse and Mental Health Service Administration (2006) describes staff as community members and the Australasian Therapeutic Communities Association (2012) says staff provide continual feedback. Tolmacz (2003) highlights the advantages accrued when clinical staff are available to residents much of the time, rather than for one hour a week as with conventional therapy. This availability is reminiscent of the actively engaged primary caregiver who responds promptly to an infant's needs (Bowlby, 1998); another characteristic of a secure base.

Taking a developmental step forward, therapeutic communities include a range of formal and informal community activities, including work (Australasian Therapeutic Communities Association, 2012; Community of Communities, 2007; De Leon, 2000; Goethals et al., 2011; Melnick et al., 2000; Perfas, 2012; Substance Abuse and Mental Health Service Administration, 2006). These activities suggest an opportunity for residents to play with new roles, reminiscent of the exploratory play which is the hallmark of secure attachment and instrumental in developing healthy autonomy (Holmes, 1993; Whitely, 1998).

In addition, as well as receiving care from senior peers and staff, as ideally occurs with caregivers and other adults in childhood, residents are encouraged to develop peer relationships and care for each other (Australasian Therapeutic Communities Association, 2012; Broekart, 2001; Community of Communities, 2007; De Leon, 2000; Goethals et al., 2011; Melnick et al., 2000; Ottenberg & Kooyman, 1993 as cited by Yates & Wilson, 2001; O'Brien & Perfas, 2005; Perfas, 2012; Soyez & Broekart, 2005; Substance Abuse and Mental Health Service

Administration, 2006). In developmental terms, such affiliative relationships arise out of secure attachment established at an earlier stage (Flores, 2001; Zeifman & Hazan, 2008). From this perspective, the phased, hierarchical group milieu of a therapeutic community in which residents receive care and support, and, when they are able, participate in mutual relationships and provide care to others clearly frames the developmental territory to be negotiated.

In summary, many of the elements of therapeutic communities are reminiscent of the characteristics of a secure base or provide opportunities for the developmental growth which arises out of secure attachment.

### **Clinical implications**

In the discussion below I explore some of the clinical implications of this literature review, drawing on the work of Bowlby (1998), addiction specialists (Caspers et al., 2006; Flores, 2001, 2004; Karen, 1998; Walant, 1995), and mentalization-based therapy (MBT). With its foundation stones in attachment theory, MBT is both relevant to this review and useful in its practical applications. On the basis of this discussion, I suggest six clinical guidelines for therapeutic communities.

#### *Providing individualised treatment*

From Bowlby onwards, attachment theorists have recognised that insecure attachment comes in various forms which require individualised treatment (Caspers et al., 2006; Flores, 2001, 2004; Karen, 1998; Walant, 1995). In addition, addicts enter therapeutic communities at varying stages of their recovery and need treatment appropriate to their needs and capacities (Flores 2001, 2004). The responsibility for responding to individual needs naturally falls on staff who have the training to assess, however informally, residents' capacities and attachment styles. However, as the community as method model means every resident is at least partially

responsible for their peers' treatment, staff also have a responsibility to help create a community of residents who can respond sensitively to their peers' attachment needs. In doing so, they will need to draw on and cultivate, in themselves, in their colleagues, and in residents, the secure base characteristics listed above.

However, many therapeutic communities deliberately employ graduates of therapeutic communities who often do not have professional training but are valued for the personal experience they bring to their work (Australasian Therapeutic Communities Association, 2012; Community of Communities, 2007; De Leon, 1995; Ravndal & Vaglum, 1994; Substance Abuse And Mental Health Service Administration, 2006). As Ravndal and Vaglum discovered, inexperienced staff who are relatively early in their own recovery from addiction may need substantial support if they are to consistently nourish the characteristics of a secure base. The implication is that both residents and less experienced staff need support from experienced, well-qualified staff. And, in addition to providing professional support and guidance, staff need to provide a secure base for each other "enabling them to bear the anxiety, helplessness, and aggression that they experience" (Tolmacz, 2003, p. 16).

This literature review highlights the tension involved in maintaining a hierarchical, structured environment while creating a secure-base experience which meets individuals' diverse attachment needs. I draw on this further in my discussion of the proposed clinical guidelines below.

