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**ALCOHOL ADDICTION, BULIMIA AND SPIRITUALITY**  
A Portfolio of Evaluation Research and Practice

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Thesis submitted in fulfilment of the Doctor of Psychology Award  
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*This distant music of the future  
Haunts me.  
And I think it will be something  
Amazing to hear,  
A delight to the gods,  
Provided we don't lose our way  
More than we already have,  
And provided we are guided  
By our deepest love,  
The love that connects us all  
On this little globe of beauty.*

*Ben Okri*

## **Declaration**

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## **PART A - Introduction**

## ***Preface***

*This doctoral portfolio comes, in part, as the result of over four years full-time employment as a therapeutic psychologist within a specialist alcohol addictions treatment centre. Having recently completed an MSc in Counselling Psychology, prior to my employment at the centre, a personal decision was made to consolidate academic learning within professional practice.*

*Academic study first included completion of a joint major BSc (Hons) degree in Psychology and Philosophy accredited by the British Psychological Society (BPS). Further study included a 12-month course at the Regent's College School of Psychotherapy and Counselling directed by Professor Ernesto Spinelli.*

*The thrust of this portfolio, however, emerged from subsequent study and professional experience. This includes completion of a Post-MSc diploma in Counselling Psychology and professional practice as a Chartered Psychologist delivering psychological therapy within a busy NHS primary care service in London.*

*It is necessary to note that this doctoral portfolio utilises the revised fourth edition of the Diagnostic and Statistical Manual of Mental Disorders – Text Revision (DSM-IV-TR; American Psychiatric Association, 2000), as, in principle, it is helpful. However, given the fact that decisions regarding inclusion or exclusion of disorders are made by majority vote rather than incontrovertible scientific data; it is maintained that the DSM-IV-TR is more a political document than a scientific one (Caplan, 2004).*

*The following sections of this portfolio are linked to reflect my acquired knowledge, skill, training, education and experience in Counselling Psychology theory, practice and research. In*

*addition to reflecting the formal features of the discipline; which is situated at the interface between scientific and clinical enquiry. This doctoral portfolio endeavours to capture the essence of Counselling Psychology that engenders flexibility; enterprise; evidence-based practice; expressed attention to the primacy of the therapeutic relationship; and, emphasis on being as opposed to doing in therapy (Frankland & Walsh, 2007).*

*Counselling Psychology is rooted in the application of psychological knowledge that integrates and transcends allied professional disciplines of psychotherapy, counselling, clinical psychology and psychiatry (BPS, 2006). Thus, practitioners will endeavour to successfully engage in a wide variety of tasks that may entail operating from different theoretical frameworks, models and organisational settings.*

*Given the above, it is evident that counselling psychology practitioners will demonstrate flexibility in their thinking and engagement with seemingly disparate organisational settings and practices. As such, it is felt that my experience within a non-statutory organisational setting reflects the flexibility that is engendered in the discipline of Counselling Psychology. This seems apparent when it is considered that the philosophy and treatment approach utilised by the organisation is not featured in any of my academic and training programmes.*

*Further, it is maintained that the demonstration of enterprise is exhibited in discovering novel areas of practice and being willing to commit and experiment whilst maintaining a secure sense of professional identity rooted in Counselling Psychology. Indeed, it is felt that my success with an independent application for funding from the AERC (Alcohol Education and Research Council) is a notable achievement (see Appendix I). In the year of my application I deferentially received the highest studentship award that was administered by the AERC.*

*The UK Government in 1982, through an Act of Parliament to administer the Alcohol Education and Research Fund, established the AERC. Its stated main aims are to: (1) generate and disseminate evidence-based research to inform and influence policy and practice; and (2) develop the capacity of people and organisations to address alcohol issues.*

*My experience within the NHS reflects issues that confront the non-statutory (and statutory) UK alcohol addiction treatment sector. That is, the importance of measuring outcomes in the effectiveness of interventions is increasingly prevalent. Recent government initiatives stress the need for effective and efficient care that meets public demand. Agencies are, to a greater extent, required to demonstrate how their service addresses strategic governmental priorities and show evidence of effectiveness in respect of quality standards and service outcomes.*

*In light of the above, the main aim of Part B (which is presented in the third person) is to evaluate the outcomes of a non-statutory specialist alcohol addiction treatment programme. A conscious decision was made to conduct such research due to the complete absence of prior outcome evaluations. This decision was influenced by my knowledge regarding the urgent need of evidence relating to "what works" in existent UK alcohol addiction treatment practice.*

*Thus, the objective of my research endeavour is to produce an original empirical study. It is contended that this will add to the existing body of knowledge in the alcohol addiction treatment outcome literature and develop the evidence base in this field of enquiry.*

*Counselling Psychology theory attests to the centrality of the therapeutic relationship and the perspective of the client. The combined case study and process report presented in Part C relates to my direct psychological intervention with a client that completed the aforementioned treatment*

*programme. The aim of this section is to provide audio evidence and demonstration of the skills and knowledge required to fulfil the role of reflexive scientist-practitioner.*

*A further objective of Part C is to highlight the treatment population that are labelled with co-morbid alcohol addiction and psychiatric disorders. In particular, the high prevalence of eating disorders in contemporary society and their serious clinical implications. My experience includes individuals presenting with alcohol addiction who are diagnosed with co-occurring psychiatric disorders but have never received treatment that addresses both conditions.*

*The final section in this portfolio relates to a fundamental philosophical tenet of Counselling Psychology that emphasises being as opposed to doing in therapy. As indicated, any therapeutic endeavour or model of practice depends first and foremost on 'being-in-relation', rather than the simple delivery of technical knowledge or expertise. It would seem, therefore, that a particular objective of any therapeutic endeavour that is under the auspice of Counselling Psychology would seek to utilise all possible dimensions of being. This begs the question what is being? Further, how exactly may it be used in therapy?*

*Indeed, Counselling Psychology theory may address the abovementioned questions by stating that being is the state of consciousness in which therapy occurs. It would follow, therefore, that each therapeutic modality has its preferred state of consciousness. Current literature suggests that there are three main understandings of consciousness or being-in-relation in Counselling Psychology theory, research and practice. This corresponds with three broad notions of rationality, authenticity and spirituality.*

*It is evident that notions of rationality abound in Counselling Psychology theory, practice and research. Such notions emphasise technical ability, the 'rational self' and, the importance of*

*having specific goals when treating clients. Schools of thought that are most consistent with this view include rational emotive behaviour therapy, solution-focused therapy and cognitive-behavioural therapy.*

*Conversely, notions of authenticity lay emphasis on the process of therapeutic encounters. It therefore allows counselling psychologists to further acknowledge the inter-subjective nature of their encounters and appreciate how their manner of existence is expressed in the therapeutic relationship. As such, it attests to the extended possibilities in therapeutic encounters rather than the maintenance of a similar stance in all situations or relationships encountered. Humanistic schools of thought are most closely allied with this notion as well as existential-phenomenological psychology and therapy. Again, notions of authenticity also abound in Counselling Psychology theory, practice and research.*

*In contrast, notions of spirituality are scarce and often poorly understood yet there is increasing evidence that it is an important variable in therapeutic encounters. Moreover, the majority of accredited Counselling Psychology programmes do not include or even address schools of thought that espouse notions of spirituality. Thus, the aim of Part D is to present a critical literature review of the notion or concept of spirituality in psychology and therapy that integrates the frameworks and models of the aforementioned sections.*

## **PART B – Research Component**

*An Outcome Evaluation of a UK Minnesota Model  
Alcohol Addiction Treatment Programme*

## Abstract

*The Minnesota Model of treatment for alcohol addiction is a common intervention that is widely employed in the UK. Despite its popularity, outcome evaluations of this approach are scarce. This study describes the Minnesota Model alcohol addiction treatment programme that is delivered at a non-statutory organisation in the UK and presents findings from an evaluation of its outcomes. A single-group quasi-experimental pre-post design is employed that includes a no treatment and partial treatment control group. The study population comprised all clients (n=478) who were assessed at the organisation between May 2001 and October 2005. All potential participants were contacted to obtain their informed consent. In total, 137 participants agreed to take part in the study and baseline information was obtained from archived pre-treatment assessment data. Of these participants, there are three groups of clients who varied in their level of engagement with the organisation. GROUP A were assessed but did not participate further (n=18); GROUP B began the programme but were discharged for various reasons (n=31); and, GROUP C completed the treatment programme (n=55). Outcome measures include drinking and non-drinking outcomes. Results show a highly significant ( $p < 0.0001$ ) association between completion of treatment and continued abstinence. At post-treatment follow-up of one to three or more years, 58% of participants completing the programme, reported continuous abstinence from all psychoactive substances. This constituted a mean follow-up period of 2.07 years for participants completing treatment. These findings are exciting and unparalleled in the alcohol addiction treatment outcome literature.*

# 1 ALCOHOL AND ALCOHOLISM

There are a multitude of terms applied to an individual's interaction with alcohol that is dependant on the context in which it is used. Within the field of psychology (and other scientific and medical disciplines) definitions and meanings of the word alcohol and alcoholism differ between areas of specialization. These meanings are further exacerbated by socio-cultural constructs (e.g., politics and religion). This introductory chapter highlights significant definitions and gives a description of the phenomena of alcohol and alcoholism.

The terms *heavy drinking*, *alcohol misuse* and *alcohol dependence* are often used in preference to the terms *addiction* and *alcoholism*. Nonetheless, these concepts are not strictly independent of each other. Thus, for the sake of brevity, the author of this study will use the terms *addiction* and *alcoholism* in reference to alcohol misuse and/or dependence, except where specific distinction is to be made between these concepts.

## 1.1 History of Alcohol Use

There is scarcely an age or culture in which alcohol use is not known. Its use predates recorded history and is presumed to have occurred by chance cir. 10,000 BC (Patrick, 1952). References to its use appear in all of the four great ancient civilisations (Egypt, Babylon, China and Greece).

Since prehistoric times, alcohol has been widely accepted as part of everyday human existence. It has been used as part of the daily diet, for hygiene, recreation, libation, artistic inspiration and numerous other cultural, religious and festive purposes (Lucia, 1963). In particular, alcohol use has been invested with symbolic, religious and mystical purposes from antiquity to contemporary society.

The prevalence of alcohol in ancient Egypt is demonstrated in the reverence of Sesmu, (the god of wine). Unlike other gods, it was worshipped throughout the entire nation and believed to be the creator of beer. For the ancient Egyptians beer was considered to be a necessity of life and brewed domestically on a daily basis (Hanson, 1995).

In contemporary societies, an alcoholic drink is still used as a symbolic announcer of peace, prosperity, friendship and agreement in personal, political and business relations. Indeed, cross-cultural research has revealed the following four main current symbolic uses of alcohol beverages as: 1) labels defining the nature of social situations and events; 2) indicators of social status; 3) statements of affiliation; and, 4) gender differentiators (Social Issues Research Centre, 1998).

It is important to note that reference to alcohol use in antiquity does not relate to the (yet to be isolated) chemical substance ethanol (Lucia, 1963). Rather it relates specifically to the naturally fermented juice of grapes and other fruits, cereals, grains and even flowers. Thus, in contrast to other cultural acquisitions, alcohol use developed as a natural phenomenon.

## **1.2 Alcohol Use Disorders**

The range of alcohol use disorders are stipulated in current versions of the *International Statistical Classification of Diseases and Related Health Problems* (ICD-10; WHO, 1992b) and the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV-TR; American Psychiatric Association (APA), 2000). However, prior to 1980, the term alcoholism was the only diagnosis given to individuals with alcohol use disorders in all classification systems.

## **Historical Background**

There have been differing conceptualisations of alcoholism that have influenced the development of current classification and diagnostic systems of alcohol use disorders. Popular conceptions of alcoholism in the 19<sup>th</sup> century attributed its cause to a failure in morality that led to initial classifications, as described below, associated with personality disorders. During this period, an alternative understanding of alcoholism saw it as a problem that reflects a disease process. Thus, alcoholism was viewed as being biologically determined and the individual alcoholic was seen as having idiosyncratic reactions to alcohol that had a predictable natural history (Kurtz, 2002).

It is often thought that the disease concept of alcoholism was embraced and largely influenced the self-help movement of Alcoholics Anonymous (AA). Yet the major texts of AA do not mention the disease concept as central to its philosophy or principles. However, AA members themselves did have a significant role in disseminating and popularising the disease concept of alcoholism (Kurtz, 2002).

Alcoholism as a disease concept reached its apotheosis with the pioneering work of Jellinek (see **Box 1.1**) who described the disorder as ‘any use of alcohol beverages that causes any damage to the individual or society or both’ (Jellinek, 1960). He identified subgroups of alcoholism based on drinking pattern and acknowledged that patterns of drinking may evolve from one subgroup to another over time.

### Box 1.1 Jellinek's typology of alcoholism

**Alpha alcoholism:** a psychological dependence on alcohol not leading to loss of control or physical dependence. It describes 'undisciplined' but not progressive drinking. Withdrawal symptoms do not occur and the main disability lies in interpersonal relationships

**Beta alcoholism:** heavy drinking complicated by physical damage without either physical or psychological dependence

**Gamma alcoholism:** that which involves 'loss of control' drinking and physical dependence. Withdrawal symptoms occur. The earlier stages of this form may resemble alpha alcoholism. Gamma alcoholism results in the most severe damage, both physical and social

**Delta alcoholism:** differs subtly from the gamma variety in that, instead of 'loss of control' there is 'inability to abstain'.

**Epsilon alcoholism:** bout drinking or 'dipsomania'

The first two editions of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM) did not provide specific diagnostic criteria for alcoholism or any other disorders. Rather, brief descriptions were given of various mental disorders. Alcohol intoxication was viewed without much consideration and referred to as a 'non-diagnostic term'.

In its initial edition (DSM, 1952), substance use disorders were grouped under personality disorders and alcoholism was defined as a 'well established addiction to alcohol without recognised underlying disorder'. DSM-II (1968) did not offer much revision and merely added the statement that 'the best direct evidence for alcoholism is the appearance of withdrawal symptoms'. Such classifications were popular with clinicians for their ease of use (Hasin, 2003).

However, popularity of matching individual symptoms with text descriptions soon waned as research conducted in the 1960s showed detrimental consequences of diagnosing mental disorders without specific diagnostic criteria. Influential test-retest reliability studies (e.g., Beck,

Ward, Mendelson, Mock & Erbaugh, 1962; Spitzer, Endicott & Robins, 1975) showed significant inconsistencies in measurement due to the lack of specific diagnostic criteria. Further, cross-national research proved to be unachievable due to inconsistent diagnostic practices.

Consequently, epidemiological statistics proved to be invalid when diagnostic practices were more specific and standardised (Cooper et al., 1972). Given the necessity for reliable diagnostic procedures in treatment practice and research, a spur in the development of more specific classification systems for diagnosing alcoholism and other psychological disorders arose. Most notably, Feighner et al. (1972) produced a pioneering set of research diagnostic criteria for alcoholism.

Research by Feighner et al. (1972) focused on observational studies of hospital and prison populations (Barchha, Stewart & Guze, 1968; Guze, Goodwin & Crane 1969) as well as alcoholics that include members of AA (Jellinek, 1960). For a definitive diagnosis of alcoholism a list of symptoms are divided into four categories. These categories indicate the following: 1) physiological aspects of heavy drinking; 2) loss of control over drinking; 3) antisocial behaviours connected to drinking; and, 4) guilt about drinking or impaired interpersonal relationships. At least three of the four categories must be present to label an individual as alcoholic.

A further development in the diagnosis of alcoholism resulted in the publication of *Research Diagnostic Criteria* (RDC) (Spitzer, Endicott & Robins 1978). This comprises a list of 18 symptoms similar to Feighner et al. (1972) but provides a more simple structure for diagnosis. Only three of the possible 18 symptoms are required for a definite diagnosis of RDC alcoholism.

The burgeoning trend in the use of specific criteria for improving diagnostic reliability led to a major advance in the third edition of DSM (DSM-III; APA, 1980). The publication of DSM-III had, for the first time, included diagnostic criteria. A multi-axial approach to assessment is

employed that includes comprehensive descriptions of psychological disorders. More importantly, it is the first classification system intended for clinical and research use (Hasin, 2003).

With regard to alcoholism, DSM-III represents the first classification system that provides criteria for two alcohol use disorders (i.e., abuse and dependence). Criteria for alcohol abuse were divided into two groups: 1) presumed indicators of pathological use; and, 2) impairment in social or occupational functioning as a result of pathological use, including legal problems and traffic crashes. For a DSM-III alcohol abuse diagnosis an individual must have experienced listed problems for a minimum of one month.

A DSM-III diagnosis of alcohol dependence, on the other hand, required pathological use or impairment in social or occupational functioning in addition to evidence of tolerance and/or withdrawal. However, it is important to note that there was no published rationale for the allocation of symptoms into subcategories or the division of alcoholism into abuse and dependence.

The subsequent revision of DSM (DSM-III-R; APA, 1987) was based on a detailed theoretical rationale (Rounsaville, Spitzer & Williams, 1986) derived from Edwards and Gross' (1976) concept known as the Alcohol Dependence Syndrome (ADS). The ADS forms the basis of the current classifications of alcoholism. They include disorders related to alcohol abuse, misuse, dependence, tolerance, intoxication and withdrawal that have been expanded to include other psychoactive substances (Bodin, 2006).

The ADS (Edwards and Gross, 1976; WHO, 1981) was conceptualised to integrate psychological and physiological processes leading to persistent heavy drinking despite knowledge of negating

external circumstances or adverse consequences. Thus, it differentiated the dependence process itself and other inevitable consequences of heavy drinking (e.g., social, legal and medical).

Edwards (1986) referred to this important distinction as the biaxial concept. The biaxial concept (Edwards, 1986) was incorporated in DSM-III-R through the organisation of alcohol dependence and abuse criteria. An alcohol disorder of dependence required three out of nine criteria for a definite diagnosis. This included the following criteria: (1) tolerance; (2) withdrawal; (3) impaired control; (4) neglect of activities; (5) time spent in alcohol-related activity; (6) inability to fulfil roles; (7) hazardous use; (8) continued use despite problems; and, (9) compulsion.