#### *Mentalization-based therapy (MBT)*

In chapter 1, I cited Fonagy and colleagues' (2010) suggestion that it is through attachment-related behaviour that infants learn how to regulate their emotional experience, partly through developing the ability to mentalize, that is, to think about their own and others' internal

states. MBT grew out of attachment theory although it is not known whether it is attachment per se or related features of parenting that promotes the development of mentalization (Fonagy et al., 2012). As addicts tend to have impaired mentalizing capacities, either as a result of, or prior to, substance abuse (Philips, Kahn, & Bateman, 2012), it is worth considering whether MBT may have a contribution to make to therapeutic communities for addictions and, in particular, to improving the attachment styles of their residents. I will begin with a brief review of MBT, with particular focus on its application in residential contexts, and then outline the six clinical guidelines I have developed on the basis of this literature review and the learnings of MBT researchers and clinicians.

According to Fonagy and Bateman (2012), MBT was initially developed to treat borderline personality disorder and has subsequently been applied to antisocial personality disorder, trauma, addiction, depression, and eating disorders. Regardless of the client group, the single most important factor distinguishing MBT from other psychotherapies is the goal of enhancing mentalizing, that is, MBT does not seek to directly alter behaviour or provide insight but these changes occur as a result of improved mentalization. An individual's capacity to mentalize can be improved by activating their attachment system while helping them maintain the capacity to mentalize. This means treatment must occur within an attachment relationship in which interventions are engaging, easy to understand, relate to current events, and make use of the clinician's mentalizing capacity (Fonagy et al., 2012). The more emotionally demanding the intervention, the more likely it is that the client will lose the ability to mentalize.

In writing about MBT in hospital settings, Fonagy and Bales (2012) recommend that the environment, including the buildings, their layout, and written information should be designed to enhance mentalization about self, others, and interpersonal interactions. Similarly, it is important

that staff work well together, are curious and open-minded, and attempt to understand difference. For staff, such a mentalizing milieu will encourage thought over action and will promote mentalization in the midst of strong feelings. This will assist clients to experience their own feelings as less frightening. Clearly explained boundaries and rules are also important in maintaining a mentalizing milieu. However, too many rules may create an over-protective, controlling environment which is not conducive to mentalization.

Many of these recommendations resonate with my suggestions above regarding individualised treatment and with Ravndal and Vaglum's (1994) findings, particularly in relation to employing inexperienced staff, the provision of negative feedback and sanctions without explanation, and rigidity of attitudes amongst staff and residents. All can be applied to the therapeutic community model.

#### *Clinical guidelines*

Careful consideration of the findings of this literature review alongside an evaluation of the application of MBT has led to the development of the six guidelines below. These guidelines summarise the practical applications of this literature review to indicate how a therapeutic community could encourage the development of secure attachment amongst its residents. They are tailored to address the actual and potential weaknesses of the therapeutic community model as revealed by this literature review. In addition, they play to the strengths of the therapeutic community model, recognising its capacity to encourage the development of secure attachment through daily interactions with peers, staff, and the environment. The guidelines are:

- Respond flexibly to residents in recognition of their attachment needs, for example, negative feedback and sanctions are tailored to be therapeutic for each individual.

- Provide support to residents and inexperienced staff so they can recognise and respond to attachment needs.
- Create an experience of at least some aspects of a secure base for staff and residents, for example, senior colleagues/residents should be available and reliable.
- Create rules and boundaries to provide containment but ensure they are not so rigid as to be overly controlling or protective.
- Enhance mentalization by ensuring residents are provided with clear information on the values, norms, standards, and expectations of the therapeutic community.
- Leaven the intensity of the therapeutic community to help residents and staff maintain mentalization, for example, through humour, games, creative expression, celebrations, etc.

In addition to and pervading these guidelines, the phrase “warm, curious authority” emerges to describe the essence of the professional atmosphere of a therapeutic community which is committed to activating and meeting the attachment needs of individuals who have developed entrenched and destructive strategies to soothe them. The unlikely juxtaposition of the words “curious” and “authority” is reminiscent of the MBT approach of attempting “to stimulate mentalizing by inserting something unexpected into the dialogue” (Bateman & Fonagy, 2012, p. 73).

This phrase, “warm, curious authority”, contrasts with De Leon’s (1995) and Perfas’s (2012) description of therapeutic community staff as rational authorities, and the North American training material’s identification of “rational authority” as one of the four distinctive features of therapeutic communities (Substance Abuse And Mental Health Service Administration, 2006). Whereas attachment theory links cognitive science and the affect-laden

world of psychoanalysis (Holmes, 1993), the bare phrase “rational authority” prioritises the former and neglects the latter. “Warm, curious authority” more accurately conveys Bowlby’s (1988) definition of a secure base as being available, responsive, wise and strong.