The DSM-III-R alcohol abuse criterion had a much narrower definition and was only used for individuals who did not meet criteria for dependence. It consisted of other types of alcohol-related problems, and only one of two symptoms was required for a definite diagnosis. These were (A) a maladaptive pattern of use indicated by at least one of the following: (1) continued use despite knowledge of having a persistent or recurrent social, occupational, psychological, or physical problem that is caused or exacerbated by use of the psychoactive substance; and (2) recurrent use in situations in which use is physically hazardous (e.g., driving while intoxicated). The second category required evidence that (B) some symptoms have persisted for at least one month, or have occurred repeatedly over a longer period of time.

The publication of DSM-IV and DSM-IV-TR (APA, 1994, 2000) represented a more conservative revision of alcohol use disorders than its predecessor (DSM-III-R; APA, 1987). Thus, criterion for DSM-IV and DSM-III-R alcohol abuse and dependence are similar. This was based on the requirement for compelling evidence before changes were administered and the concern that DSM-III-R definitions of dependence being rather wide whilst abuse was too narrow in its definition (Hasin, 2003).

During the development of DSM publications authors of the *International Statistical Classification of Diseases and Related Health Problems* (ICD) were also developing a classification system to compile statistics on all causes of death, including those related to alcoholism. The ICD is the principle international classification system of diseases, injuries and causes of death. The World Health Organisation (WHO) manages ICD and they are mandated to publish periodic revisions (Saunders, 2006).

The ninth and tenth editions of ICD (WHO, 1978, 1992a) had substantial revisions from previous publications. Insight obtained from DSM-III-R and DSM-IV influenced definitions of alcohol use disorders included in the WHO classification system. In particular, ICD-10 (WHO, 1992b) accepted the ADS as the basis for alcohol dependence criteria (Hasin, 2003).

The spur to develop current understandings of alcohol use disorders is likely to result in revised definitions within forthcoming editions of classification and coding systems. The WHO is mandated to publish the 11<sup>th</sup> edition of ICD before 2011 and DSM-V is due to be published between 2012 and 2014 (Saunders, 2006). As preparation for future editions commence, opportunities for further convergence between the two systems may materialise.

### **1.3 Epidemiology**

The study of the distribution and determinants of alcohol use and alcoholism may be assessed from drinking patterns and alcohol-related harm. That is, the physical, psychological and socio-economic costs that may occur from alcohol consumption. Drinking patterns are particularly relevant to epidemiologists as this may elevate an alcohol users risk of health and socio-economic problems. The WHO estimates that there are in the region of 2 billion individuals who consume alcohol and 76.3 million with diagnosable alcohol use disorders (WHO, 2004a).

Annually, alcohol use causes 1.8 million deaths (3.2% of total) and a loss of 58.3 million (4% of total) Disability-Adjusted Life Years (DALY) worldwide. Neuro-psychiatric conditions account for nearly 40% of the DALYs, while unintentional injuries account for up to 33.3% of the 1.8 million alcohol related deaths (WHO, 2002).

In addition to chronic diseases caused by heavy drinking, alcohol contributes to traumatic health outcomes in disability and mortality rates. As indicated, there is increasing evidence that the pattern of alcohol use (e.g., binge drinking) has an adverse affect on health outcomes. Alcohol is globally estimated to cause between 20-30% of liver cancer, oesophageal cancer, liver cirrhosis, epileptic seizures, murders and driving accidents (WHO, 2002). In general, there is a causal relationship between alcohol use and more than 60 types of disease and injury.

### **European Union**

Although alcohol use has been falling, the European Union remains the region of the world with the highest proportion of drinkers and levels of alcohol consumption per population (Anderson & Baumberg, 2006). Alcohol consumption within the EU is also a particularly significant risk factor for ill health and premature death. With the exception of nicotine related diseases and raised blood pressure, alcohol use is the greatest risk factor for poor health outcomes (WHO, 2002).

Within the 25 countries of the European Union alcohol is responsible for 7.4% of all ill health and premature death. In the age group of 15-29 year olds, alcohol is a cause of over 25% of male deaths. Fifty-five million European adults drink to hazardous levels and some 100 million binge-drink at least once a month. The burden of such alcohol use on socio-economic life in Europe is phenomenal. In 2003 alcohol-related crime was estimated to be €33 billion; property damage from drink driving was estimated to be €10 billion and the physical and psychological effects of

crime has been valued between €9-37 billion (Anderson & Baumberg, 2006). In total, tangible costs were estimated at €125 billion and intangible costs of up to €270 billion.

There are an estimated 23 million EU citizens that are alcohol dependent and approximately 195,000 premature deaths per annum are alcohol related. The health impact is evident in many areas including 10,000 suicides; 45,000 deaths from liver cirrhosis; 50,000 cancer deaths; 17,000 deaths from neuro-psychiatric conditions as well as 200,000 episodes of depression. The cost of meeting these health outcomes is estimated at €17 billion with €5 billion spent on treatment and prevention of harmful alcohol use and dependence (Anderson & Baumberg, 2006).

### **United Kingdom**

Within the adult alcohol use population in the UK, 39% of males and 42% of females are considered heavy drinkers. Respectively, 24% of males and 9% of females are heavy episodic drinkers, consuming six or more drinks on one occasion weekly or more. Further, it has been estimated that 4.7% of adult drinkers are alcohol dependent. Of those classified dependent, gender ratios are 7.5% and 2.1% for males and females respectively (WHO, 2004a).

Indeed, it has been noted that alcoholism is a tremendous financial, economic, health, familial, and social liability that contributes to some of the leading causes of death in the UK. This has recently led the government to publish its *Alcohol Harm Reduction Strategy* (2004). The cost of alcoholism to the health service alone is £1.7 billion per annum and is linked to annual expenditure of £95 million on specialist alcohol treatment; over 30,000 hospital admissions annually for alcohol dependence syndrome; up to 22,000 premature deaths per annum; and, at peak times, up to 70% of all admissions to accident and emergency.

## 1.4 Aetiology

Current research demonstrates alcoholism as having a multidimensional aetiology (Schuckit, 2006). The main factors that contribute to the aetiology of alcoholism include the properties of alcohol itself, constitutional factors (individual characteristics) and the environment. Alcoholism is also a heterogeneous disorder and for each individual it is the result of an interaction of different aetiological factors.

Given a normal population distribution in a particular environment not all individuals will drink to excess levels. However, increased levels of consumption appear to increase the probability that an individual will develop an alcohol use disorder. It is contended that this may only be explained by consideration of physical and psychological differences between individuals (Farren and Tipton, 1999).

Zucker and Gomberg (1986) argue that a comprehensive understanding in the aetiology of alcoholism is enhanced within the context of a biopsychosocial process. That is, a longitudinal-developmental framework (originated by Meyer, 1948) that includes physiological, behavioural and socio-cultural variables.

Thus, biopsychosocial understandings of the aetiology of alcoholism incorporate medical and other uni-dimensional models (e.g., Psychodynamic, Behavioural Science, Cognitive, Social learning, Tension Reduction and Disease models). **Box 1.2** lists the individual and environmental factors that have been implicated in the aetiology of alcoholism. However before discussion of this subject, it is important to state the environmental factors that are implicated in the development of alcoholism.

It is argued, in what is known as the *population-based approach*, that at a most basic level the availability of alcohol constitutes a fundamental and necessary environmental factor in the development of alcoholism. Epidemiological research has shown that factors such as cost, taxation, income and legislation affect the availability of alcohol. Thus, it is maintained that these and other socio-political factors constitute important aetiological mediators in determining per capita consumption and the incidence of alcohol related problems within any given population (Bobak, 2005).

However, a contrary argument to Bobak (2005) incorporates cultural factors and maintains that *high-risk patterns* rather than availability are core factors in determining per capita consumption of alcohol (Single, 2005). Indeed, the recent work by Plant and Plant (2006) demonstrates how cultural factors exert considerable influence on alcohol consumption.

Other environmental factors that are important components of aetiology in the development of alcoholism include occupation, family environment as well as stress and life events. Of these, occupation is a leading environmental factor affecting alcohol consumption of particular groups of individuals.

Occupation denotes a complex set of psychosocial factors that reflect intelligence, education, personality, ambition, social status and lifestyle. The risk factors associated with occupation include availability of alcohol at work, social pressure to drink on the job, isolation from normal social relationships and freedom from supervision. These factors influence the consumption of alcohol and the development of alcoholism (Oikinuora, 1984).

Further indications that the consumption of alcohol and alcoholism has many correlations with occupations are evidenced in mortality rates. Mortality rates for cirrhosis of the liver are clearly

above average for certain occupations with the highest risk found in occupations serving food and alcoholic beverages (Cook, 1998). In an influential study Plant (1979) showed how certain occupations in the brewery industry appeared to exert a causative effect in the generation of heavy drinking and a selection effect at the point of employment.

**Box 1.2 Factors affecting susceptibility to alcoholism**

Environmental factors:

- (1) Epidemiological
- (2) Occupational
- (3) Cultural
- (4) Familial
- (5) Stress and life events

Biological markers:

- (1) Genetic
- (2) State
- (3) Trait – Enzymatic, Electrophysiological & Neuro-chemical

Personality & Psychiatric Disorders

Psychological factors:

- (1) Psychodynamic theories
- (2) Behavioural science, Cognitive & Social psychological theories:
  - Classical conditioning
  - Operant conditioning
  - Tension reduction hypothesis
  - Cognition
  - Stimulus generalisation
  - Social learning

Source: modified from Cook (1998).

As indicated in **Box 1.2**, biological markers fall into three main categories. Abnormalities in various neurochemical systems in alcoholism have been investigated. In particular, there have been significant attempts to correlate findings with various phenotype characteristics of alcoholics (e.g., family history of alcoholism, severity, duration of abstinence and age of onset) (Cook, 1998). With regard to genetic factors a considerable volume of research has addressed the question as to whether a predisposition to alcoholism may be inherited. Heritability estimates of

alcohol dependence range from 52% to 63% depending on the diagnostic system used (van den Bree et al., 1998).

In particular, twin and adoption studies offer the opportunity for separating genetic and environmental effects. It also affords the possibility of examining various aspects of alcohol dependence. For example, there are heritability estimates of 66% in females and 42-75% in males for frequency of alcohol consumption. In addition, the genetic risk for alcohol dependence was increased in those reporting a history of conduct disorder or clinical depression. This is also the case in those with high neuroticism, 'tough-mindedness', novelty-seeking or (in females only) extraversion scores (Heath et al., 1997).

Indeed, research findings indicate that there are various genetic influences at many stages in the development of alcoholism. However, it is maintained that the defining criteria of the phenotype in question can have major effects on the results of the study (WHO, 2004b). Nonetheless, it is clear that there are genetic components that relate to many aspects of alcohol use (e.g., onset, frequency, quantity and response to alcohol), albeit a relationship of some complexity.

In theory, it is possible for a state marker to appear in individuals with a pre-morbid vulnerability to alcoholism. However, state markers reflect the consequences as opposed to the causes of an individual's prolonged heavy drinking. Thus, although they may be useful in screening for alcoholism, they offer no or scant information regarding its aetiology.

Trait markers reflect enduring individual differences that may indicate a predisposition to alcoholism. There are particular studies often used to identify trait markers in alcoholism research such as identification in a group of those deemed to be 'at risk' (e.g., non-alcoholics with strong family histories of alcoholism). Such an approach is preferred as it attempts to avoid the possible

confusion that may arise from a failure to distinguish between consumption, or state markers, and genuine markers indicating vulnerability to alcoholism (Farren & Tipton, 1999).

As indicated in **Box 1.2**, research on the aetiology of alcoholism has generally identified three main trait markers, namely enzymatic, electrophysiological and neurochemical. Several investigators have studied enzymatic markers; in particular they have addressed the issue of platelet monoamine oxidase (MAO) activity in alcoholism. Originally, MAO activity was vigorously investigated in schizophrenia and affective disorders although this did not amount to any specific or conclusive associations (Fowler, Tipton, Mackay & Youdim, 1982). However, there have been significant associations with abnormalities in MAO activity and alcoholism.

Gottfries, Oreland, Wiberg and Winbald (1975) found reduced MAO activity in the post-mortem brains of alcoholic suicides, relative to non-alcoholic controls. However, they found less difference between alcoholic and non-alcoholic suicides, implying some degree of association between affective disorder and alcoholism. Indeed, this was groundbreaking research and stimulated research interest in using platelet MAO as a peripheral marker of central MAO activity in alcoholism. Subsequent to research by Gottfries et al. (1975) a significant number of studies explored the association between low platelet MAO activity and alcoholism. In particular, research was conducted between low platelet activity and the proposed Type II alcoholism (Cloninger, Bohman & Sigvardsson, 1981), a subset of alcoholism that has not been conclusive with regard to its clinical relevance (Schuckit & Irwin, 1989) (see **Table 1.1**).

**Table 1.1 Two types of alcoholism\* (Cloninger et al., 1981)**

	Type I 'Milieu Limited'	Type II 'Male Limited'
Drinking pattern	Loss of control	Inability to abstain
Sex	Male and female	Male
Heritability	Parents mild/non-abusers	Highly heritable
Criminality	No association	Associated
Post-natal environment	Determines severity and frequency	May influence severity
Severity	Usually mild	Moderate/Severe
Age of onset	> 25 years	< 25 years

\* More recent developments of alcohol typology are known as Type A and Type B (Babor et al., 1992; Litt & Babor, 2001)

Electrophysiological trait markers have been investigated through the use of electroencephalograms (EEGs). Such research has shown that individuals with strong family histories of alcoholism and alcohol dependence demonstrate relatively low levels of slow wave (alpha) activity on EEGs. Some of these studies showed alpha activity increased relatively more than in controls following an ethanol challenge (Cook, 1998).

Pollock et al. (1983) developed a hypothesis of greater EEG response to alcohol predicting later development of alcoholism. This theory was based on the tension-reduction hypothesis of alcoholism. However, this has been refuted in a 10-year follow-up study of participants at risk of alcoholism, where a low EEG response to alcohol was found to predict subsequent development of alcoholism (Volavka, et al., 1996).

Event-related potentials (ERPs), most notably the P3 wave, in response to visual and auditory evoked potentials, have also been investigated as potential trait markers. Event-related potentials are recorded EEG-locked brain responses that are linked to some externally observable event. The

event may include an auditory, visual, or an omission of a stimulus (such as an increased latency between stimuli). Elmasian, Neville, Woods, Schuckit & Bloom (1982) examined the P3 auditory wave after doses of alcohol or placebo in young participants with and without positive family histories of alcoholism. It was found that there were longer latencies and smaller amplitudes in the children of alcoholics.

Further research has not shown consistent findings with the early study conducted by Elmasian et al. (1982). Indeed, some of these studies have shown that latency may have increased as a result of previous alcohol consumption. This led Polich and Bloom (1987, 1988) to conclude that P3 latency does not appear to be as closely linked with positive family histories of alcoholism in the adult. Rather, they maintain that it appears to be related to the amount of alcohol consumption.

However, studies examining child and adult populations appear to show more consistent results. For example, studies with girls as well as boys have confirmed the reduced P3 amplitude in male children of alcoholics. Further, the influential ongoing *Collaborative Study on the Genetics of Alcoholism* (Begleiter et al., 1995) found that visual P3 amplitude ERP means were significantly lower in all sex- and age-matched alcoholic groups, relative to healthy controls. This investigation also found that affected males had lower amplitudes than affected females. In addition, affected individuals from alcoholic families had lower P3 amplitudes than unaffected individuals leading to a strong suggestion of a phenotypic marker (Porjesz, et al., 1998).

The belief that personality has a role in the aetiology of alcoholism has a long tradition. Popular and medical theorising in the nineteenth century often focused on the 'degeneracy' of the alcoholic. Degeneracy was a global concept that encompassed criminality, sexual promiscuity, and feeble-mindedness (Peele, 1985). Indeed, many alcohol therapists still use the term 'addictive personality' in contemporary clinical practice. They refer to common characteristics that are

deemed to be inherent in the 'addictive personality'. These include low frustration tolerance, generalised anxiety, grandiosity, perfectionism, justification, isolation, sensitivity, impulsiveness, defiance and dependence on others.

Although research indicates that there appears to be a personality dimension to alcohol addiction there is no current identification of a personality type that is likely to develop alcoholism. Rather, there is evidence that suggests a non-specific increase in risk of alcoholism among individuals with certain traits. However, there is only substantial support for individuals diagnosed with antisocial personality disorder (Cook, 1998).

Psychodynamic theories in the aetiology of alcoholism emphasise the development of psychic forces, structures and functions. References made by Freud regarding alcoholism were few, although he did maintain that alcohol use provided relief from conflict generated by an oral fixation or repressed homosexuality. Freud reasoned that alcoholics who were stuck at an early developmental stage used alcohol as an escape from reality and its challenging demands on adult life. Homosexuals were said to resort to drink because they were dissatisfied in relationships with women and drinking afforded the opportunity to spend more time with men.

Developments of psychodynamic theories have proposed that alcoholism reflects unresolved dependency conflicts, a striving for power or a form of self-destruction. It is maintained that the anxiolytic effect of alcohol use obscures normal avoidance from adverse consequences of drinking. Alcoholics are perceived as particularly susceptible to this effect as they have deficient psychological mechanisms by virtue of an unconscious motivation toward self-destruction. According to psychodynamic theory, this is generated by anger and destructive feelings directed toward the internalised parent in the alcoholic's super ego (Barry, 1988). This has led to the view of alcoholism as a form of 'slow suicide' or 'suicide on the instalment plan' (Cook, 1998).

Contemporary psychodynamic theories have incorporated recent neuro-scientific developments in aetiological understandings of alcoholism and veer from the notion of inadvertent pursuit of pleasure or self-destruction. Khantzian (2003) has continued to develop his *self-medication hypothesis* that seems compatible with social learning theories discussed below. He suggests that the alcoholic's use of drink is an attempt to self-medicate their suffering and to regulate their lives. Thus, a general practitioner or psychiatrist may liken an individual's use of alcohol to the prescription of anti-depressants or anxiolytics.

Drawing on an evolving psychodynamic paradigm, Khantzian (2003) suggests that alcohol addiction is viewed as developing through the following stages: (1) a special adaption; (2) an attempt to self-medicate and/or change intolerable affect states; (3) self-regulation disorder; and, (4) a reflection of disorder in personality organisation.

Despite such notable developments psychodynamic theory is not a prominent feature in alcoholism treatment and research. In contrast to psychodynamic explanations, behavioural science, cognitive and social psychological theories have become increasingly popular. Representative models of these theories are described below and illustrate their applicability in psychological understandings of the aetiology of alcoholism.

Behavioural science in psychology specifically addresses aspects of behaviour that can be objectively viewed and verified. It describes human behaviour in terms of stimuli and its responses. Thus, the development of alcoholism is understood as part of a learning process involving interaction with alcohol and alcohol-related environments. The two major theories that are relevant in learning and behaviour include: (a) Pavlovian or classical conditioning and (b) instrumental or operant conditioning.

Pavlovian theory of classical conditioning asserts that unconditioned stimuli (e.g., social events, passing a wine bar and completion of projects) may become associated with alcohol use over a period of time. Thus, given a period of time, they become conditioned stimuli that triggers a desire to drink (*craving*) or actual alcohol use as a conditioned response.

In a similar vein clinical alcohol withdrawal syndrome may become a conditioned response to physiological states or environmental cues. It is suggested that alcoholics experience Pavlovian conditioning by pairing external (e.g., familiar bar) and internal (e.g., negative mood states) stimuli to the reinforcing effects of alcohol.

Thus *craving* for alcohol is viewed as an appetitive urge, like hunger, which varies in intensity and characterised by symptoms similar to withdrawal. Such symptoms are elicited by internal and external cues that trigger memory regarding the anguish of withdrawal and the euphoria of alcohol use (Ludwig & Stark, 1974; Ludwig & Wikler, 1974; Ludwig, Wikler & Stark, 1974). The neurobiological basis for these associations is likely to be dopamine signals in the nucleus accumbens, this is part of a neurotransmitter system referred to as the mesolimbic dopamine pathway that is strongly implicated in alcohol and other psychoactive substance addiction (Wise, 1998).

Instrumental or operant conditioning requires an individual to have some level of control over the presentation of stimuli. It is often referred to as 'goal-directed behaviour' and falls under three main categories: (a) positive reinforcement, (b) negative reinforcement and (c) punishment. With regard to the individual, alcohol use may be seen as positive reinforced behaviour due to its agreeable subjective effects. Such positive effects include social as well as neurochemical factors.

The negative emotional states relieved by drinking may include stress, tension and symptoms of withdrawal. Indeed, according to the 'tension' or 'anxiety' reduction theory, the alcoholic uses alcohol as an anxiolytic to decrease levels of anxiety, which would otherwise be perceived as too threatening.

The tension reduction hypothesis initially proposed by Conger (1956) states that: "alcohol serves to reduce tension or anxiety, possibly because of the depressing or tranquilizing effects of alcohol on the nervous system. Drinking is thus reinforced by the tension reduction effects obtained" (p.175). Although Conger's (1956) hypothesis has received popular support there is conflicting scientific validation for its basic premise. For instance, there have been several major reviews of the hypothesis since it was first proposed (Cappell & Herman, 1972; Cappell, 1975; Cappell & Greeley, 1987; Young, Oei & Knight, 1990).

Cognitive theory extends classical and operant learning principles by including the impact of cognitive processes on the development and modification of behaviour. Such cognitive processes include thinking, self-efficacy, imagery, outcome expectancies, self-talk and fantasy. The theory is premised on the idea that an individual's beliefs about self and their interaction with the world are critical components of behaviour (Ellis, 1982).

Thus, cognitive theory asserts that the core problem of an alcoholic is a set of maladaptive (and addictive) cognitions that are derived from core beliefs. Such core beliefs interact with stimulus situations that activate alcohol-related beliefs leading to a desire (or craving) for alcohol (see Part C). Indeed cognitive theory incorporates understanding of the process of 'stimulus generalisation' in explanation of the aetiology of alcoholism whereby the alcoholic is likely to respond to an increasingly broader range of stimulus situations. Once alcohol use occurs as a conditioned response to one stimulus, it may be subject to a process of stimulus generalisation. Thus, whereas

originally an individual may have only felt a strong desire to drink in social situations, in time, it may be extended to other experiences such as when excessively anxious, angry, bored or lonely (Beck, Wright, Newman & Liese, 1993).

Social learning is concisely described by Orford (1985) when he states that: “the outcome of a behavioural choice...is the result of the balance of expectations of positive outcomes over negative outcomes (rewards over punishments) for engaging in rather than desisting from appetitive behaviour” (p.170). The outcomes described by Orford (1985) include intrinsic (psychological and physiological) and extrinsic (e.g., social consequences) effects of alcohol use. Social learning theory also extends classical and operant principles by asserting that explanation of human learning is frequently dependent on observation and imitation. Thus conditioning, expectations and other cognitions not only arise from stimuli and rewards, but also influence reactions to stimuli, behaviours and consequences.

This is a basic premise of social learning theory (Bandura, 1977) that recognises the self-aware individual as an active participant in the learning process rather than as a simple passive victim of circumstance. The theory also emphasises modelling or ‘vicarious learning’ in relation to alcohol use behaviour of both peers and family. Patterns of drinking behaviour are copied without reinforcement, a phenomenon that may explain the prevalence of heavy drinking in certain occupations (Marks et al., 2005).

It is noted that Bandura (1977) has been particularly influential in revealing the importance of learning via modelling in alcohol use behaviour by relating it to his concept of self-efficacy. Thus, it may be contended that individuals with low self-efficacy are more susceptible to the imitation of undesirable behaviours than those with high self-efficacy (Marks et al., 2005).

Indeed, there is strong experimental and clinical support for a social learning analysis of alcoholism. Moreover, alcohol use treatments based on this theory (e.g., cue exposure and social skills training) have received increasing support. The theory has also given rise to the notion of learned helplessness (e.g., belief in loss of control) and cognitions that bolster abstinence violation effects (e.g., “I have relapsed therefore all is lost”) (Harrison & Carver, 2004).

## **1.5 Alcohol Treatment**

The treatment of alcoholism has reflected the societal context in which it is offered. For example, there are current nation states that attempt to manage alcoholism by total prohibition. Indeed, this was a method used in the USA from the 1920s to 1940s during alcohol prohibition. As total abstinence became unpopular the vulnerability of the individual was viewed as the primary reason for the development of alcoholism as opposed to the alcohol itself. It is important to note however that, ultimately, treatments offered are dependent on the view of alcoholism as a medical condition, disease, or one of social choice (Marks et al., 2005).

Differences in the conception of alcoholism have led to what is known as the abstinence versus controlled drinking debate. In essence, the debate centres on whether alcohol treatment goals should aim for total abstinence or controlled (moderate) drinking. As indicated, learning theorists would advocate controlled drinking as a treatment goal and this is supported by considerable evidence (Raistrick, Heather & Godfrey, 2006). Uncontrolled drinking is viewed as learned behaviour and can therefore be unlearned.

In support of the controlled drinking debate, Heather and Robertson (1997) found that a significant number of clients diagnosed with severe dependence and treated with abstinence programmes were drinking moderately at long-term follow-up. A consistent finding in their

review showed that the percentage of clients who maintained abstinence and those who were drinking moderately at long-term follow-up was equivalent. However, it is important to note that the proportion of clients who were abstinent or moderate drinkers were considerably smaller than those who had relapsed to heavy drinking.

Following the abstinence debate, Schuckit (2006) offers a different view that seems to be representative of North American perspectives. He maintains that anecdotal and follow-up information indicates that only one to five per cent of individuals who are alcohol dependent ever achieve a persistent state of controlled or moderate alcohol use.

It is often useful to consider the work of Lindström (1991) who maintains that there are generally four hypotheses that alcohol treatment may address (see **Table 1.2**). To a large extent, subsequent alcohol treatment research has centred on these hypotheses.

**Table 1.2 Lindström's (1991) four hypotheses regarding the treatment of alcohol problems**

	<i>Is treatment effective?</i>	<i>Do therapies vary in efficacy</i>	<i>Is there a superior therapy?</i>
The technique hypothesis	Yes	Yes	Yes
The matching hypothesis	Yes	Yes	Yes
The non-specific hypothesis	Yes	No	—
The natural healing hypothesis	No	—	—

Current approaches to the treatment for alcoholism emphasise a multidimensional perspective and adhere to a belief that there is more than one effective psychological treatment for alcohol dependence (Slattery et al., 2003). As stated, this approach is commonly known as a *biopsychosocial* model in which the multidimensional aetiology of alcoholism is seen to have physiological, psychological and socio-cultural dimensions. The type of treatment offered will

inevitably be based on varying conceptualisations of the aetiology, course, treatment goals, and length of treatment for alcohol problems. **Box 1.3** gives an overview of the 3 main stages of treatment and appropriate interventions.

**Box 1.3      Stages of Alcohol Treatment**

**Stage 1: Acute Intervention**

- Emergency treatment – immediate resolution of symptoms
- Detoxification – management of acute intoxication and withdrawal
- Screening – identification of problem drinkers and their referral for treatment

**Stage 2: Rehabilitation**

- Evaluation and assessment – development of individualised treatment strategies based on assessment of problems
- Primary care – treatment to reduce drinking and associated problems (including brief and intensive interventions)
- Extended care (stabilisation) – consolidation of achievements made through primary care

**Stage 3: Maintenance**

- Aftercare – longer-term continued support to maintain changes achieved
- Relapse prevention – therapy directed at avoiding return to previous patterns of drinking
- Domiciliary care – provision of ongoing support to those too impaired by alcohol use to resume independent living

(Source: Cantwell & Chick, 1998; modified from Institute of Medicine, 1990)

The stages of treatment shown in **Box 1.3** were originally delineated in a highly influential report entitled *Broadening the Base of Treatment for Alcohol Problems*, published in 1990 by the Institute of Medicine of the National Academies (IOM). The report accounts for the acute and chronic care needs in the overall management of the individual with alcohol problems. Further, in addition to the increasing evidence supporting the efficacy of brief interventions for individuals less severely affected by alcohol use, the IOM (1990) report acknowledged the need to redress the emphasis placed on acute intervention to the detriment of follow-up and community support.

## **UK Alcohol Addiction Treatment**

In the UK, specialist NHS addiction services utilise psychosocial interventions in prevention of relapse (i.e., from abstinence or controlled drinking) for alcohol dependent individuals. These agencies form part of the local mental health service that are incorporated in Primary Care Trusts (PCTs). The other main statutory services focusing on the prevention of relapse are those provided by social work services through local authorities. In addition, non-statutory services provide a considerable amount of alcohol dependence treatment, to the extent that statutory services could not cope in their absence (Slattery et al., 2003).

In light of the recent review on alcohol treatment effectiveness by Raistrick et al. (2006), it is maintained that a typology of alcohol misuse can assist thinking in alcohol treatment provision in the UK. This will include the identification of the following types of alcohol users: (1) hazardous drinkers; (2) harmful drinkers; (3) dependent drinkers – i) moderate and ii) severe; and, (4) drinkers with complicated needs. The typology of drinkers identified by Raistrick et al. (2006) is said to be necessary for the full range of services that are required and may be useful in planning and commissioning services. With regard to specialist UK alcohol addiction treatment, those that are most commonly used are discussed below.

## **Psychosocial Interventions**

According to Slattery et al. (2003), psychosocial interventions for relapse prevention are based on an original cognitive-behavioural model proposed by Marlatt and Gordon (1985) and are an integral feature of alcoholism treatment. The relapse prevention (RP) model (Marlatt & Gordon, 1985) states that both immediate determinants (e.g., high-risk situations and coping skills) and covert antecedents (e.g., lifestyle factors and urges or cravings) may contribute to relapse or the return to heavy drinking (see Part C).

In addition, the RP model incorporates various specific and global intervention strategies that facilitate therapist-client interaction in addressing each step of the relapse process. Specific interventions may include the identification of high-risk stimuli, whereas global strategies might comprise the employment of stimulus control techniques. Thus, the RP model provides a broader conceptual framework for intervention strategies that may enhance treatment outcomes.

There are more than 40 different types of psychosocial interventions, although specific features are common amongst most of them (e.g., therapeutic relationship). These interventions are centred on 'talking therapies' that may involve individual, couple, family or group approaches and the promotion of self-help as an adjunct to treatment and support options. Of the treatments most commonly used in alcohol addiction services, there are certain elements that are implicit and used in combination or as singular interventions. These elements include the following: 1) developing motivation 2) cognitive restructuring and, 3) improving coping skills (Slattery et al., 2003).

Raistrick et al. (2006) list 10 psychosocial treatments (including RP), with an evidence base, that are used in specialist alcohol addiction services in the UK. In addition, they state that planned and structured aftercare is effective in improving outcome following an initial treatment episode with individuals suffering from severe alcohol problems. Of the psychosocial models listed by Raistrick et al. (2006) one of the treatments is a fairly novel approach known as *social behaviour network therapy* (SBNT) and is described in chapter three. *Behaviour contracting* and *extended case monitoring* are listed amongst these treatments, however they are described as more a component of treatment and will not be discussed further. Similarly, *aversion therapy* is also listed but will not be discussed further as it is not recommended for treatment practice. The remaining treatments listed by Raistrick et al. (2006) are deemed to be the most relevant to individuals with moderate or severe alcohol dependence and they will be described below.

Hunt and Azrin (1973) developed the *community reinforcement approach* (CRA) for the treatment of alcohol dependence. CRA is based on learning theory, in particular, the operant approach as espoused by Skinner (1938), and stresses the interaction between an individual's behaviour and their environment. In essence, it seeks to focus on what the individual client finds rewarding in their social, familial, occupational and recreational existence. The aim, then, is to help the individual change their lifestyle and social environment to support long-term changes in behaviour. Such changes in behaviour would render the use of alcohol (or drugs) as less rewarding than non-use (Curran & Drummond, 2005).

In its contemporary form, CRA has three necessary assessment stages: 1) identification of reinforcers that are important to the individual client; 2) acquiring a historical background and substance use information; and, 3) a function analysis explaining (both positive and negative) antecedents and consequences of drinking and non-drinking behaviour. Specific aspects of CRA include 'sobriety sampling'. This involves setting periods of sobriety on a time-limited basis by therapist and client. During this time the supervised administration of disulfiram is often a key component of therapy. Relapse prevention is also a feature of CRA and ultimately involves examining the nature of relapse and the behavioural reward leading to relapse (Raistrick et al., 2006).

*Behavioural self-control training* (BSCT) is a multi-component intervention that teaches skills targeting controlled drinking as a treatment goal. Although variations of BSCT exist, its typical format includes the following: (1) self-monitoring of alcohol use and urges; (2) specific goal setting; (3) rating control of alcohol use and drink refusal; (4) behavioural contracting whereby reward and consequences for goal adherence are specified; (5) identifying and managing triggers for heavy drinking; (6) functional analysis of drinking behaviour; and, (7) relapse prevention.

In sum, BSCT utilises a range of behavioural strategies to manage drinking behaviour and urges so that the individual may achieve and maintain adherence to specific alcohol use goals. At present, BSCT is considered the most effective treatment approach available for individuals considered suitable for a moderation goal (Raistrick et al., 2006).

*Coping and social skills training (CSST)* is designed to address the factors that increase the likelihood of relapse for the individual alcoholic. Primarily, this is done by the following: (1) training in the use of coping skills specific to certain high-risk situations that may be used in other circumstances that may trigger a relapse; (2) teaching general social skills aimed at improving sober relationships and reducing conflict in familial and work environments; and, (3) the result of improved coping and social skills may lead to the development of increased self-efficacy expectations when utilising such skills in high-risk situations (Monti & Rohsenow, 1999).

Treatment methods of CSST generally begin with a comprehensive assessment of an individual's areas of vulnerability (Monti, Rohsenow, Colby & Abrams, 1995). This may include biological, psychiatric, interpersonal and intrapersonal risk factors as well as expected amounts of alcohol cue exposure. Monti and Rohsenow (1999) maintain that amongst the various types of CSST, the following four approaches have been used most extensively: (1) relapse prevention; (2) social or communication skills training; (3) urge-specific coping-skills training; and, (4) cognitive-behavioural mood management training.

Raistrick et al. (2006) maintain that CSST is an effective treatment approach for individuals who are moderately dependent on alcohol and may be particularly useful for those who lack social skills. However, they advise that individuals with low psychiatric morbidity or high anger would benefit more from other types of intervention.

*Cognitive behavioural marital therapy* (CBMT), as implied in its title, is based on cognitive behavioural therapy (see Part C). The primary aim of this approach is to develop support for abstinence or moderate drinking and improve relationship functioning between married or cohabiting individuals. The theoretical rationale underlying CBMT attests to the causal connections between alcohol use and relationship dysfunction that is complex and reciprocal. In turn, relationship discord is associated with increased problematic alcohol use and post-treatment relapse among alcoholics. Thus, it is hypothesised that alcohol use and relationship discord generate a destructive cycle in which each induces the other (Fals-Stewart, O'Farrell & Birchler, 2004).

Raistrick et al. (2006) maintain that there is increasing evidence for the employment of CBMT in the treatment of alcoholism and report that its use is not exclusive in severely dysfunctional relationships. However, as expected, it is also stated that CBMT can only be applied to individuals who are married or in relatively long-term relationships. Thus, its use is made redundant with a large proportion of alcoholics.

*Cue exposure treatment* (CET) is a structured approach involving exposure to alcohol-related cues based on social learning theory and learning theory models. Thus, CET may be effective through two different mechanisms. Firstly, learning theory posits that repeated presentation of a cue while preventing the usual response should result in decreasing response to the stimulus over a period of time (i.e., habituation). Further, it may lead to permanent loss (i.e., extinction) of the elicited response (e.g., urge to drink). However, it is important to note that habituated reactions are cue-specific. Thus, the undesired response is easily reinstated if the individual alcoholic is exposed to a different cue.

Secondly, following the principles of social learning theory, engaging with social skills practice in the presence of alcohol-related cues should increase the effectiveness of such skills in their environment. Further, the individual's beliefs about their self-efficacy in responding skilfully to similar cues in their environment should increase. Consequently, it is maintained that repeated practice results in diminished internal reactions to alcohol cues and strengthening of the alcoholic's ability in implementation of learnt coping skills (Monti and Rohsenow, 1999).

There are few controlled trials that assess the effectiveness of various CET approaches, however, the studies that do exist indicate that it has promise in the future of alcohol treatment (Drummond & Glautier, 1994; Monti et al., 1993). In particular, it is maintained that CET has potential as an effective alcohol treatment approach when combined with coping or communication skills training in a CBT framework (Raistrick et al., 2006).