### **Research contexts**

Below, I briefly describe the research landscape revealed by this literature review and then take a wider view to hint at how modern Western society might be implicated in the development of insecure attachment and subsequent addiction.

#### *Addiction and attachment theory*

This review has briefly traversed the relatively robust body of literature exploring attachment theory and its implications, as well as the substantial but significantly less empirically grounded literature applying attachment theory to addictions. The associations between insecure attachment and addiction are manifold but the mechanisms by which substance use might ameliorate the effects of insecure attachment are not clear and the role of insecure attachment in the etiology of addiction has not been established.

#### *Therapeutic communities*

A rich body of literature describes the development of therapeutic communities for addictions and details their methods. However, as this review has revealed, the potential for understanding their curative factors by applying the understandings of attachment theory is relatively untapped. Building bridges between these two fields holds the promise of both validating current therapeutic community practice and informing refinements to improve long-term outcomes.

*An alienated society*

While this literature review is concerned with the interiority of therapeutic communities, the society in which they operate cannot be ignored. The attitudes residents and staff bring to a therapeutic community inevitably include those very attitudes implicated in the development of addictions; arguably born out of a culture which values independence over dependence, individuality over community, and personal choice over communal needs (Karen, 1994; Walant, 1995), leading to alienation from others and from self (Flores, 2004). It may be over-ambitious to suggest that therapeutic communities can build secure attachment amongst people who have dedicated many years to developing strategies for soothing unmet attachment needs. However, a therapeutic community culture which models dependence as a healthy aspect of relationships and community as an arena of both support and autonomy may provide a context in which some of the worst symptoms of an alienated society can be alleviated.

**Study strengths and limitations**

In basing this review on constructionism and interpretivism, I have acknowledged my doubt in the existence of objective knowledge. However, I have also endeavoured to stay true to the realities, however partial, revealed by the literature. In synthesising several bodies of different types of literature and making links between them, I have acknowledged my own subjectivity while endeavouring to be rigorous in my approach to retrieving and critiquing the literature. Another researcher following in my footsteps may have come to *slightly* different conclusions, however, due to my stringent efforts to be systematic, it seems unlikely that the conclusions would be *very* different. I have also endeavoured to be transparent throughout this review, for example, at the macro level, by outlining the epistemology, to, at the micro level, listing the search results.

Strengths of this review include the new perspective it has brought to therapeutic communities for addictions. Given its influence on other fields, attachment theory holds the promise of revealing at least some of the curative mechanisms of therapeutic communities and suggesting how they could be enhanced. I have made a first attempt at this by bringing the learnings of MBT to my research findings in order to develop the clinical guidelines outlined above. These shift this review from the world of academic abstraction to the arena of therapeutic application.

A limitation is the uncertain relationship between attachment style and addiction. As causality has not been established, the clinical guidelines are based on the hypothesis that insecure attachment is implicated in addiction and should therefore be addressed as part of the treatment regime. While this aligns with the theoretical literature cited above, the research data is inconclusive.

### **Further research**

The role of attachment style in the etiology of addiction is poorly understood. As this review has shown, there is a strong association but causality is unproven. Further research could be influential in improving prevention of addictions and their treatment. In addition, while the efficacy of therapeutic communities for addictions has been demonstrated (De Leon, 2010), research is required to illuminate their curative factors. In particular, research on whether residents' attachment styles improve during therapeutic community treatment and the longer-term outcomes in relation to attachment style and abstinence from substances could be influential in shaping therapeutic communities.

I envisage a New Zealand research project involving two therapeutic communities with different programme lengths and treatment regimes, for example, Higher Ground Drug

Rehabilitation Trust and one of Odyssey House's facilities. The quantitative aspect of the research would assess residents' attachment styles on admission, periodically throughout their residential treatment, and for some years post-treatment. In addition, substance use pre- and post-treatment would be measured. In parallel, researchers acting as participant-observers in the therapeutic communities would determine how the programmes actually functioned with a particular focus on attachment-related aspects of treatment.