There is, however, a conceptually different intervention based on the philosophy of AA. The 12 steps of AA refer to the stages of growth an alcoholic is expected to progress through in order to achieve and maintain sobriety. It is distinct from the aforementioned psychosocial interventions, as a therapist does not deliver it.

## **1.6 Alcoholics Anonymous**

Although rooted in the Judeo-Christian belief system, as an organisation AA contains thought elements that are consistent with a variety of spiritual, philosophical and psychological traditions. Following earlier temperance societies and the Washingtonian movement in North America (Marks et al., 2005), AA's basic philosophy and principles were also developed from the observation of behaviour and organisational needs of its initial Fellowship (Alcoholics Anonymous World Services, 2002).

From its beginnings with only a few members in Akron, Ohio AA has developed into a global organisation. It has an estimated 2.2 million members in over 100,000 groups in approximately 150 countries (Alcoholics Anonymous World Services, 2002). As a social movement AA's achievement is indisputable and this is reflected in its prominence in film, television and the print media. AA's success in helping "alcoholics" "recover" from "alcoholism" is equally manifest by its considerable influence on the professional community, government agencies and programs, and the general public. Indeed, it is argued that more alcoholics have been rehabilitated through AA than the combined efforts of medicine, psychology and psychiatry (Finlay, 2000; Emrick & Tonigan, 2004).

The cofounders of AA believed that they were strongly influenced by two prominent figures in the history of psychology, namely the renowned Swiss psychiatrist Carl Gustav Jung and the eminent North American philosopher and psychologist William James. According to one of the cofounders of AA, its origins could be traced back to the consulting room of Carl Jung in Zurich, Switzerland (Wilson, 1957). With regard to the influence of William James, it was stated that his significance deserved cofounder status (Anonymous, 1984).

## **History and Origins**

In a desperate endeavour to overcome failed attempts at addressing spiralling problems with alcoholism, Rowland Hazard, a successful investment banker and former state senator from Rhode Island travelled to Zurich in 1930 and placed himself under the care of Carl Gustav Jung. Having worked with Jung for a year he returned to North America but had relapsed within a few weeks. On his return to Zurich, Jung stated to Hazard that there was nothing more that psychiatry or medicine could do for him. However, Jung maintained that his only hope for recovery could be through a spiritual conversion experience (Finlay, 2000).

Having taken Jung's advice, Hazard began an association with the Oxford Group, an evangelical fellowship founded by Frank Buchman (Kurtz, 1979). It was formed in opposition to what Buchman saw as the institutionalisation of religion. Organisation members were encouraged to do the following: (1) practice public and private confession of sin; (2) show complete surrender to the will of God; (3) listen in quiet times for divine guidance; (4) engage in restitution to people harmed; (5) practice the 'four absolutes' of purity, honesty, love, and unselfishness; and, (6) carry the message to those still 'defeated' (Bufe, 1991).

Following his association with the Oxford Group, Hazard may have obtained the conversion experience suggested by Jung, as he no longer had the compulsion to drink. On his return to New York, Hazard subsequently chose to devote his service and share his experience of recovery to other alcoholics. Along with two other Oxford Group members, he had helped an individual known as Edwin "Ebby" Thatcher who was imprisoned and threatened with mental institutionalisation because of his alcoholism. Their efforts were effective and Thatcher experienced his first extended period of sobriety in several years. This led him to call on the most chronic alcoholic he knew, his old friend of 20 years, and soon to be cofounder of AA, Bill Wilson (Finlay, 2000).

Wilson, a one time successful New York stockbroker, tentatively engaged with the advice given to him by Thatcher and attended his first Oxford Group service whilst still drinking. It seems that Wilson was given hope as, subsequent to his attendance, he decided on a course of alcohol inpatient detoxification. During his stay in hospital he recalls that:

Suddenly the room lit up with a great white light. I was caught up into an ecstasy which there are no words to describe. It seemed to me, in the minds eye, that I was on a mountain and that a wind not of air but of spirit was blowing. And then it burst upon me that I was a free man. Slowly the ecstasy subsided, I lay on the bed, but now for a time I was in a new world, a new world of consciousness. All about me and through me there was a wonderful feeling of Presence...A great peace stole over me and I thought, "No matter how wrong things seem to be, they are still all right..."

(Wilson, 1957, p.63).

Reflecting on this experience whilst in hospital, Wilson was led to believe that he was becoming psychotic. He related his experience to the neuropsychiatrist treating him (William Silkworth) who assured him that his experience was not an indication of psychosis. Rather, Silkworth maintained that: "there has been some basic psychological or spiritual event here. I've read about these things in books. Sometimes spiritual experiences do release people from alcoholism" (Wilson, 1957, p.63).

On the following day Wilson received a copy of a book written in 1902 by William James, entitled *The Varieties of Religious Experience*, which was on the recommended reading list of the Oxford Group (Pittman, 1988). He was influenced by James's beliefs about spiritual experiences and how they may totally transform a person's life. In particular, Wilson read how spiritual experiences could come in many forms and how they often came to people in difficult and challenging circumstances.

Reflecting on his experience after reading *The Varieties of Religious Experience* Wilson stated the following:

I devoured it from cover to cover...My thoughts began to race as I envisioned a chain reaction among alcoholics, one carrying this message and these principles to the next. More than I could ever want anything else, I knew I wanted to work with other alcoholics.

(Wilson, 1957, p.64).

Whilst travelling to Akron, Ohio, Wilson recalls being haunted by old familiar thoughts about drinking. He reminded himself of how he maintained his sobriety whilst trying to help other alcoholics over the last few months. Wilson therefore set out to engage with another alcoholic from local Oxford Group members. This led to an invitation to meet with Robert H. Smith (aka Dr Bob Smith), a local surgeon with a history of chronic alcoholism.

In light of the above, it is maintained that AA was initially founded in Akron, Ohio on the 12<sup>th</sup> of May 1935, as the outcome of a meeting between Bill Wilson and Dr Bob Smith. Groups of alcoholics began meeting in association with the Oxford Group in New York and Akron led by Wilson and Smith. The New York group, led by Wilson, detached itself from the Oxford Group in August 1937 and the Akron group did the same two years later.

Within four years of its foundation the AA organisation published a book in April 1939 as a basic text to describe its method and process of recovery from alcoholism. The book (still in current use) was entitled "Alcoholics Anonymous" (also known as "The Big Book") and from it the Fellowship put forth its spiritual ideas. In total, three successful groups emerged in as many initial years of experimentation in selecting the most effective methods on which the Fellowship could be based. The third group was established in Cleveland, Ohio and called itself Alcoholics

Anonymous, after the book, which led to the adoption of the name by the organisation in general (Finlay, 2000).

### **Influence of William James on AA**

William James was born on January the 11<sup>th</sup> 1842 and grew up as the eldest of five siblings with his parents. His father was said to be very strict and his obsession with the education of his children “led them on an educational odyssey from private school to private tutor, from one continent to another” (Fancher, 1990, p.243).

It appears that James initially held a strictly biological view regarding the determinants of alcoholism (or dipsomania, as it was then called). In *The Principles of Psychology* he stated that alcoholism and “the love of drunkenness is a purely accidental susceptibility of a brain and its causes are to be sought out in a molecular realm, rather than in any possible order of ‘outer relations’” (James, 1890/1981, p.1226). However, James does describe characteristics of alcohol addiction that are akin to AA understandings of the condition.

In his writings James provided various anecdotes to demonstrate how he viewed the powerful nature of thinking and behaviour related to alcohol addiction. For example, he gives an account of an alcoholic who went to extraordinary lengths to obtain alcohol. James describes how an institutionalised man completely severed his hand in order to obtain rum to immerse his “stump” and later drink. In addition, James describes what he saw as the endless justifications sober alcoholics would offer to resume drinking. Describing his view of the alcoholic he states:

That is the conception that will not stay before the poor soul’s attention...If through thick and thin he holds to it that this is being a drunkard and is nothing else, he is not likely to remain one long. The effort by which he succeeds in keeping the right *name* unwaveringly present to his mind proves to be his saving moral act.

(James, 1890/1981, p. 1170).

James's account of the chronic nature of alcoholism and possible methods to overcome it, seem entirely consistent with the AA view of alcohol addiction and recovery. For instance, AA groups and individuals repeatedly make reference to their chosen identity as alcoholics. Further AA holds that nothing other than uncompromising self-honesty is necessary to embark on the process of recovery. Indeed, as stated below, this is made explicit in Step One of the AA 12-step programme.

In 1909, James made a trip to Worcester, Massachusetts to meet Sigmund Freud (who was travelling with his then associate Carl Gustav Jung) at the 20<sup>th</sup> anniversary celebration of Clark University. James spent some time with Jung discussing psychic phenomena. In a letter to his fellow psychical researcher, Theodore Flournoy, dated the 28<sup>th</sup> of September 1909, James expressed his very positive impression of Jung (Allen, 1967). James also wrote (in the same letter) about a newspaper report in which "Freud had condemned American religious therapy (which has had extensive results) as very 'dangerous' because [it is] so 'unscientific.' Bah!". Further indications of James's possible influence on the philosophy of AA stem from his association with a treatment programme for nervous disorders (that included alcoholism) known as the Emmanuel Movement (Worcester, McComb & Corriat, 1908).

The Emmanuel Movement began in 1906 at the Emmanuel Episcopal Church in Boston. It was founded by psychologist Dr Elwood Worcester who was one of many American psychologists that trained with Wilhelm Wundt at the University of Leipzig (Benjamin, Durkin, Link, Vestal & Accord, 1992). The Emmanuel Movement was, in many ways, similar to AA and made use of James's ideas (McCarthy, 1984). Its treatment strategy involved a combination of confession, acceptance of problems, the use of relaxation and suggestion, imparting religious faith and consciously replacing negative emotions with positive ones. With regard to alcohol addiction,

abstinence was a primary goal and maintained through daily prayer and accepting personal responsibility for behaviour.

James was sociable with Worcester and his colleagues and gave approval to their treatment method (MacDonald, 1909). In 1908, he gave permission for the Emmanuel Church to publish and distribute an essay entitled *The Energies of Men* (James, 1908). This essay attested to the reality of a spiritual power that may be utilised in times of great need (Worcester, 1931). Richard Peabody, having become sober through the Emmanuel Movement developed its philosophy and established his own alcohol addiction treatment method (Peabody, 1931). Peabody's alcohol addiction treatment method became the most popular in North America until the 1940s when AA surpassed its popularity (McCarthy, 1984).

It becomes apparent that James adopts a more pluralist philosophy in his later writings and this gives further indication of his influence on the development of AA. He discusses the need for complete surrender to alcohol and cites evidence suggesting, "the only radical cure for dipsomania is religiomania" (James, 1902/1985, p. 217). James also describes how an individual may change undesirable emotional states by acting *as if* the desired emotional state was existent. Indeed, Walle (1992) has noted that such thinking forms the basis of the AA slogan "fake it 'till you make it". In sum, it appears that the influence of William James on AA came directly through his writing. Indirectly, the influence of James on AA is via the Oxford Group, the Emmanuel Movement, and Richard Peabody (Pitmann, 1988).

### **Carl Gustav Jung and AA**

Carl Gustav Jung was born on July the 26<sup>th</sup> 1875 in a small village in Switzerland and spent his childhood in a religious and spiritual environment. His father was a Protestant minister and his mother, although often practical and goal directed, was known to be unstable, mystical and

clairvoyant (Alexander, 1991). Jung's maternal grandparents and several other relatives from his mother's family were said to be endowed with unusual spiritual gifts (Charet, 1993).

Although prone to neurotic tendencies as a child and adolescent, Jung became an extremely successful and respected student (Levine, 1992). In 1900, Jung graduated from the University of Basel holding a degree in science and medicine. He wrote his dissertation, *On the Psychology and Pathology of the So-Called Occult Phenomena*, on experiments conducted with his cousin, Helen Preiswerk who was known as a medium.

Jung decided to specialise in psychiatry and travelled to work at the Burghölzli Mental Hospital in Zurich with Eugene Bleuler. Bleuler is known for his classic description of dementia praecox (which he later referred to as schizophrenia) and originating the concept of ambivalence (Charet, 1993). Whilst working at the hospital in Zurich, Jung reports on treating many patients with alcohol-related problems and began his association with Sigmund Freud (Jung, 1965).

It seems that Jung had read *The Varieties of Religious Experience* prior to his meeting with James at Clark University as in 1909 he writes:

I spent two delightful evenings with William James alone and I was tremendously impressed by the clearness of his mind and the complete absence of intellectual prejudices...I was also interested in parapsychology and my discussions with William James were chiefly about this subject and about the psychology of religious experience.

(Adler & Jaffe, 1975a, p. 531).

In another letter that referred to his meeting with William James, Jung stated:

He...answered my questions and interjections as though speaking to an equal...Aside from Theodore Flournoy he was the only outstanding mind with whom I could conduct an uncomplicated conversation.

(Adler & Jaffe, 1975a, p. 452).

In 1913, Jung ended his association with Freud and later resigned from his post at Burghölzli Mental Hospital. He went into private practice in Zurich and was writing his theory on analytical psychology when Rowland Hazard became his patient (Jung, 1965). Jung frequently referred to his beliefs regarding religion and its therapeutic potential and this was made explicit in his book *Modern Man in Search of a Soul*. At his Tavistock lectures in the autumn of 1935 Jung stated that:

I have had some patients who, after having had analysis with me, even joined the Catholic Church, just as I have had some patients who now go to the so-called Oxford Group Movement, with my Blessing! I think it is perfectly correct to make use of these psychotherapeutic institutions which history has given us, and I wish I were still a medieval man who could join such a creed.

(1935/1968, p. 182).

It was not until 1961 when Wilson wrote to Jung on the 23<sup>rd</sup> January, that he became aware of his influence and legacy in the AA Fellowship (Anonymous, 1984). Jung promptly replied to Wilson in a letter that stated his classic dictum that underlines the ethos of AA. In his reply, dated the 30<sup>th</sup> of January 1961, Jung wrote:

Your letter was very welcome indeed. I had no news from Roland H. anymore and often wondered what had been his fate...His craving for alcohol was the equivalent on a low level of the spiritual thirst of our being for wholeness... You see, alcohol in Latin is *spiritus* and you use the same word for the highest religious experience as well as for the most depraving poison. The helpful formula here is: *spiritus contra spiritum*.

(Adler & Jaffe, 1975b, pp. 623-625).

### **Spirituality in AA and Bill Wilson's Experience**

The 12<sup>th</sup> Step in AA declares that the effects of having a spiritual experience are the direct result of practicing the 12-step programme in everyday life. AA fellowship members maintain that the impact of such spiritual experience is evidenced in psychic change that is sufficient to recover from alcoholism (Alcoholics Anonymous World Services, 2000, p. xxvii).

Within Appendix II of *Alcoholics Anonymous*, two types of spiritual conversion are explained. These are referred to as a sudden “spiritual experience” and a slow “spiritual awakening” (Alcoholics Anonymous World Services, 2000, p. 569). Reference is made to William James with regard to these two types of experience.

Of the sudden type of spiritual experience it is maintained that it has an immediate and profound effect with more religious members of AA referring to it as leaving them with an overwhelming “God consciousness” (Alcoholics Anonymous World Services, 2000). The second type is described as being more common amongst AA members and is a gradual process that is manifest over a period of time.

Bill Wilson alluded to having his first spiritual experience (in his alcoholism recovery process) during World War I:

We landed in England. I visited Winchester Cathedral. Much moved, I wandered outside. My attention was caught by a doggerel on an old tombstone:

“Here lies a Hampshire Grenadier  
Who caught his death  
Drinking cold small beer.  
A good soldier is ne’er forgot  
Whether he dieth by musket  
Or by pot.”

Ominous warning – which I failed to heed.

(Alcoholics Anonymous World Services, 2000, p. 1).

However, as indicated in the above extract, the significance of Bill Wilson’s reported experience was not immediately apparent to him and he “turned to alcohol”. It was not until he had begun to reflect on his first spiritual experience while in recovery that its significance became manifest (Alcoholics Anonymous World Services, 2000, p. 12). It would seem, therefore, that Carl Jung’s dictum of *spiritus contra spiritum* accommodates Bill Wilson’s experience as an alcoholic. In

particular, it may be contended that Wilson's appetite for spirituality was diluted by his desire for alcohol from World War I until his previously stated spiritual experience in hospital.

### **AA Philosophy and Principles**

In "The Big Book" the spiritual tenets of AA are embedded in the 12 steps the application of which is made explicit to the alcoholic's predicament. The book also contains case histories in which alcoholics describe their drinking experiences and recovery. After publication of the "The Big Book" it was considered that the AA's pioneering period had concluded and a rapid progression took place as members and the public at large spread their method of recovery (Kurtz, 2002). With such rapid expansion there were inevitable ensuing problems with organisational management. To address these concerns the AA's Twelve Traditions (see Appendix II) were created and published in 1946. These were later confirmed at AA's First International Convention in 1950 at Cleveland, Ohio (Finlay, 2000).

### **Therapeutic Processes**

It is maintained in clinical literature that the AA programme is a unified process. AA and, by extension, other 12-step groups are effective because they are readily and widely available; provide a philosophy for living; and, present a structured community of individuals united by a common purpose. Although AA member groups vary widely (Montgomery, Miller & Tonigan, 1993; Tonigan, Ashcroft & Miller, 1995), prescribed AA-related behaviours are relatively constant across membership groups (Emrick & Tonigan, 2004).

As stated AA principles and practices incorporate ideas from psychological traditions including psychodynamic, systemic, cognitive-behavioural, humanistic, transpersonal and existential-phenomenological models. The following discussion will attempt to examine the effective

recovery processes in AA that are compatible with or drawn from particular psychological models.

The therapeutic processes of AA are entrenched in working the 12 steps. The steps are framed in such a way that, once an individual accepts the basic premise of Step One, the remaining steps seem to follow accordingly. Its simple purpose is to assist the individual in achieving continuous sobriety by developing a set of recommended practices. However, George (1990) maintains that the individual alcoholic does not necessarily go through the 12 steps in a linear fashion. Rather, a new member may initially proceed on a linear path but soon learns that recovery is a continual cycling through the various steps. Thus it entails ongoing work, study, and discussion within the AA programme.

The 12 steps of Alcoholics Anonymous are specifically stated as follows:

1. We admitted we were powerless over alcohol – that our lives had become unmanageable.
2. Came to believe that a power greater than ourselves could restore us to sanity.
3. Made a decision to turn our will and our lives over to the care of God *as we understood Him*.
4. Made a searching and fearless moral inventory of ourselves.
5. Admitted to God, to ourselves, and to another human being the exact nature of our wrongs.
6. Were entirely ready to have God remove all these defects of character.
7. Humbly asked him to remove our shortcomings.
8. Made a list of all the persons we had harmed, and became willing to make amends to them all.
9. Made direct amends to such people wherever possible, except when to do so would injure them or others.
10. Continued to take personal inventory and when we were wrong promptly admitted it.

11. Sought through prayer and meditation to improve our conscious contact with God *as we understood Him*, praying only for the knowledge of His will for us and the power to carry that out.
12. Having had a spiritual awakening as a result of these Steps, we tried to carry this message to alcoholics, and to practice these principles in all our affairs.

(Alcoholics Anonymous World Services, 2000, pp. 59-60).

Overall the 12 steps and AA method of recovery is threefold and includes:

- 1) attending AA meetings;
- 2) having one-to-one guidance and support from a senior member (a “sponsor”) and;
- 3) “working” the steps.

Attendance at AA meetings provides the context in which effective change may take place.

Khantzian and Mack (1994) refer to AA meetings as a process of “reprogramming”. Such processes include group encouragement and support to explore (and own) self-seeking, and self-centred thinking that are (according to AA) contributory factors in the maintenance of alcoholism.

Thus, descriptions of inebriated thoughts, feelings and behaviours are shared amongst AA members in their meetings.

Indeed, such narratives are often familiar to all alcoholics in AA meetings and provide increasing external evidence that their alcohol use, associated cognitions and, behaviours are maladaptive.

Attendance at AA meetings also provides the alcoholic with “emotional arousal, hope, and dependence on others for relief” (George, 1990, p.167). Further, AA meeting attendance affords members the opportunity to learn methods of changing cognitions that maintain their problems.

For instance, there are effective slogans that are often gleaned from the AA literature that address the particular struggles that members are expected to face in some shape or form. These issues include control, power and distorted thinking.

Robertson (1988) suggests that alcoholics cannot think straight and these slogans function as a protective factor. Thus common AA slogans such as “one day at a time”, “this too shall pass” and “keep it simple” are used as a coping strategy to help the individual overcome circumstances that often trigger thoughts of drinking. Obtaining one-to-one support from a senior member in AA (i.e., a “sponsor”) is an additional process that helps the individual with strategies for change. AA sponsors play a pivotal role for members by acting as mentors and teachers (particularly new comers) in the process of change.

‘Working’ the steps (as it is known in AA circles) enables members to address significant problems associated with their addiction that require identification and change (DiClemente, 1993). They may be grouped into three processes of change that are detailed below.

Steps 1-3 are *decision* steps that involve accepting, powerlessness over alcohol, a need for help and ‘surrender’ of one’s will to a personal understanding of God (or whatever one considers to be the ultimate, or divine). The first three steps may also be viewed as providing a basis for cognitive restructuring that allows for, what are considered to be, typical alcoholic cognitions, emotions and behaviours to change (Steigerwald & Stone, 1999).

Thus, step one challenges cognitive distortions of grandiosity, defiance and isolation by admitting powerlessness over alcohol. Step two may be viewed as transforming this powerlessness into reliance and hope through an existing or newly acquired belief in a higher power. Whereas, step three allows the individual to relinquish inappropriate or destructive self will and foster reliance upon a higher power of their choice.

The AA recovery process, as Brown (1993) notes, is paradoxically based on relinquishing self-will to find authentic power and freedom. In the *Twelve Steps and Twelve Traditions* it states:

Who cares to admit complete defeat? Practically no one, of course. Every natural instinct cries out against this idea of personal powerlessness... Upon entering AA we soon take quite another view of this absolute humiliation. We perceive that only through utter defeat are we able to take our first steps toward liberation and strength. Our admission of personal powerlessness finally turn out to be firm bedrock upon which happy and purposeful lives may be built... Our sponsors declared that we were victims of a mental obsession so subtly powerful that no amount of human willpower could break it

(pp. 21-24).

Indeed, the first three steps may be interpreted dynamically utilising insights from analytic psychology. It follows then that the alcoholic has formed a self-defeating 'transference' relationship with alcohol as opposed to another person. Alcohol becomes an omnipotent 'self object' (Kohut, 1971) that gradually traps the alcoholic in a vicious and destructive cycle of dependence.

Thus, 'surrender' may be understood in terms of the idealised transference to the therapist in analytic psychology that facilitates the therapeutic alliance. When an individual joins the AA fellowship, it may be said that surrendering their life to a higher power is akin to finding an omnipotent parent who is benevolent, compassionate and trustworthy.

Steps 4-9 may be viewed as *action* steps and are often referred to as the "house-cleaning" steps. This involves writing a moral inventory and sharing its content with another person; turning to a higher power (personal understanding of God) to assist in removing 'defects of character'; and, making amends for harm done to others.

It is apparent that steps 4-10 incorporate dynamic and CBT understandings that are akin to the process of 'character analysis,' developed by William Reich (1980). Having commenced the 12-step process of recovery the alcoholic is challenged with the task of confronting their 'character armour' that has been developed over a period of years.

Undertaking a 'searching and fearless moral inventory', the alcoholic relinquishes their armour-plated character 'defects'. They are afforded the validation of those present and a new way of being that allows for human vulnerability and development of authentic relationships. CBT incorporates similar processes in character development by challenging a client's 'cognitive distortions' and setting 'homework assignments' in the form of behavioural tasks (Schermer, 2003).

Bean-Bayog (1993) maintains that such introspection is integral for recovery and allows the individual to address interpersonal problems. For instance, guilt from past actions may be diminished through confession, atonement, and making amends. Thus, it is maintained that there will be less need for defences, projections and distorted cognitions.

Steps six and seven present significant challenges to conventional therapy and focus on inner change and restitution, in essence, they are prescriptive attitudes that are necessary for the AA method of accepting personal responsibility and rectifying reprehensible behaviour. Becoming 'entirely ready,' may be related to the psychoanalytic concept of 'resistance' (avoiding the task of uncovering intra-psychic complexes and facing oneself in the analytic process). Thus, the alcoholic in recovery becomes 'entirely ready' to give up their resistance to personal growth and change.

Step seven proposes that humility is the basis of growth that is necessary for recovery and entails a willingness to be vulnerable and open to experience. Indeed, this is implied in the aetiological factors of alcoholism stated above. Often, 'shame-based' families of origin and alcoholic behaviours have humiliated individuals with alcohol problems. Thus, alcohol-induced or related humiliations may be re-interpreted as a basis for realistic self-appraisal rather than shame (Schermer, 2003). Paradoxically, step seven suggests that the alcoholic may avoid further

humiliation by practicing humility. Again, in analytic therapy the need for humility may be discerned in a client's regression to childhood stages of development for further understanding of intra-psychic processes.

The final three steps, 10-12, are *maintenance* steps that entail continued monitoring of personal and moral growth; increased relationship with personal understanding of a higher power through prayer and meditation; and carrying the AA message to other alcoholics. They are, therefore, oriented in the present and address concepts such as altruism and spirituality. It is maintained that these steps may help the recovering alcoholic awaken to and maintain ego deflation, honesty, humility, gratitude, and responsibility, while being connected to their understanding of a higher power (Brown, 1993).

Ultimately, it seems that the 12-step philosophy of AA is most compatible with transpersonal psychology. As mentioned, AA is heavily influenced by Jung and, in particular, his dictum *spiritus contra spiritum*. Jung precluded psychological therapy as a method of treatment for alcoholism, yet it is evident that such problems often have strong psychological components. Given that transpersonal psychology affords the integration of psychological principles within a wider spiritual context. It appears that transpersonal theory may allow for a deeper understanding of the psychological and therapeutic processes evident in AA (see Part D).

In sum, the AA Fellowship (and 12-step programme) acts as a normative organisation that helps individuals experience, express and manage feelings without fear of negative feedback. AA groups and processes allow the individual to improve their self-efficacy, develop a sense of relationship to others and discover their purpose or meaning of life. All of which are, arguably, central goals in many psychological therapies.

Using concepts that are akin to CBT, AA promotes healthy coping strategies for interpreting traumatic experiences and members are taught to distinguish between controllable and uncontrollable events. Active cognitive coping strategies are prescribed for managing distressing uncontrollable events by instructing members to think positively in the event of crises. For example, as stated earlier, it is suggested that AA members think, "this too shall pass" when confronted with stressful events that they cannot change.

Active behavioural coping strategies are encouraged for dealing with controllable events. This is made explicit in step 10 where members are taught to deal immediately and actively with interpersonal conflict. Indeed, regardless of the type of situation confronting the AA member, they are encouraged to refrain from using psychoactive substances that are considered as avoidant and destructive coping strategies.

### **AA Outcome Studies**

Prior to 1990, outcome studies on AA had been scarce. This led an IOM committee to conclude that, despite being one of the most widely used approaches to recovery from psychoactive substance use it remains one of the least rigorously evaluated (IOM, 1990). Subsequently, there has been further research that documents the effectiveness of AA in facilitating individuals to maintain abstinence from alcohol. However, it has been contended that much of the research (on AA outcomes) has serious methodological flaws.

In a meta-analysis of AA studies it is stated that research has been mostly pre-experimental in design and has failed to use instruments with established reliability. It is reported that studies have not usually attempted to check for the validity of self-report data and has inadequately assessed the nature of participants' alcohol problems. Further, it is argued that studies have been

deficient in describing demographic characteristics of the sample with an unrepresentatively large number of middle-aged males (Emrick, Tonigan, Montgomery & Little, 1993).

Although Emrick et al. (1993) assert that clients of professional treatment programmes who attend AA during or after therapeutic intervention are more likely to improve in drinking behaviour than those who do not. They maintain that the “chances of drinking improvement are not overall a great deal higher” (Emrick et al., 1993, p.57). Tonigan, Toscova and Miller (1996), in support of these findings from their meta-analysis, report that from the perspective of experimental rigor the standard of many AA studies was poor. Similarly, Tonigan et al. (1996) found that “better designed studies report moderate and positive relationships between AA attendance and improved psychosocial functioning” (p.68).

Further, evidence summarised from large-scale reviews indicate a positive relationship between AA membership and positive drinking and non-drinking outcome measures. Humphreys, Moos and Cohen (1997) investigated the outcomes from AA attendance with 515 participants. In this study, participants (n=515) with previously untreated drinking problems who attended AA without seeking formal professional treatment were followed-up at one year.

Humphreys et al. (1997) found significant improvements on all measures of drinking problems and other non-drinking outcomes. A further 315 participants were followed-up at eight years. Amongst this group it was found that the number of AA meetings attended during the first three years was positively related to a decrease in alcohol-related problems; lower levels of depression; and, improved interpersonal relationships.

A study of 3,018 male veterans investigating the relationship between non-residential treatment and 12-step group participation showed strong support for the findings by Humphreys et al.

(1997). At one-year follow-up, it was found that 12-step group attendance between 9-12 months post-treatment was associated with desired treatment outcomes (Ouimette, Moos & Finney, 1998). This included increased abstinence, dissipation of significant distress and psychiatric symptoms, absence of psychoactive substance use problems, and, increased employment. In conclusion to their study, Ouimette et al. (1998) state that main findings revealed 12-step attendance and involvement were more strongly related to positive outcomes than non-residential treatment attendance. They further assert that participants who engaged with both non-residential treatment and 12-step groups simultaneously achieved better one-year post-treatment substance use and psychosocial outcomes (Ouimette et al., 1998).

Since the IOM (1990) report, there has been much research linking AA-related behaviours to positive outcomes (Kaskutas, Bond & Humphreys, 2002; Zywiak, Longabaugh & Wirtz, 2002; Conners, Tonigan & Miller, 2001; Morgenstern & Bates, 1999; Humphreys, Finney & Moos 1994). What is indicated in this research is that active AA membership facilitates the use of various CBT adaptive and therapeutic processes. This includes behavioural change processes such as avoidance of high-risk situations and cognitive techniques (e.g., advantages-disadvantages (A-D) analysis) to minimise reliance on psychoactive substance use.

### **AA Criticisms**

Despite the apparent effectiveness of AA and its notable influence in addiction treatment, it is maintained that 12-step groups are not always effective and may even be harmful to some individuals. This has led to compelling criticisms that are made against its method of recovery from alcoholism and, the development of alternative self-help groups such as Rational Recovery (RR), Women for Sobriety (WFS) and Secular Organizations for Sobriety (also known as Save Our Selves, SOS) (Emrick & Tonigan, 2004). In essence, these organisations are particularly critical of AA's notion of powerlessness.

For instance, it is maintained that female alcoholics generally have lower self-esteem than men that is made stronger by social stereotypes, which particularly denounce alcohol dependent women. Thus, it is argued that the focus on powerlessness, ego deflation and repeated storytelling based on inebriated histories is particularly damaging for women and may serve to reinforce traumatic memories and negative identities that are socially engineered. Moreover, the founder of Women for Sobriety (sociologist, Dr Jean Kirkpatrick) maintained that the solution for female alcoholics lies within their own minds and not a higher power (Humphreys, 2004; Kaskutas, 1996).

Further, it has been maintained that AA notions of powerlessness over alcohol may lead the individual to further rationalise alcohol use and increased drinking. Brandsma, Maultsby & Welsh (1980) reported a correlation between AA participation and increased rates of binge drinking in their experimental study of alcoholics arrested for drunkenness. In their randomised controlled trial, individuals were assigned to three groups: 1) AA treatment; 2) lay Rational Emotional Behaviour Therapy (REBT) and, 3) a no treatment control group. Findings revealed that participants assigned to the AA group engaged in five times as much binge drinking than those who were in the no treatment control group. Further, in comparison to the REBT group, participants in the AA group were involved in nine times as much binge drinking.

Other major criticisms that are made toward AA may be stated as follows: (1) that it requires a belief in God or a higher power; (2) it requires life long membership and does not have a “cure” for alcoholism; and, (3) it is not organised and maintained by mental health professionals. With regard to the necessity for a belief in God or a higher power, it is evident that this requirement will exclude individuals who do not believe in God or notions of a higher power (Dolman, 2002). Further, it may be argued that the AA method of recovery fosters dependency in its members and simply replaces one addiction for another.

In light of the above, perhaps the most compelling criticism of AA is that lay individuals run it on a philosophy and method of recovery that developed over 70 years ago at a time when little was known about the aetiology of alcoholism. However, what is often poorly understood in the UK regarding the key concept or mechanism of change in AA (i.e., spirituality – see Part D) has left it open to criticism and standing outside the mental health establishment. Nonetheless, despite such criticism, the influence of AA practices and principles is particularly evident in the development and implementation of the Minnesota Model of alcohol addiction treatment. This is discussed in the following chapter.

## 2 THE MINNESOTA MODEL

The Minnesota Model of treatment for alcohol addiction (and other psychoactive substances) is an approach that is practiced in the UK and around the world (Fuller, 1989; Strang & Farrell, 1998). Although this method of treatment is a common approach in the treatment of alcoholism, there are relatively few published reports on its effectiveness (Stinchfield & Owen, 1998; Bodin, 2006). The philosophy and evolution of the Minnesota Model method of treatment will be described below and a review of relevant literature will be discussed.

Central to the philosophy of the Minnesota Model of alcohol addiction treatment is the identification of alcoholism as: 1) a primary condition, 2) chronic in nature; and, 3) characterised by progressive loss of control over substance use. Given this view of alcoholism it is contended that the main goal of treatment is complete abstinence from alcohol and all other psychoactive substances (Spicer, 1993).

### 2.1 History and Evolution

The Minnesota Model evolved in North America during the 1940s following the end of prohibition and development of AA. At this time three alcohol treatment programmes emerged independently in the state of Minnesota that shared common beliefs and practices with regard to alcoholism treatment. They were known as the Pioneer House, Hazelden and Willmar State Hospital programmes.

Initially the Minnesota Model had its origins in the state hospital in Willmar, Minnesota due to the pioneering work of Drs Nelson Bradley and Daniel Anderson. They were particularly influential as the treatment outcomes of their new approach appeared to be better than those obtained with the standard treatment of medical detoxification. Thus, the approach was first

known as the Willmar model. It was not until the 1970s that the approach gained wider appeal and became known as the Minnesota Model (Anderson, 1981; Edwards, Marshall & Cook, 2003).

Each of these three programmes adhered to the AA 12-step philosophy and practices as a basis for treatment. They also incorporated prevailing views from various professions and schools of thought including medicine, psychology and theology. In addition, the use of recovering alcoholics as part of a multidisciplinary staff team became an integral part of the approach (Spicer, 1993). This provided the foundation of the Minnesota Model as it is currently practiced in addiction treatment centres.

During the late 1970s and early 1980s, health insurance policies in North America began to acknowledge the treatment of alcoholism using the Minnesota Model. What is now commonly known as the Hazelden Foundation also increased its reputation for addiction treatment employing this method. This acknowledgement stimulated the rapid growth and success in the delivery of the Minnesota Model in treatment centres throughout North America. Consequently, the majority of addiction treatment programmes in North America have adopted the Minnesota Model and its 12-step programme (Spicer, 1993; McCrady & Miller, 1993). In the UK, the first Minnesota Model treatment centre was established in 1975. By 1989 there were seven centres using a variation of the Minnesota method in the treatment of psychoactive substance dependence (Morojele & Stephenson, 1994). It is estimated that in 2007 there are in the region of 100 to 130 Minnesota Model type addiction treatment centres in the UK (Addiction Recovery Foundation, 2007).

## 2.2 Treatment Structure

Although the particular application of the Minnesota Model may vary between treatment centres, there are common themes and core principles that are shared among them. Milligan (1991) gives a précis to the structure and orientation of the Minnesota Model when she states that “as a concept and a treatment method it begins and ends – essentially with AA” (p. 22). Thus the approach to treatment is completely compatible with the AA Fellowship and incorporates its philosophy into a structured treatment programme.

In essence there are three key objectives at the centre of the Minnesota Model that may be listed as follows:

- 1) The development of spiritual awareness.
- 2) The acknowledgement of choice and personal responsibility.
- 3) The acceptance of peer relationships as an important tool for recovery.