This project would seek to answer a number of questions:

- What are the attachment styles of New Zealand addicts before, during, and after therapeutic community treatment?
- What is a resident's perspective on treatment in a New Zealand therapeutic community, with a particular focus on attachment-related experiences?
- What are the elements of two New Zealand therapeutic communities and how might they impact on attachment style?
- Does treatment in New Zealand therapeutic communities affect attachment style?
- Are any particular treatment elements associated with changes in attachment style?
- Do changes in attachment style have any association with retention in treatment?
- Do changes in attachment style have any association with abstinence from substances post-treatment?

This is an ambitious research project, however, even aspects of it would contribute to the literature and to New Zealand addictions treatment. For example, gathering data on attachment style on admission to a therapeutic community and on discharge may be helpful in tailoring treatment and would make a significant contribution to the literature. Similarly, a qualitative

research project using one appropriately trained participant-observer could shed light on attachment-related experiences in a New Zealand therapeutic community.

### **Conclusion**

This research project has explored the relevance of attachment theory to therapeutic communities for addictions. I initially established two aspects of the research context by providing some data on substance use and abuse in New Zealand and describing the development and implications of attachment theory. I then outlined the philosophical and theoretical stances informing this project: The epistemological basis is constructionism, the theoretical framework interpretivism, and the methodology and method a critical review of the literature. I then clearly outlined every step of the method from literature search through to how the review was presented.

An exploration of the antecedents of present-day concept therapeutic communities and identification of their key elements established some of the parameters of this research project. A paragraph summarising the key elements of therapeutic communities synthesised the numerous lists and descriptions found in the literature. I also reviewed a small body of literature related to the application of attachment theory to therapeutic communities for addictions.

In order to determine if attachment theory could have any relevance to therapeutic communities for addictions, the theoretical literature on attachment and addictions was synthesised, and a significant body of research literature summarised, synthesised, and critiqued. This literature showed that attachment theory has been a rich resource in research on addiction even if it has not been applied to therapeutic communities. Associations between insecure attachment and addictions have been demonstrated and progress has been made in clarifying which attachment styles are most associated with addiction and why.

I then discussed some of the implications of this research for therapeutic communities, drawing on MBT which is itself a child of attachment theory. In particular, I emphasised the importance of providing individualised treatment to residents. However, as therapeutic community residents are partially responsible for delivering each other's treatment, the culture of the community needs to encourage both staff and residents to acknowledge difference and respond positively to it. In addition, as therapeutic communities provide the conditions likely to activate a resident's attachment system it also needs to provide conditions that assist residents to experience the community as a secure base and maintain mentalization. These could include clear information about the therapeutic community's functioning as well as activities to help leaven the intensity of the community.

On the basis of the findings of this literature review and an evaluation of the application of MBT, I developed six clinical guidelines for the development of secure attachment within therapeutic communities. They address the weaknesses of the therapeutic community model and take advantage of its strengths. I also coined the phrase "warm, curious authority" to describe the essence of the professional atmosphere of a therapeutic community. This phrase both summarises the clinical guidelines and describes the culture of a therapeutic community which endeavours to provide a secure base experience which eases the distress of insecure attachment.

In summary, whether insecure attachment is implicated in the etiology of addiction is a moot point but it is indisputable that many, if not most, addicts are insecurely attached. Therefore, therapeutic communities for addictions need, at the very least, to bring warmth, curiosity, flexibility, and understanding to the attitudes and behaviours of insecurely attached individuals. In doing so, they may begin to lay the foundations of secure attachment.

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## Appendices

### Appendix A: Literature search results

#### *Search 1 - Therapeutic communities*

##### *PsycINFO (limits: English Language, All Journals)*

<b>Search words</b>	<b>Results</b>	<b>Relevant articles</b>
“therapeutic communit\$” AND addict\$	2290	Refined search
“therapeutic communit\$” AND attachment	261	Refined search
“therapeutic communit\$” AND addict\$ AND attachment	83	0
“residential treatment” AND addict\$ and attachment	112	0
residential AND “attachment theory”	385	Refined search
residential.ab AND “attachment theory”.ab	60	2
hospital.ab AND attachment.ab	193	Refined search
hospital.ab AND “attachment theory”.ab	19	1
institution.ab AND “attachment theory”.ab	4	0