In its typical format, the Minnesota Method consists of an initial three to six week course of treatment that is commonly delivered in therapeutic communities or residential settings with regular AA attendance (Cook, 1988a). This is combined with long-term aftercare of between six to 24 months. However, in some cases, initial treatment episodes may be of a longer duration and intensity. The provision of a comprehensive continuum of care is a key characteristic of treatment delivery and includes information and referral services, intermediate residential care (half-way house), aftercare and family programmes.

As stated, a multidisciplinary staff team, that often include counsellors in recovery from alcoholism, deliver treatment. Additional staff members may include psychologists, nurses, medical doctors, psychiatrists and social workers. Settings are designed to promote atmospheres

conducive to change and the content of therapeutic intervention usually consists of five key components (Stinchfield & Owen, 1998). These are as follows:

- 1) Group therapy.
- 2) Individual counselling.
- 3) Psychoeducation that includes didactic instruction, directed reading on 12-step philosophy and the completion of designated assignments.
- 4) Family intervention programmes providing advice and support.
- 5) Introduction of client and family members to appropriate 12-step mutual help groups.

Group therapy is considered to be the main vehicle for therapeutic intervention that affords the individual client an opportunity to engage in meaningful communication and identification with others who have similar issues. They may take the form of problem solving groups designed to address specific personal issues or, at times, confrontational groups that may address impediments to recovery (e.g., psychological denial). Other forms of group sessions may be client-led and involve daily reading groups, reflection and/or meditation sessions.

### **2.3 Outcome Studies**

Although the Minnesota Model is used widely for the treatment of alcohol addiction it has not been rigorously evaluated and, published peer-reviewed follow-up studies of individuals completing this form of intervention are very scarce. For instance, with regard to Minnesota Model interventions, recent reports frequently refer to a review by Christopher Cook that was conducted nearly 20 years ago (Grønbaek & Nielsen, 2007; Sobell & Sobell, 2006). Cook's (1988a, 1988b) review of the Minnesota Model in the treatment of addiction comments on widely reported success rates with two thirds of admissions showing good outcomes at 1-year follow-up. However, he cautions against blind acceptance of reported outcomes due to methodological flaws that need to be addressed in further outcome research. Nonetheless, Cook (1988b) concludes that

negative reactions against the Minnesota Model are indefensible as there is much to be learned from the approach.

Ferri, Amato and Davioli (2006) conducted a more recent review that assessed AA and other 12-step programmes for alcohol dependence in comparison to other psychosocial approaches.

However, they reported that their findings did not allow for a conclusive assessment of the effect of 12-step programmes in promoting complete abstinence.

### **North American Outcomes**

During 1955 and 1956 the first follow-up study of a Minnesota Model programme was conducted with individuals at Willmar State Hospital. A counsellor who wanted to determine the extent to which the programme could be deemed effective undertook the investigation. The counsellor conducted interviews with participants of the programme and various informants who could validate their claims (e.g., police and probation officers, welfare agencies and AA groups) to gain some measure of the programme's effectiveness. Follow-up interviews were conducted in 1957 with 20% of the selected sample and it was found that (at best) a 45% abstinence success rate was achieved (Cook, 1988b).

A more detailed study was published approximately 5 years after this initial investigation and, although a very low percentage of the target population were traced, encouraging results were reported that attested to the programme's effectiveness. Rossi, Stach and Bradley (1963) traced a 12% (n=208) sample of male alcoholic admissions to Willmar State Hospital with a mean follow-up of 21.3 months. Of these, 49 (24% of the original sample) had abstained from alcohol for six months or more and 35 (17% of the original sample) had improved on previous periods of abstinence by a minimum of six months.

Rossi et al. (1963) included 20 other variables to assess the outcome of alcohol treatment that mainly addressed behavioural conduct in psychosocial life. It was found that participants who had maintained continuous abstinence since discharge from treatment showed improvement in 16 of these areas. These included sibling relations, budgeting, employment, 'harmony at work' and having a 'self questioning attitude'.

However, despite such encouraging and valuable results there are significant methodological flaws to these investigations. Firstly, there were no control or comparison group of participants included. Secondly, the behavioural measures used in the study were subjective and defined in operational terms. Thirdly, the sample was only 12% of the population and was therefore probably biased to include more successful rehabilitated cases. Finally, when considering the main goal of treatment was for continuous abstinence, results on this measure were relatively low. At follow-up, only 14 (7% of the selected sample) participants had maintained continuous abstinence since being discharged from treatment.

Subsequent to investigations by Rossi et al. (1963), there were two further major studies of alcohol treatment outcomes using the Minnesota Model. These were also conducted with participants from one of the three pioneering centres of this method. Laudergeran (1982) evaluated participants (n=3638) who had been discharged from treatment at Hazelden over a 30-month period between 1 June 1973 and 31 December 1975.

Laudergeran's (1982) evaluation incorporated methodological detail and analyses that had been lacking in previous studies and added further significance of outcome results. For example, the sheer size of the study population is notable. Response rates were higher, adjustments were made for clients re-entering treatment, untraceable clients and, deaths between discharge and follow-up. Consideration was also given to stability and drinking behaviour over time and the use of

psychoactive substances other than alcohol. With regard to evaluation outcomes, Laudergeran's (1982) study achieved a 56% follow-up response rate at 12 months. In this group, it was found that 50% of participants reported abstinence at 12-month follow-up. This prompted further investigation of the Hazelden Minnesota Model programme.

Gilmore (1985) conducted a similar investigation with 1,531 clients discharged from Hazelden in 1978, 1980 and 1983. Although results were largely equivalent to Laudergeran's (1982) study there were additional outcome measures that included quality of life issues and AA attendance rates. Gilmore (1985) reported a 12-month follow-up response rate of 75%. Of this group, 89% had "good outcome". This included abstinence and lower post-treatment alcohol use at 12-month follow-up. However, Gilmore's (1985) study did not escape the critical review of the above studies by Cook (1988b) who challenged findings on the basis of inappropriate methodology.

In a further study Higgins, Baeumler, Fisher & Johnson (1991) reported outcomes of 1,655 clients who were discharged from Hazelden in 1985 and 1986. Follow-up interviews were conducted at 6 and 12 months with response rates of 76% and 72% respectively. Abstinence rates for alcohol were 66% at both follow-up assessments.

However, the findings by Higgins et al. (1991) have notable flaws that render their findings dubious. For example, follow-up rates seem to be magnified as some clients were excluded who were deemed "inappropriate or unavailable for follow-up". That is, they had either remained in treatment for less than five days, gave no contact details, refused to participate, returned to treatment during follow-up, had deceased or been imprisoned. Thus, abstinence rates would most likely have been reduced with more stringent inclusion criteria.

Stinchfield and Owen (1998), according to the author's knowledge, conducted the most recent published Hazelden outcome study. Their evaluation employed a single group pre-post design and included 1,083 participants who were admitted for treatment between 1989 and 1991. Outcomes were based on one, six and 12-month follow-up response rates of 79%, 76%, and 71% of the sample, respectively.

At 12-month follow-up reported abstinence rates from all psychoactive substances was 52.8%. A further 35% had reduced their use of alcohol and other drugs from pre-treatment to 12-month post-treatment. However, again there are significant methodological flaws in the design of Stinchfield and Owen's (1998) study that affect the reliability and validity of their findings.

The most significant methodological flaw is the absence of a no-treatment control group. Thus, it is not possible to infer what type of outcomes would have occurred for individuals who did not receive any treatment. A further criticism is possible response bias due to data being collected by Hazelden staff. This may have led to "cherry-picking" the data.

### **European Outcomes**

Studies investigating outcomes of Minnesota Model treatment in Europe appear to be located mainly in Scandinavian countries. It is contended that the first European study was a randomised controlled trial conducted in Finland (Keso & Salaspuro, 1990). In this study 141 employed alcoholics were randomised to Hazelden-type Minnesota Model treatment (n=74) and traditional Finnish in-patient treatment (n=67). Traditional treatment was predicated on social work and psychiatric treatment approaches. This consisted of work-oriented programmes, individual, group and family therapy. Although this programme did not advocate AA principles or practices, abstinence from alcohol was encouraged.

Keso and Salaspuro (1990) state that follow-up interviews were conducted bi-monthly for the duration of one year with follow-up response rates between the ranges of 70-80%.

It was reported that of the participants assigned to Minnesota Model treatment, 14% maintained continuous abstinence throughout the first post-treatment year. In contrast, only 1.9% of participants receiving traditional in-patient treatment maintained the same level of abstinence. Results also showed that participants who received Minnesota Model therapy were less likely to drop out from their programme and more likely to attend AA meetings after treatment.

Keso and Salaspuro (1990) further reported abstinence rates of 26.3% and 9.8% (for participants randomised to Minnesota Model and traditional in-patient treatment, respectively) in their final 8-12 month post-treatment follow-up period. Their findings seem to suggest that within the Finnish population higher abstinence rates are achieved for alcohol dependents receiving Minnesota Model programmes than those receiving traditional in-patient treatments. However, Keso and Salaspuro (1990) maintained that although the Minnesota Model programme seemed to have better outcomes the main conclusion drawn should be that neither programme was very effective at achieving abstinence outcomes.

Brewer (1991a; 1991b), a staunch critic of the Minnesota Model method vehemently disputed the findings in Keso and Salaspuro's (1990) study. He contended that there is a very simple answer to the apparent superiority of abstinence outcomes in favour of the participants randomised to the Minnesota Model treatment. Brewer (1991b) maintained that higher abstinence outcomes were merely a reflection of the enthusiasm of new staff assigned to Minnesota Model treatment delivery.

Further, studies of the efficacy of Minnesota Model treatment have been conducted in Sweden. Andréasson, Parmander and Allebeck (1990) conducted the first of such studies at a psychiatric

ward known as M79 (subsequently known as M87) in Huddinge hospital. This was the first Swedish institution that adopted Minnesota Model principles. However, Andréasson et al. (1990) did not complete their investigation due to difficulties with participant recruitment and high attrition rates. Nonetheless, the authors considered it to be a pilot study and still published their findings.

Participants were randomised to M79 and standard outpatient treatment; a no-treatment control group was also included in the study. Although the Minnesota Model participants achieved better outcomes in abstinence and other measures, the high attrition rate within this group constituted a selected sample. Furthermore, the total number of recruited participants was only 35 and did not allow for reliable conclusions to be drawn.

Bodin (2006) has given a summary of Swedish Minnesota Model outcome evaluations in her research findings of a private 12-step programme. It is stated that all of the six previous studies have used single-group post-test designs and (with one exception) have relied on mailed questionnaires for follow-up assessment. In all studies, follow-up rates are in the range of 52-68%. However, three of these research evaluations used information from collaterals (contacts associated with participants) that inflated response rates. Of the six Swedish Minnesota Model evaluations reported by Bodin (2006), selected population samples shared similar demographics. This included age, gender ratios, marital and employment status. Follow-up periods varied between 10 to 48 months whilst abstinence rates were in the range of 13-55% with higher abstinence rates reported for treatment completers' and post-treatment AA attendance.

Clearly, the aforementioned studies have considerable methodological flaws that render findings questionable. For example, the apparent over-reliance on mailed questionnaires for follow-up assessment and the inflation of response rates using collaterals. Furthermore, it is contended that

effective outcome evaluations should have follow-up rates of 70% or more (Tonigan, 2004). This was not achieved in any of the reported research investigations.

Bodin's (2006) research evaluation included 244 participants who were interviewed at baseline during the beginning of their treatment. Of these, 9 (3.7%) were day clientele and 235 (96.3%) received residential treatment. Measures included drinking and non-drinking outcomes. Follow-up rates achieved at 12 and 24 months were 77% (n=188) and 61% (n=148) respectively.

Participants were recruited from four sites that were run by the Minnesota Model treatment centre. At 12-month follow-up interviews 76 (31% of selected baseline sample) participants had achieved continuous abstinence. This figure had reduced to 47 (19% of selected baseline sample) at the 24-month follow-up period.

Bodin's (2006) study is an improvement on previous evaluations in Swedish Minnesota Model treatment settings. For instance, at the 12-month post-treatment interviews follow-up rates were better than all previous evaluation studies. There were, however, limitations to this study such as the exclusive reliance on self-report. Further, a significant number of participants received follow-up interviews in person whilst others were conducted by telephone. In total, there were 5 interviewers (including the principal researcher) that had varying degrees of involvement with the treatment centre and participants at different units. One interviewer worked intermittently in an administrative role at one unit; two nurses worked at another; and, an alcohol counsellor conducted research interviews at a unit that was separate from those already mentioned. It may be argued, therefore, that the conduct of interviews in Bodin's (2006) study may have introduced significant variation in baseline and follow-up data.

In light of the above reviews, it is worth noting recent outcomes from a European study. Grønbaek and Nielsen (2007) conducted a randomised controlled trial from a sample of 148 individuals

diagnosed with alcohol dependence. Participants were randomised to Minnesota Model and public day clinic treatment.

Of the participants completing Minnesota Model and public day clinic treatment (42 and 45, respectively), at 12-month post-treatment follow-up, 35% of participants completing Minnesota Model treatment maintained continuous abstinence. In comparison, only 20% of participants completing public day client treatment had maintained abstinence during the same period.

Nonetheless, Grønbaek and Nielsen (2007) conclude that Minnesota Model day clinic treatment does not differ in effect from more cost-effective public treatment twelve months after onset of therapy.

### **UK Outcomes**

As noted by Cook (1988b), systematic outcome evaluations of UK Minnesota Model treatment centres are lacking in the alcohol treatment outcome literature and there does not seem to be much of a change in almost 20 years since his review. It is contended that Rob Mawby undertook the first of such studies in 1989 with his evaluation of a 12-step programme in Plymouth (Morojele & Stephenson, 1994). Follow-up interviews were conducted at three and 12 months. The original sample population consisted of 69 individuals. Of these, only 11 participants were alcohol dependent and the remaining sample (n=58) were drug dependent individuals.

Follow-up interviews were conducted with seven participants in Mawby's (1989) alcohol dependent sample. It was found that five participants had remained abstinent at 3-month follow-up. However, only 2 participants (18% of selected alcohol dependent sample) remained abstinent at the 12-month follow-up period. Nonetheless, given the small sample size and response rate, it is difficult to make any meaningful clinical conclusions from this study.

Morojele and Stephenson's (1994) evaluation of a mixed gender UK Minnesota Model centre included individuals with alcohol dependence, drug addictions and eating disorders. The duration of treatment varies from approximately six to twelve weeks and activities included those that are typical in such settings (e.g., attendance at Fellowship meetings, 12-step education, written assignments, individual and, group therapy).

Of an initial 142 consecutive admissions over a period of 18 months, 103 individuals were followed-up at the 12-month post-treatment period. Follow-up procedures primarily involved interviews and self-report postal questionnaires. Detailed follow-up data were obtained from 68 participants through self-report questionnaires (n=53) and interviews (n=15). Less detailed data were obtained for 35 participants through other means and are labelled as "the other source sample" (Morojele and Stephenson, 1994, p.5). Follow-up measures included drinking and drug use, addictive behaviours, social circumstances, 12-step Fellowship involvement and general well being. Of the 53 participants that were treated for alcohol dependence 43 completed treatment and 10 were discharged.

Morojele and Stephenson (1994) reported abstinence rates of 49% (n=21) for the alcohol dependent sample at 12-month post-treatment follow-up. They further reported improved follow-up drinking outcomes for 11% (n=11; of the alcohol dependent sample) of participants from this group. However, these findings are open to criticism. A major limitation in Morojele and Stephenson's (1994) research investigation is the lack of control or comparison group with which participant outcomes may be measured against. In addition, the manner in which follow-up procedures were conducted may be considered haphazard at the very least. Follow-up data were obtained through interviews, postal questionnaires, telephone conversations with participants, annual reunions at the treatment centre and from members of 12-step Fellowships. Further,

interviews were conducted at participants' place of employment and residence, at the treatment centre, halfway houses, public parks and the address of another participant.

With regard to the alcohol dependent group (n=53) only 37 participants were reported as having alcohol dependence as their primary disorder at baseline, thus, making interpretations or comparisons with these findings more problematic. Nonetheless, Morojele and Stephenson's (1994) investigation is an improvement on the evaluation conducted by Mawby in 1989. They also respond to Cook's (1988b) call for further research on UK Minnesota Model treatment outcomes and conclude that:

To date, with the exception of Mawby's (1989) small sample study, there do not seem to have been any systematic follow-up studies of British Minnesota Model centres. There is a clear need for more research of the present kind to provide an indication of the post-treatment functioning of [clients] following treatment at Minnesota Model centres for addictive behaviours. Particularly required are studies also employing comparison or control groups...and the application of longer-term follow-up periods

(Morojele & Stephenson, 1994, p. 15).

More recent UK Minnesota Model alcohol addiction treatment outcome studies have been conducted at the Castle Craig Hospital Extended Care Unit (ECU) in 1999 and 2000. The Castle Craig Hospital ECU (1999) follow-up study included 96 alcohol dependent participants who were sent postal questionnaires that enquired about alcohol and drug use, abstinence and, self-ratings of improvements in general quality of life, physical and mental health. Stated outcome measures included: (1) Continuous Abstinence – having consumed no alcohol whatsoever since discharge; and, (2) Good – no more than three relapses and continuously abstinent for six months before point of follow-up. Of the 96 participants, it is reported that almost 93% had completed treatment and 75 returned questionnaires that constituted a response rate of 78%.

The Castle Craig Hospital ECU (1999) outcome study reported continuous abstinence rates of 41% with a mean follow-up period of 16.6 months. A further 19% of participants with a mean follow-up period of 20.8 months reported a “good” outcome. However, despite what appears to be encouraging results, this study has considerable methodological flaws. For example, the study population constituted a selected sample, as they were chosen from a database (by treatment staff) on the basis of participants being employed or having life partners who were in employment. Furthermore, there were no control or comparison group of participants and reported definitions in outcome measures did not specify continuous abstinence from all psychoactive substances.

A further study by the Castle Craig Hospital ECU (2000) attempted to address some of the methodological flaws in their previous study. In this investigation there were no exclusion criteria and all clients admitted to the ECU during the two-year study period (1.9.1997 to 31.8.1999) were included. It was reported that the “mean time between [participants] leaving treatment and their entry into the study was 429 days”. Stated outcome measures included: (1) Continuous Abstinence – having consumed no alcohol and no drugs (including cannabis) since completing treatment; and, (2) No more than three relapses and continuously abstinent for at least three months before point of follow-up. In total, the study group comprised 206 participants. Of these, 123 were alcohol dependent and 83 were drug addicted on the basis of DSM-IV diagnostic criteria. The average duration of treatment in the ECU was 85 days with a minimum and maximum stay of one and 289 days, respectively. The total number of participants who completed the recommended duration of treatment was 119.

Findings from the Castle Craig Hospital ECU (2000) study showed that 48% of participants completing treatment maintained continuous abstinence at follow-up. Of these, 44% of the alcohol dependent sample completing treatment maintained continuous abstinence at follow-up. Again, however, there are significant limitations to this study. For example, data was collected by

treatment staff and done in an irregular fashion that included direct contact, postal questionnaires and telephone contact with clients or their authorised contact person. In many instances, data was obtained from Social Workers.

## **2.4 Significance of Study**

There has been a distinct lack of investment in clinical addiction research in the UK. Although the Department of Health (DH), National Health Service (NHS) Research and Development, and the AERC have funded a few small-scale clinical trials in addiction, there has been no sustained programme of clinical research. Further, due to the absence of a UK national strategy for clinical addiction research, competition for funding is fierce (Curran & Drummond, 2005).

In light of the above, there are several limitations to the existing UK alcohol treatment research evidence base due to an overall lack of rigorous investigation in clinical settings. This indicates restriction in the generalisability of the existing evidence base to UK alcohol treatment settings. Consequently, this presents particular difficulties for clinicians and policy makers with decisions regarding the appropriateness of specific treatment for particular alcohol dependent individuals and populations (Curran & Drummond, 2005).

This research evaluation directly addresses the need for systematic research on psychosocial treatments in specialist alcohol addiction clinics within UK settings. It is contended, therefore, that this investigation is of particular significance. Moreover, according to the author's knowledge, it would be the first British outcome evaluation research of a six-month specialist alcohol addiction treatment centre utilising the Minnesota Model.

Increasing numbers of people within the UK suffer from alcohol dependence and require treatment (Drummond et al., 2005). Treatment evaluation improves quality of care and saves

money for services that are effective. Research has consistently shown that less intensive treatments are equal in effectiveness to more intensive methods yet the UK alcohol treatment sector still supports intensive treatment programmes with no evidence-base (Raistrick et al., 2006).

The classic trial by Edwards et al. (1977) clearly demonstrates the importance of addressing current concerns regarding intensive alcohol treatment. In a trial of 100 married alcohol dependent men, Edwards et al. (1977) attempted to challenge conventional wisdom on alcoholism treatment. Their study examined the outcomes of participants seen consecutively at an outpatient clinic and allocated randomly to either treatment or an advice-only group. Of those in the treatment group a 12-month programme was delivered that involved introduction to AA; calcium cyanamide, withdrawal medication; regular contact with a psychiatrist; advice on interpersonal problems and abstinence strategies; and, social work interventions with spouses.

In contrast, participants in the advice-only group were offered a brief explanation that health improvement was their responsibility and professional advice was to completely abstain from alcohol. Findings reported by Edwards et al. (1977) showed no difference between the two groups on outcome measures that included alcohol consumption. Thus, it was concluded that less intensive treatments are equally effective to more intense methods.

Indeed, subsequent to the classic study by Edwards et al. (1977), further research has supported their findings. For example, Chick, Ritson, Connaughton, Stewart and Chick (1988), in an attempt to repeat findings by Edwards et al. (1977) conducted outcome evaluation research in Edinburgh. Similarly, it was found that 'extended treatment' showed no advantage over 'advice only'. At two-year follow-up, there were no significant reported differences in outcome measures that included abstinence and problem-free drinking.

Moreover, such findings have been confirmed in populations outside the UK. Chapman & Huygens (1988) reported a trial of 113 alcohol-dependent men randomised to a single confrontational interview and a 12-week programme involving 6 weeks of residential treatment. Again, there was no difference between groups on measures of drinking outcomes and approximately 33% of participants were abstinent after 18 months.

Recent initiatives by the UK government have documented a trend in the growth of alcohol treatment services and clientele. It is also acknowledged that there is unacceptable disparity in the demand and supply of appropriate evidence-based alcohol treatment (Drummond et al., 2005). With potential and actual demand far exceeding supply. Yet, despite scarcity in current provision for alcohol treatment, resources are given to unproven (and possibly ineffective) treatments throughout the UK.

The centre in which this evaluation took place has provided therapeutic alcohol dependence programmes for over 15 years and receives the majority of its funding from local NHS authorities throughout the UK. Yet outcome evaluation of programme effectiveness, despite increasing pressure from national and local government initiatives, has never been undertaken.

An intense Minnesota Model of treatment is employed at the centre and, as stated, the duration of treatment is six months. Such 12-step treatment practices require empirical evidence to validate chosen methods as it is in contrast to UK research findings in alcohol dependence treatment (Luty, 2006). Furthermore, rankings of interventions derived from controlled trials in clients with an alcohol problem of any severity do not bode well for Minnesota Model alcohol treatment providers. Miller and Wilbourne (2002) rank brief intervention and motivational enhancement therapy respectively, as the most effective treatments for alcoholism. In contrast, Minnesota

Model type interventions are ranked at 52 behind recreational therapy and job finding that are ranked at 48 and 49 respectively.

### **Effective technology transfer in alcoholism treatment**

There is increasing evidence that attests to the importance of effective technology transfer in alcohol addiction treatment. That is, the diffusion of knowledge and information between research and treatment, and not just simply from research to treatment (Amodeo, Ellis & Samet, 2007; Marinelli-Casey, Domier & Rawson, 2002; McCaul & Monti, 2003). As indicated, alcohol addiction treatment services in the UK continue to be characterised by a lack of evidence-based practice. This is due, in part, to problems in effective technology transfer that are associated with the strong allegiance of scientists and practitioners to contrasting treatment models.

The underlying assumptions in the Minnesota Model of alcohol addiction treatment continue to guide the delivery of alcoholism services in the UK. However, Morgenstern (2000) reported findings that do not lend support for such assumptions in Minnesota Model programmes and comments on the varying levels of support for the superiority of alternative evidence-based treatments to replace current practices. Further, Morgenstern (2000) maintains that research practitioner collaboration must be promoted to facilitate effective technology transfer and attests to the need for research paradigms that possess high salience to practitioners while preserving scientific rigor.

In light of the above, it is maintained that this outcome evaluation is in the interest of all individuals and organisations that are involved in the UK alcohol treatment sector. Furthermore, given the adverse health and socio-economic impact of alcohol dependence and misuse in general (WHO, 2004a), it is contended that this research evaluation is of national and global significance.

## **2.5 Research Problem**

There is difficulty in measuring alcohol treatment outcomes in UK (other than for reasons already mentioned). This is primarily due to lack of research and control or comparison groups made up of no-treatment (and/or partial treatment) clients being difficult to form for ethical reasons (Alcohol Concern, 2002).

Many treatment providers (particularly in the non-profit sector) lack understanding of the importance and concept of outcomes. Consequently, this problem is exacerbated as evaluation is often met with considerable resistance from counselling staff (Burns, 2000). Further, resources required to initiate and implement sophisticated and credible outcome evaluation, particularly in the non-profit sector, are limited. Overcoming this problem requires novel and creative research designs by committed individuals who have considerable experience and expertise in alcohol addiction treatment and evaluation.

### 3 ALCOHOL TREATMENT OUTCOMES

It is maintained that alcohol treatment outcome research is designed to answer the basic question of whether, as a result of alcohol treatment intervention, a behavioural change has occurred. From this basic question, alcohol treatment researchers seek to address one or a combination of the following: (1) Is treatment better than no treatment? (2) Is treatment worse than no treatment? (3) Is one treatment better than another? (4) If a treatment is effective is a little just as good as a lot? (5) Does quality of life change due to change in alcohol use? (6) Are the benefits of treatment worth the cost?

The importance of alcohol consumption as a criterion for measuring treatment outcomes is axiomatic. However, what is of some contention is the need to address non-drinking outcomes and in which particular form. It is clear, at least in the UK, that there is increasing emphasis on harm reduction models for evaluating outcomes. This is exemplified in the UK government's *Alcohol Harm Reduction Strategy* (Prime Minister's Strategy Unit, 2004) where emphasis is not on the reduction of alcohol consumption per se but alcohol-related problems.

Following discussion in previous chapters, definitions in outcomes reflect two competing paradigms detailing the phenomenon of alcoholism. Babor, Dolinsky, Rounsaville and Jaffe (1988) summarises these views in relation to alcohol treatment outcomes. They maintain that one model views alcoholism as a *unitary* syndrome with abstinence as the sole marker of response. In contrast, a *multidimensional* model (i.e., biopsychosocial approach) addresses abstinence or reduction in drinking as an important, although not sole, determinant of treatment outcome.

In an attempt to broaden and further address the debate on outcomes, researchers began to develop a hypothesis regarding alcohol treatment effects and treatment effectiveness in general. It

was maintained that exposure to any given treatment would result in one of three outcomes, namely, there would be individuals who would: (1) benefit; (2) remain unchanged; or, (3) deteriorate. This led researchers to the conclusion that those who benefited from a specified treatment were appropriately *matched*, whereas those who remain unchanged or deteriorated are considered *unmatched* or mismatched (Heather, 1999).

Invariably, the average effect of exposure to any given treatment was found to be equivalent (Brown & Wood, 2001). Thus, it was theorized that effective treatment referrals that ideally matched clients on the basis of identifiable individual characteristics would significantly improve outcomes. This led to the development of *The Matching Hypothesis* and the instigation of a psychotherapeutic study that is unmatched in history.

### **3.1 Project MATCH**

The largest and most comprehensive psychotherapeutic outcome study ever undertaken was conducted exclusively on alcoholics and initiated by the National Institute on Alcohol Abuse and Alcoholism (NIAAA) in 1989. Known as Project MATCH (Matching Alcoholism Treatment to Client Heterogeneity), it proposed a thorough investigation into therapeutic outcomes that utilised substantial financial (US \$28 million) resources and a number of the most eminent North American professionals in the field of alcohol addiction. It was to provide a rigorous test of the most promising hypothetical matches. Essentially, Project MATCH was designed to test whether different types of alcoholics respond differently to specific therapeutic approaches. The study was successfully implemented and over 90% of participants provided follow-up data. Biochemical corroboration and interviews with participants' relatives and friends confirmed self-report drinking measures (Babor & Del Boca, 2003).

To test a series of ten *a priori* primary hypotheses (see **Table 1.3**) on how client-treatment interactions relate to outcome; 25 senior investigators, 80 highly skilled therapists and many more research assistants and support staff were employed at over 30 participating institutions and treatment agencies. Two independent but parallel matching studies were conducted in outpatient and aftercare (following inpatient care or intensive day hospital) treatment settings. Outcome evaluation of participants drinking patterns, functional status/quality of life and treatment service utilisation were conducted at 90-day intervals for 15 months following completion of treatment. Further follow-up was conducted at 39-months for participants who were treated at the five outpatient settings.

The eight-year multi-site trial employed three individually delivered treatment approaches that had demonstrated clinical effectiveness but varied significantly in philosophy and practice. The three treatment models used in the trial were: 1) Twelve-Step Facilitation Therapy (TSF) based on the principles of AA involving 12 sessions specifically designed to familiarise participants with AA philosophy and encourage AA fellowship participation; 2) CBT including 12 sessions designed to develop participant coping skills to avoid relapse; and 3) Motivational Enhancement Therapy (MET) based on motivational psychology (consisting of 4 sessions over 12 weeks) and designed to increase motivation and commitment to change.

In total 1,726 participants were recruited and randomly assigned to the three treatment approaches delivered in nine communities across North America. This included 952 outpatients (28% females; mean age 38.9 years) and 774 aftercare participants (20% females; mean age 41.9 years). Participants varied widely in personal characteristics and alcohol problem severity (although the vast majority were diagnosed as dependent).

The personal characteristics that were investigated were based on previous empirical findings and included the following: severity of alcohol misuse, cognitive impairment, conceptual level, gender, meaning-seeking, readiness for change, psychiatric severity, social support for drinking versus abstinence, sociopathy, typology classification (Type A and Type B), alcohol dependence, anger, antisocial personality, assertion of autonomy, psychiatric diagnosis, prior engagement in AA, religiosity, self-efficacy and social functioning.

**Table 1.3 Project MATCH Research Group primary *a priori* hypotheses**

Client Characteristics	Hypothesis
<u>Alcohol Use</u>	
Alcohol Severity	CBT better than TSF or MET
Support for Drinking	CBT or TSF better than MET
Typology	CBT or TSF better than MET for Type B MET better than CBT or TSF for Type A
<u>Demographics</u>	
Gender	CBT better for women TSF better for men
<u>Intrapersonal</u>	
Psychiatric Severity	CBT better than MET or TSF
Cognitive Impairment	TSF better than CBT CBT better than MET
Conceptual Level	MET better than TSF
Meaning Seeking	TSF better than CBT or MET
Motivation	CBT better than MET
(Source: Brown & Wood, 2001)	

## **Theoretical Framework**

As “the largest, statistically most powerful psychotherapy trial ever conducted” (Project MATCH Research Group, 1997a, p.25) the methodological rationale of Project MATCH specifically addressed the limitations of previous matching studies. The research team went to extraordinary lengths to design a large, tightly controlled and more conceptually focused investigation (Project MATCH, 1997a, 1997b, 1998a, 1998b). In so doing, it stands as arguably the most significant study of therapeutic outcomes ever conducted in the field of psychology.

Previous outcome studies designed to test matching hypotheses were flawed by procedural shortcomings that included a lack of internal and external validity. In particular, this included a lack of the following: 1) clearly defined *a priori* hypotheses; 2) randomly assigned participants to experimental conditions; 3) standardised manually based treatments; 4) appropriate supervision to ensure quality and consistency in therapeutic delivery; and 5) a comprehensive outcome assessment protocol that is valid and reliable (Project MATCH, 1997a). It is evident that the Project MATCH Research Group was primarily concerned with maximising internal validity as considerable resources were given to assessment and frequency of follow-up (Heather, 1999).

The treatment approaches selected in Project MATCH were chosen for their potential to reveal matching effects and all sessions were delivered on a one-to-one basis in non-residential settings with abstinence as the primary goal. Extraordinary measures were taken to ensure that variance in outcomes were not attributable to variation in quality or extent of treatment (Ashton, 1999). With regard to the content of treatment, this was carefully controlled, and analyses demonstrated that the three treatments used were significantly different from each other in expected ways (Carroll et al., 1998).

As stated, only highly trained and skilful therapists were recruited for the study and they provided treatments based on comprehensive manuals. A large sample was used that intended to represent the real world population of alcoholics in North America. All sessions were recorded on video to ensure consistency in therapeutic delivery and to afford detailed evaluation of the treatment process. Compliance to treatment was enhanced by the signing of collateral contracts by all participants who were regularly contacted between sessions and sent reminder notes prior to all major study events.

### **Main Findings**

Initial findings from Project MATCH revealed that all of the three treatment conditions (TSF, CBT and MET) produced significant positive outcomes in drinking and life functioning measures (Project MATCH Research Group, 1997a). Baseline measures showed that participants averaged 25 drinking days per 30-day month. After treatment, frequency of drinking was reduced four-fold to fewer than six days per month. Participants' also demonstrated improvements in liver functioning, depressive symptoms and alcohol and drug related problems. At one-year follow-up, participants were still achieving over 25 alcohol-free days in a month. Outcome measures at 39-month follow-up also revealed significant abstinence rates (Project MATCH Research Group, 1998b).

However Project MATCH was not designed to test whether treatment works (e.g., there were no untreated control groups) and surprised the alcohol research field with its unanticipated main findings. Despite anticipated confirmation of the most promising matching theories in the last 25 years prior to the investigation, Project MATCH failed to deliver. Only one of the ten primary matching hypotheses was partially supported in the 15-month outpatient follow-up group (Project MATCH Research Group 1997a). Outpatients with low (or absence of) psychiatric severity had

more abstinence days during more of the year following treatment when TSF (as opposed to CBT) was given as a treatment intervention.

### **Secondary Analyses**

Given the general disappointment in finding only one *a priori* predicted treatment effect, Project MATCH investigators attempted to elicit more meaningful findings than initial data analysis had revealed. Essentially, this entailed two processes. Firstly, further investigation of three-year follow-up outcomes to ascertain which client-matching treatment effects were sustained, strengthened or lost in the long-term. Secondly, further exploratory analyses were conducted to reveal possible effects that were not hypothesised (Project MATCH Research Group 1998a).

### **Project MATCH Criticisms**

Much of the criticisms toward Project MATCH are associated with factors that were intentionally used for its design (i.e., its unique conceptual focus and methodological rigour). A common criticism points to the extensive assessments and follow-up sessions that may have contributed to positive outcomes across treatment conditions. Initial assessments were 8 hours in length for each participant and follow-up interviews were conducted on five occasions in the first post-treatment year. Glaser (1999) maintains that such contact may have provided participants with a considerable therapeutic effect that overshadowed any existing client-treatment interaction.

A comparable criticism refers to the extremely high standard of treatment delivery and therapist supervision that may have produced ceiling effects in treatment outcome. It is argued that such high standards of treatment are not representative of real world alcohol addiction treatment and, yet again, the possibility of such conditions masking matching effects is palpable (Glaser, 1999). Furthermore, therapists were trained to use highly structured interventions based on treatment manuals specifically designed for the investigation and their formats did not equate with those

used in real world settings. For instance, the delivery of TSF was conducted on a one-to-one basis, yet in 12-step treatment programmes and AA fellowships group interventions are intrinsic to positive outcomes (Glaser, 1999; Drummond, 1999).

Another significant criticism stems from the evidence of bias in the selected sample. Only 37% (N=1726) of the initial sample (N=4481) was randomized for treatment trials. Potential participants were excluded for various reasons including failure to complete the initial 8-hour assessment; legal problems; co-morbid diagnosis; polydrug use; residential instability; and, anticipation of concurrent treatment (Moncrieff & Drummond, 1998).

Such high levels of sample selection limit the generalisability of Project MATCH findings to the wider alcohol treatment seeking population and inevitably increase the homogeneity of those recruited. Consequently, as the research investigators acknowledge, this impedes efforts in locating treatment-matching effects and the relevance of findings to real world settings is, at best, limited (Drummond, 1999; San, 1999).