##### *ProQuest Central (limits: Scholarly Journal, Article, English)*

<b>Search words</b>	<b>Results</b>	<b>Relevant articles</b>
“therapeutic communit*” AND addict*	1590	Refined search
“therapeutic communit*” AND addict*.ab	358	Refined search
“therapeutic communit*” AND attachment	298	Refined search
“therapeutic communit*” AND addict* and attachment	129	3
“residential treatment” AND addict*	2153	Refined search
ab("residential treatment") AND ab(addict*)	121	Duplicates
residential treatment AND addict\$ and attachment	197	Refined search
"residential treatment" AND ab(addict*) and	15	1 + duplicates

attachment

ab(residential) AND ab(addict*) and attachment	4	Duplicates
residential AND ("attachment theory")	426	Refined search
ab(residential) AND ab("attachment theory")	12	0
ab(hospital) AND ab(attachment)	386	Refined search
ab(hospital) AND ab("attachment theory")	15	0
ab(institution) AND ab("attachment theory")	9	1
ti(hospital) AND ti(attach*)	9	0

*ProQuest Dissertations and Theses UK & Ireland (limits: English)*

Search words	Results	Relevant articles
"therapeutic communit*"	2065	Refined search
ab("therapeutic communit*")	214	Refined search
ab("therapeutic communit*") AND addict*	89	0
ab("therapeutic communit*") AND ("attachment theory")	5	0
ab("therapeutic communit*") AND attachment	5	1
"residential treatment" AND attachment	37	1
(residential) AND ("attachment theory")	1930	Refined search
ab(residential) AND ab("attachment theory")	15	2
ab(hospital) AND ab("attachment theory")	19	0
Ab(institution) AND ab("attachment theory")	11	0

*Psychoanalytic Electronic Publishing (limits: English, in paragraph)*

"therapeutic communit*"	475	Refined search
"therapeutic communit*" AND addict*	84	0
"therapeutic communit*" AND attachment	114	Refined search
"therapeutic communit*" AND attachment (articles only)	94	0
"residential treatment" AND addict* AND attachment	15	1

residential AND "attachment theory"	53	0
hospital AND attachment (both in abstract)	21	0
institution AND attachment (both in abstract)	22	1

*Search 2 - Attachment theory and addictions*

*PsycINFO (limits 'All journals' and 'English')*

<b>Search words</b>	<b>Results</b>	<b>Relevant articles</b>
"attachment theory"	9714	Refined search
attachment AND addict\$.ab	375	Refined search
attachment adj5 addict\$	271	6
"attachment theory".ab AND addict\$.ab	23	6 + duplicates
attachment.ab AND addict\$.ab	130	6 + duplicates
"attachment theory".af AND substance.af	906	Refined search
"attachment theory".ab AND substance.ab	31	3
"attachment theory".ab AND drug.ab	12	1
"attachment theory".af AND alcohol\$.af	888	Refined search
"attachment theory".ab AND alcohol\$.af	90	5 + duplicates
"attachment theory".ab AND alcohol\$.ab	18	Duplicates

*ProQuest Central (limits 'Scholarly journal', 'Articles' and 'English')*

<b>Search words</b>	<b>Results</b>	<b>Relevant articles</b>
"attachment theory"	5216	Refined search
"attachment theory" AND addict*	527	Refined search
attachment N/5 addict*	154	9 + duplicates
attachment AND ab(addict*)	367	Refined search
ab(attachment) AND ab(addict*)	108	Duplicates
"attachment theory" AND ab(addict*)	31	Duplicates
"attachment theory" and substance	1172	Refined search
ab("attachment theory") AND ab(substance)	25	1 + duplicates
"attachment theory" and drug	1010	Refined search
ab(attachment) AND ab(drug)	2203	Refined search

attachment N/5 drug	888	Refined search
“attachment theory” N/5 drug	1	0
ab (attachment) AND ab (drug)	2203	Refined search
ab(“attachment theory”) AND ab(drug)	10	1 + duplicates
“attachment theory” AND alcohol*	978	Refined search
ab(“attachment theory”) AND alcohol*	96	Duplicates

*ProQuest Dissertations and Theses (limits: English)*

<b>Search words</b>	<b>Results</b>	<b>Relevant articles</b>
“attachment theory”	7617	Refined search
attachment and addict*	23427	Refined search
“attachment theory” AND addict*	2348	Refined search
attachment N/5 addict*	330	Refined search
attachment AND ab(addict*)	623	Refined search
ab(attachment) AND ab(addict*)	88	9
ab(“attachment theory”) AND substance	388	Refined search
ab(“attachment theory”) AND ab(substance)	37	1 + duplicates
ab(“attachment theory”) AND ab(drug)	31	2 + duplicates
ab(“attachment theory”) AND ab(alcohol*)	36	Duplicates

*Psychoanalytic Electronic Publishing (limits: English, in paragraph)*

<b>Search words</b>	<b>Results</b>	<b>Relevant articles</b>
attachment and addict*	1363	Refined search
“attachment theory” AND addict*	132	Refined search
“attachment theory” AND addict* (articles only)	112	0
“attachment theory” AND substance	173	Refined search
“attachment theory” AND “substance abuse”	60	0
“attachment theory” AND drug	114	0
“attachment theory” AND alcohol*	144	Refined search
“attachment theory” AND alcohol* (articles only)	133	0

**Appendix B: Essential elements of therapeutic communities for addictions**

Australasian Therapeutic Communities Association, 2012	Basic concepts of community as method: member roles, continual feedback from peers and staff members, role models, friendships and healthy family-like relationships, collective learning, internalisation of culture and language, hierarchical work structure and communication system, open communication and personal disclosure.
Broekaert, 2001	Treatment characteristics. Safety and acceptance, hierarchical structure, verbal reprimands and learning experiences, encounter, family work.
Community of Communities, 2007	Core standards. All community members: work alongside each other, share social time, can discuss any aspects of life within the community, regularly examine their attitudes and feelings towards each other, share responsibility for each other, create an emotionally safe environment, participate in the process of a new member joining the community, share meals together, take a variety of roles and levels of responsibility, are involved in the selection of new staff, and in making plans when someone completes the programme. The whole community meets regularly. Informal aspects of living are integral to the work of the community. There is an understanding and tolerance of disturbed behaviour and emotional expression. Positive risk taking is seen as an essential part of the process of change. The therapeutic community has a clear set of boundaries, limits or rules which are understood by all members.
De Leon, 2000	Components. Community separateness, community environment, community activities, staff roles and functions, peers as role models, a structured day, work as therapy and education, phase format, teaching of therapeutic community concepts, peer encounter groups, awareness training, emotional growth training, planned treatment duration, continuity of care.
De Leon, 2000	Community as method, basic elements. Member roles, membership feedback, members as role models, relationships, collective learning formats, culture and language, structure and systems, open communication, community and individual balance.
De Leon, 2000,	Essential experiences of change. Emotional healing (nurturance-sustenance,

	physical safety, psychological safety), social relatedness and caring, subjective learning.
Edwards, 2002	12 themes of treatment. Feeling cared for, spiritual experience, insight, making a commitment, empowerment/self-esteem, releasing emotional pain, remorse, reconnecting with traditional values, forgiveness, relief, safety, gratitude.
Goethals et al., 2011; Melnick et al., 2000	Survey of Essential Elements Questionnaire. Essential elements of community as therapeutic agency. Peers as gatekeepers protect community values, peers provide mutual self-help, daily activities emphasize community participation, contact with outside community, community hierarchical organization includes status and privilege, community uses sanctions for norm violations, periodical formal community surveillance.
Haigh, 1999*	Five universal qualities of therapeutic communities. Attachment, containment, communication, involvement and agency.
O'Brien & Perfas, 2005	Core elements. Belief in therapeutic community, dedicated environment, effective method to manage and shape behaviour, proven method to facilitate psychological change and spiritual healing, activities to increase self-competence, system of rewards and sanctions, self-help and community as social learning environment, peers and staff as role models, community norms and values, public sharing, stages of treatment, teaching aspect.
Ottenberg, Broekaert & Kooyman, 1993 as cited by Yates & Wilson, 2001	What can't be changed in a therapeutic community. Self-help and community as cornerstones of the therapeutic process, use of staff and peers as role models, emphasis on social learning to produce behaviour and attitude change, planned duration of treatment.
Perfas, 2012	Major elements. Staff (rational authority, responsible concern) and residents, physical setting (family home ambience) and daily structures (highly structured), rules or community norms and values, methods employed to shape and manage unproductive behaviours, methods used to deal with psychological issues and facilitate self-awareness, tools used to develop self-

	competence and self-reliance (work, hierarchy).
Perfas, 2012	3 essential elements. Communal environment and shared set of values and norms within a structured environment, public forum for interpersonal communication, self-help and mutual-help as a mode of treatment.
Perfas, 2012	4 vital components of staff function. Democratization, preservation of each patient's individuality, belief in their trustworthiness, encouragement and reinforcement of good behaviour, belief in their capacity to assume responsibility and take initiative, an active and adequate work day.
Rapoport, 1960*	Permissiveness, communalism, democracy, confrontation.
Soyez & Broekart, 2005	Elements. Safety and trust, acting as if, responsible concern for peers, confrontation, positive peer pressure, learning to express emotions.
Substance Abuse and Mental Health Service Administration, 2006	Basic components. Community separateness, community environment, community activities, staff as community members, peers as role models, a structured day, phased programme, work as therapy and education, education in therapeutic community concepts, peer encounter groups, awareness training, emotional growth training, planned treatment duration, after-care programme.

\*These authors are referring to psychiatric therapeutic communities.

### **Most commonly listed qualities**

Communication/concern/safety and acceptance/belonging (6)

Sanctions and privileges (5)

Peers (and staff) as role models (5)

Self-help and mutual self-help (4)

Work as therapy/education (4)

Stages of treatment/phase format (4)

Hierarchy (4)

Structure (3)

Values and norms/culture and language (3)

Planned treatment duration (3)

**Appendix C: Studies related to attachment style and substance use, abuse and addiction**

<b>Study</b>	<b>Measure(s)</b>	<b>Sample group</b>	<b>Control group</b>	<b>Primary findings of relevance to this critical literature review</b>
Andersson and Eisemann, 2004	Bowlby Scale, Attachment Style Questionnaire, Reciprocal Attachment Questionnaire	81 heroin addicts on methadone maintenance programme	81 students	Addicts were less likely to have healthy attachment than control group.
Brummet, 2007	Experiences In Close Relationships - Revised	121 adults receiving methadone maintenance treatment	N/A	Anxious attachment was related to severity of addiction while avoidant attachment was not.
Caspers et al, 2006	Adult Attachment Interview	208 adults who were adopted	N/A	Dismissing, preoccupied or earned-secure adoptees had highest rates of substance abuse/dependence.
Cooper et al, 1998	Relationship Scales Questionnaire – modified	1,600 adolescents	N/A	Anxiously attached adolescents reported significantly more drinking problems in the past six months.

Study	Measure(s)	Sample group	Control group	Primary findings of relevance to this critical literature review
Davidson and Ireland, 2009	Adult Attachment Style Questionnaire	98 participants in total, unidentified numbers in substance-using group and non-substance-using university student and staff group		Found a correlation between avoidant <i>and</i> secure attachment styles and drug use, but no relationship between insecure attachment and drug use.
De Rick et al, 2009	Adult Attachment Style Questionnaire	101 alcoholic inpatients	N/A	The majority of the sample had moderate to high attachment deficiencies.
Doumas et al, 2007	Relationship Scales Questionnaire	46 addicts in an outpatient programme	N/A	The sample tended to have preoccupied or fearful attachment.
Elk, 1999	Parental Attachment Questionnaire	424 university students	N/A	Found no relationship between attachment and rate of MDMA use.
Finzi-Dottan et al, 2003	Adult Attachment Scale	56 male drug addicts	N/A	60.7% avoidant attachment style, 12.5% anxious/ambivalent, 26.8% secure.
Golder et al 2005	Adult Attachment Scale	241 women aged under 17 who were pregnant or already mothers	N/A	Found an association between insecure attachment and problem behaviour including substance use.

<b>Study</b>	<b>Measure(s)</b>	<b>Sample group</b>	<b>Control group</b>	<b>Primary findings of relevance to this critical literature review</b>
Kassel et al, 2007	Adult Attachment Scale	212 psychology students	N/A	Insecure attachment was significantly related to frequency of substance use and stress-motivated substance use, largely through dysfunctional attitudes about the self and low self-esteem.
Kizhampurath, 2012	Nil	9 male addicts in treatment, 6 counsellors, 2 community leaders	N/A	All the addicts had experienced emotional or physical neglect or abuse.
Lackings, 2009	Emotional Cutoff Scale	50 women in addiction treatment	N/A	Found links between insecure attachment and addiction.
Lechliter, 2008	Pilkonis Adult Attachment Prototype Tool	442 patients with personality disorder	N/A	All individuals with substance use disorder were insecurely attached.
Markus, 2003	Attachment History Questionnaire, Revised Adult Attachment Scale	206 recovering adults	General population attachment norm	Found a significant relationship between insecure attachment and addiction and age of first substance use.

<b>Study</b>	<b>Measure(s)</b>	<b>Sample group</b>	<b>Control group</b>	<b>Primary findings of relevance to this critical literature review</b>
McGee et al, 2000	Inventory of Parent and Peer Attachment	1037 adolescents enrolled in the Dunedin longitudinal study	N/A	Early use of cannabis (before 18) is associated with poor parental attachment.
McKay et al, 1991	Family Assessment Device	45 adolescents psychiatric inpatients	N/A	Found an association between family inability to experience and share feelings and increased levels of substance abuse, particularly alcohol.
McNally et al, 2003	Relationships Questionnaire	366 students who consume alcohol	N/A	Those with a negative self-view (pre-occupied and fearful attachment) experienced more drinking-related consequences.
Molnar et al, 2010	Relationship Scales Questionnaire	213 addiction treatment residents	696 students who consume alcohol	Anxious attachment was associated with problem drinking for both groups. For the clinical population drinking largely related to affect-regulation problems, for the student group drinking was motivated by both social and affective factors.
Mottola, 1984	Attachment History Questionnaire (modified)	25 treatment residents	25 churchgoers	Found no relationship between attachment and addiction.

<b>Study</b>	<b>Measure(s)</b>	<b>Sample group</b>	<b>Control group</b>	<b>Primary findings of relevance to this critical literature review</b>
Nurco and Lerner, 1996	Five questions about each parent	225 male addicts	147 close peers 199 distant peers	Living with both parents and strong attachment with father at age 12-14 were both associated with avoiding later addiction.
Reis et al, 2012	Relationships Questionnaire, Inventory of Parent and Peer Attachment	90 students	N/A	An association was found between fearful attachment and alcohol dependency for the males (14) but not the females.
Sayre, 1994	3 interviews to elicit family attachment data, Relationships Questionnaire, Adult Attachment Style Questionnaire	4 adolescents in treatment and their parent(s)	N/A	All the adolescents and their parents were insecurely attached. The adolescents rated their attachment more accurately than their parents. The adolescents rated their attachment as improving during treatment but the questionnaires did not confirm this.
Schindler et al, 2005	Relationship Scales Questionnaire	71 drug-dependent adolescents	39 non-clinical siblings	Addicts were more likely to be insecurely attached and to be fearfully attached.
Schweitzer and Lawton, 1989	Parental Bonding Instrument	63 substance abusers	50 students	Abusers described parents as controlling and uncaring.

<b>Study</b>	<b>Measure(s)</b>	<b>Sample group</b>	<b>Control group</b>	<b>Primary findings of relevance to this critical literature review</b>
Searight et al, 1991	Family of Origin Scale	40 adolescent substance abusers	161 adolescents not using substances	Drug abusers' parents were critical and emotionally distant, with poor communication, and low respect for personal boundaries.
Sicher, 1998	Attachment History Questionnaire, Parental Attachment Questionnaire, Revised Adult Attachment Scale	62 treatment residents	57 community controls	The sample group had poorer attachment at every life stage.
Stoops, 2011	Nil	8 female addicts	N/A	None of the women felt loved and accepted by their parents.
Thorberg and Lyvers, 2006	Revised Adult Attachment Scale	99 treatment residents	59 non-clinical	The addicts were more likely to be insecurely attached.
Thorberg and Lyvers, 2010	Revised Adult Attachment Scale	100 treatment residents	2 student / community samples	The addicts were more likely to be insecurely attached, had less confidence in mood regulation, and higher fear of intimacy.

<b>Study</b>	<b>Measure(s)</b>	<b>Sample group</b>	<b>Control group</b>	<b>Primary findings of relevance to this critical literature review</b>
Veijola, 2008	Nil	3020 adults separated from parents at birth	5970 matched reference subjects	The infants separated from parents at birth were more likely to develop later addictions.
Vungkhanching et al, 2004	Relationship Scales Questionnaire	369 students	N/A	Insecurely attached subjects (particularly fearful-avoidant and dismissive-avoidant) were more likely to have alcohol use disorder.
Wedekind et al, 2013	Relationships Style Questionnaire	59 adults in an alcohol detox unit	General population data	67% of the alcoholics were insecurely attached compared to a population norm of 33% insecurely attached.