#### **'Post MATCH Era' Debate**

Despite the above criticisms, Project MATCH represents a quantum leap in the field of alcohol treatment outcomes. Further analyses of Project MATCH data have revealed some level of clinical significance in treatment matching effects. This includes psychiatric severity; alcohol dependence; social support for drinking; and, anger. Whilst these findings have not provided compelling evidence for the necessity of treatment matching in real world clinical settings, researchers and clinicians are unlikely to abandon their efforts in this area (Brown & Wood, 2001).

Above all, what Project MATCH has demonstrated is that treatment for alcohol dependence is effective. Leading Fuller to state in an NIAAA (1996) press release that Project MATCH “findings are good news for treatment providers and for [clients] who can have confidence that any one of these treatments, if well delivered, represents the state of the art in behavioural treatment” (NIAAA, 1996). Although, the lack of a no-treatment control group in Project MATCH prevents clinicians and researchers from complete affirmation of Fuller’s (NIAAA, 1996) assertions, outcome results suggest (appropriate) therapeutic intervention yield excellent results.

Furthermore, prior reviews of the alcohol treatment research literature (e.g., Miller et al., 1995; Finney & Monahan, 1996) have shed light on considerable empirical evidence supporting the efficacy of CBT treatment. Such reviews offered no support to 12-step based treatment approaches. The findings from Project MATCH, however, have shown that 12-step principles afford treatment outcomes comparable to (or better than) CBT interventions (Finney, 1999). These findings were subsequently supported by multi-site effectiveness evaluation of 12-step and CBT substance abuse treatment programmes of the US Department of Veteran Affairs (Ouimette, Finney & Moos, 1997).

The effectiveness study results given by Ouimette et al. (1997) show minimal outcome differences between 12-step and CBT treatment at 13-month follow-up. However, participants exposed to 12-step treatment in the investigation were more likely to be abstinent compared to those who received CBT interventions. These results lend considerable support (and are comparable) to Project MATCH findings.

It is contended that the most remarkable finding from Project MATCH (particularly in regard to its relevance with UK alcohol treatment practice and research) relates to the intensity and

duration of treatment. In the UK (as in North America) there is considerable pressure to achieve optimal results with minimum expense (UKATT Research Team, 2001).

Extraordinarily, Project MATCH findings revealed that four planned interventions of MET was as efficacious as 12 intended TSF and CBT sessions despite the fact that the majority of participants were alcohol dependent. At the very least, a general conclusion may be drawn that posits brief interventions as equally effective to more intensive therapy. Given that alcohol addiction treatment is traditionally delivered with longer-term therapeutic intervention, this finding is highly significant. Furthermore, cost effective analyses has confirmed that the delivery of MET is less expensive in authentic addiction treatment settings (Cisler, Holder, Longabaugh, Stout & Zweben, 1998). In addition meta-analyses by Burke, Arkowitz and Menchola (2003) have confirmed the effectiveness of MET in treatment for alcohol problems.

### **3.2 New Research Paradigm**

Much of the methodological criticisms of Project MATCH were due to its intensely high focus on maintaining scientific rigour at the expense of external validity and generalisability. Although rigorous methods are necessary in RCTs similar to Project MATCH, the emphasis and preoccupation with RCTs is being challenged (Wells, 1999).

In the wake of Project MATCH, there has been a veritable sea change into treatment research that attempts to determine what works in everyday clinical practice. For example, the National Institute of Mental Health (NIMH) in North America has, in recent years, embraced this challenge by instituting what is referred to as a “public health” emphasis on funding studies grounded in everyday clinical practice settings. This has been met with annual funding of US \$40 million in treatment research focused in this area (Foxhall, 2000).

### **Efficacy versus Effectiveness**

The dilemma that has arisen for alcohol treatment researchers in developing outcome investigations is deciding whether to adopt an efficacy or effectiveness approach to research design. Efficacy approaches (such as Project MATCH) offer enhanced internal validity, as stated, however this limits generalisability to real-world settings. Effectiveness approaches on the other hand offer enhanced external validity but are often less controlled than efficacy studies, thus, limiting the assumptions that may be conferred about causality.

### **3.3 UKATT**

In an attempt to address the dilemma between efficacy and effectiveness alcohol treatment outcome research, the United Kingdom Alcohol Treatment Trial (UKATT) commenced in 1998, funded by the Medical Research Council (MRC). The UKATT Research Team conducted a pragmatic multi-centre, RCT with blind assessment that represented collaboration between psychiatry, clinical psychology, biostatistics, and health economics. It represented to the UK what Project MATCH did to North America (i.e., the most ambitious and largest clinical trial of treatment for alcohol problems ever conducted in the UK).

UKATT involved 742 individuals seeking treatment for alcoholism at seven treatment centres across the UK. Participants were randomised to either brief or intensive treatment approaches with two follow-up periods. At 3 months 689 (93%) participants were interviewed and 617 (83.2%) at 12 months. The main outcome measures included changes in alcohol consumption, alcohol dependence, and alcohol related problems over 12 months.

Alcohol consumption was measured by form 90 (a structured assessment interview also used in Project MATCH) designed to reconstruct substance use (and other relevant behaviours) in the past 90 days. This was summarised by the number of units of alcohol per drinking day and

percentage of days abstinent. The Leeds dependence questionnaire, developed by Raistrick et al. (1994) as part of a treatment evaluation package, was used to measure alcohol dependence. Alcohol related problems (in the past 90 days) were measured by the alcohol problems questionnaire (Drummond, 1990). Finally,  $\gamma$ -glutamyl transferase was measured by Reflotron (in vitro diagnostic device designed for quantitative determination of clinical chemistry parameters) and detected blood – cholesterol levels.

Secondary outcome measures in the UKATT investigation addressed health related quality of life. These outcomes were measured by the EQ-5D (a health status index); SF-36 (commonly used health profile); and the general health questionnaire 28 was used to measure psychological disturbance (UKATT Research Team, 2005).

The proposal for UKATT came from a meeting (in April 1994) convened by the Medical Research Council (MRC) that discussed various issues relating to alcohol treatment research. A major conclusion drawn from the meeting was the necessity for multi-centre alcohol treatment trials within the UK (UKATT Research Team, 2001). During the development of UKATT the findings of Project MATCH were beginning to emerge and were incorporated in a revised proposal to the MRC. The UKATT Research Team, therefore, took into account the implications of Project MATCH findings for the delivery of alcohol treatment in the UK.

In view of the procedural controversy surrounding Project MATCH regarding its extreme emphasis on internal validity UKATT investigators attempted a methodological leap in its design. This was done by changing emphasis from internal validity and explanatory mechanisms to accentuate pragmatic considerations and (crucially) treatment effectiveness rather than efficacy under controlled conditions.

In light of the above, UKATT assessment procedures were condensed into a single 3-hour session and only two follow-up sessions were scheduled in the first post-treatment year. Therapists were chosen from the participating treatment centres and were nominated by their employers.

Exclusion criteria were not particularly stringent which enabled clients who would normally receive an offer for UK alcohol treatment to be included.

The UKATT Research Team (2001), following their concerns regarding pragmatism and alcohol treatment effectiveness, compared treatments under conditions expected in routine clinical practice. As such, it is contended that UKATT findings are directly applicable to decision making in alcohol treatment, particularly in the UK. Furthermore, the strong element of fiscal evaluation enhanced the pragmatic nature of the trial.

Although the design focus for UKATT was pragmatism and effectiveness in alcohol treatment research, considerable measures were still taken to ensure optimal conditions with respect to internal validity. For example UKATT research investigators endeavoured to meet the high standards set by Project MATCH with regard to therapist training, supervision and quality control of treatment delivery (UKATT Research Team, 2001).

### **UKATT Framework**

The development of UKATT was based on the prevailing evidence attesting to the relative effectiveness of psychosocial alcohol treatment interventions. Furthermore, it was agreed that existing professional groups in the UK could routinely administer such treatment (UKATT Research Team, 2001).

In particular, findings from the innovative research synthesis by Holder, Longabaugh, Miller and Rubonis (1991) were drawn on. Holder and his colleagues analysed the cost effectiveness of

alcoholism treatment approaches based upon three specific factors. This included (1) findings from clinical trials, (2) costs for treatment in settings and/or by providers and (3) recommendations from treatment experts about appropriate settings, providers and treatment events.

Finney and Monahan (1996), in a development of findings by Holder et al. (1991), calculated an Adjusted Effectiveness Index (AEIn) for each treatment approach. This was the difference between its predicted and actual effectiveness score. Although the AEIn results were consistent with Holder et al. (1991) a second approximation on the relative cost-effectiveness of treatment approaches was conferred. Overall, a smaller range of effectiveness across treatment approaches was found as well as a non-significant relationship between cost and effectiveness.

Prior to the UKATT research investigation major trials of psychosocial treatment had been limited in the UK. Chick et al. (1988) had conducted the largest of such studies which 152 participants in Edinburgh who were randomised to brief or extended treatment. Although Chick et al. (1988) findings are noteworthy, they lacked statistical power to detect small to medium sized effects when comparing treatment approaches. The implications of this are axiomatic when considering treatment approaches being widely prescribed to a large number of clients across the UK.

As stated, the most relevant finding from Project MATCH, in terms of alcohol treatment provision in the UK, was that MET outcomes were comparable to TSF and CBT at all levels of severity of alcohol problems and dependence. This outcome led the UKATT Research Team to conclude that MET was equal in effectiveness to (thus more cost effective than) CBT and TSF.

The UKATT Research Team (2001) maintained that TSF was less relevant than CBT to formal treatment provision in the UK than in North America. Consequently, TSF was not considered for inclusion in the multi-centre trial, despite a proliferation of settings across the UK that administer a 12-step programme (Boyd, 2007). This decision was also based on the ongoing project by Miller, Andrews, Wilbourne and Bennett (1998) that reviews clinical trials for alcohol use disorder treatments.

A *prima facie* deduction was made that MET should replace CBT on the grounds of cost effectiveness. With regard to intensive approaches to alcohol treatment the UKATT Research Team reasoned that it was necessary:

- (1) to conduct a multicentre trial of treatment for alcohol problems in the British treatment system in order to discover whether North American findings with respect to MET and more intensive treatment can be replicated;
- (2) to examine thereby outcomes from any more intensive approach to treatment which both theory and research give grounds for hypothesizing may be more effective than MET;
- (3) building on matching findings already reported by the [Project MATCH Research Group] to enquire what types of client may not benefit from MET and may therefore need a more intensive form of treatment, and what types of client may be especially suited to MET.

(UKATT Research Team, 2001, p. 12).

Based on extant literature and a *Popperian* approach to the issue of intensive versus brief treatment, members of UKATT (Copello, Orford, Hodgson, Tober & Barrett, 2002) developed Social Behaviour Network Therapy (SBNT). This represented the form of, intensive psychosocial approach supported by research literature that was specifically developed for UKATT. SBNT is a novel treatment package that integrates various strategies found to be effective in other therapeutic approaches. It is based on the notion that alcohol misuse and dependent clients

achieve good treatment outcomes by developing positive social support networks (Copello et al., 2002).

In practice, SBNT utilises a myriad of cognitive and behavioural strategies that foster development of social networks supportive of change for the client (UKATT Research Team, 2001). Models that were used in developing social networks were drawn from network therapy; behavioural marital therapy; unilateral family therapy; social aspects of the community reinforcement approach; relapse prevention; and, social skills training (Galanter, 1993; McCrady et al., 1991; Thomas and Ager, 1993; Sisson and Azrin 1989; Chaney et al., 1978; Oei and Jackson 1980).

The delivery of SBNT in the UKATT project consisted of eight 50-minute therapy sessions over the course of 8 to 12 weeks. MET therapy was modified from the version used in Project MATCH. Firstly it comprised three (rather than four) 50-minute sessions over 8 to 12 weeks; and, secondly significant others were only permitted to attend the initial therapy session and could only provide confirmatory information.

### **Hypotheses and Findings from UKATT**

The main objectives of UKATT were addressed by the expression of 2 primary null hypotheses, and 6 subsidiary hypotheses, which are as follows:

- 1) Less intensive, motivationally based treatment (MET) is as effective as more intensive, socially based treatment (SBNT).
- 2) More intensive, socially based treatment (SBNT) is as cost-effective as less intensive, motivationally based treatment (MET).
- 3) Clients with weak social networks at initial assessment show the same outcomes from MET as from SBNT.
- 4) Clients with low levels of readiness to change drinking behaviour at initial assessment show the same outcomes from SBNT as from MET.

- 5) There is no interaction between clients' severity of psychiatric morbidity and the relative effectiveness of MET and SBNT.
- 6) Clients high in anger at initial assessment will show the same outcome from SBNT as from MET.
- 7) There is no interaction between clients' level of alcohol dependence at initial assessment and the relative effectiveness of MET and SBNT.
- 8) Therapists with different characteristics achieve the same outcomes with MET and SBNT.

The main findings that were drawn from the UKATT investigation showed that the two post-treatment therapy groups (MET & SBNT) achieved similar outcomes at three and 12-month follow-up. For example, the difference in the percentage of days abstinent from alcohol in the most recent 90 days at follow-up between the two groups was only 0.90% and 1.20% at three and 12 months respectively (in favour of the SBNT group).

Likewise, the difference in number of drinks consumed per drinking day at three and 12-month follow-up between the MET and SBNT groups was 0.6 and 1.1 (at 3 and 12 months respectively (against the SBNT group). Similar differences were recorded for preferred changes in levels of alcohol dependence and problems (UKATT Research Team, 2005).

The UKATT investigators compared (MET & SBNT) mean adjusted scores for primary and secondary outcomes at baseline and three and 12-month follow-up. It was found that percentage of days abstinent from alcohol improved from 29% to 43% at three months and to 46% at 12 months. Alcohol consumption reported by continuing drinkers decreased from 27 drinks per drinking day to 18 and 19 at three and 12 months respectively (UKATT Research Team, 2005).

Furthermore, reported mean adjusted scores on dependency fell from 17 to 12 and 11 at three and 12 months respectively. Mean adjusted scores on alcohol problems decreased from 12 to seven

and six at three and 12 months respectively; and, reported mental health also improved. This was measured by the mental health component of the SF-36 that increased from 30 to 37 and 39, with no serious adverse events, at three and 12 months respectively.

With regard to the cost effectiveness of treatment for alcohol problems a comparison was made with SBNT and MET. The main economic measures used for the comparison were quality adjusted life years (QUALYs); costs of implementing respective treatments; and adverse economic consequences for public sector resources. Overall, findings showed that every £1 spent on treatment resulted in savings of £5 to the national economy (UKATT Research Team, 2005).

Delivery of SBNT and MET did not differ significantly in net savings or cost effectiveness, despite a 58% difference in treatment costs. This led the UKATT research investigators to conclude that research participants (n=608) achieved highly significant reductions in drinking and associated problems and costs. Indeed, as demonstrated the UKATT Research Team has made a significant contribution to the alcohol treatment outcome literature (particularly as it applies to the UK). However, it is argued that the true extent to which findings from UKATT are generalisable are, at best, limited.

### **UKATT Criticisms**

A significant criticism of the UKATT Research Team investigation stems from its exclusion procedures when initiating the study. Potential participants of the study were excluded for reasons that included inappropriate contact information, illiteracy and not having a fixed abode. However, if it is taken that such factors are not necessarily uncommon in the treatment seeking population in the UK. Then, the extent to which UKATT findings offer external validity is restricted.

Indeed, research by Khan, Murray and Barnes (2002) on the effect of poverty and unemployment on alcoholism suggests that participants excluded from the UKATT investigation are likely to represent some of the poorest members of UK society. Given its pragmatic design and the explicit assertion that “findings of the study are intended to be directly applicable to decision making in clinical practice” (UKATT Research Team, 2001, pp). It seems wholly unethical to base decisions for alcohol treatment provision based on research that potentially excludes some of the most vulnerable and impoverished individuals in UK society.

Furthermore, recent research in homelessness, health and the association of regular alcohol use with poverty retract UKATT findings (Frankish, Hwang & Quantz, 2005; Neufeld, Peters, Rani, Bonu & Brooner, 2005), as it may be argued that potential participants excluded from UKATT are disproportionately affected by alcoholism and often present the greatest challenges in clinical practice.

Participant demographics at randomisation to treatment in UKATT show that 424 (58.6%) individuals from the selected sample had annual incomes of less than £10,000. Moreover, the largest group in reported annual incomes earned the least income and consisted of 273 individuals (37.7% of the selected sample population). It may be argued, therefore, that the aforementioned group of UKATT participants would have increased significantly if exclusion criteria (unrelated to alcohol dependence) were less stringent.

Luty (2006) has contended that, when considering the selected sample in UKATT considerable caution is required when interpreting findings. In comparison to Project MATCH only 23% of the treatment seeking population of the chosen centres completed the trial. Such figures indicate that concern regarding bias in the selected UKATT sample is warranted.

A further criticism of UKATT is due to its exclusion of 12-step programmes that specifically focus on abstinence as a primary goal in therapeutic intervention. Within the statutory UK alcohol treatment sector 12-step programmes are not offered. However, it is increasingly embraced by alcohol treatment professionals and, as stated, constitutes the main approach for addiction treatment in North America. Indeed, international UK authorities in the field of alcohol treatment and research routinely make referrals to 12-step programmes. There are approximately 475 alcohol treatment services in England. The majority of these are run by voluntary agencies but funded by the NHS (Alcohol Concern, 2002).

It has been shown that the majority of clients attending UK alcohol specialist treatment services are helped to achieve abstinence rather than moderate or controlled drinking (Rosenberg, Melville, Levell & Hodge, 1992). As such, it may be argued that the exclusion of 12-step programmes in UKATT was injudicious, primarily due to the fact that such programmes were designed for the sole purpose of abstinence as the main goal in therapeutic intervention.

### **3.4 Real World Research**

There has been an expanding cornucopia of research on addictive behaviours in the past 30 years. We have formulated conceptual models, measured key constructs, examined salient theoretical issues, and made substantial progress in understanding the ebb and flow of addictive disorders. An integrated biopsychosocial orientation and a theoretical paradigm of evaluation research have supplanted earlier adherence to an oversimplified biomedical model and reliance on a restrictive methodological approach to treatment evaluation. And yet, in an ironic way, more remains to be done than before, in part because of new clinical perspectives and treatment procedures and the evolving social context in which we ply our trade

(Moos, 2003, p.3).

Given the recent findings of Project MATCH and the UKATT investigators, considerable emphasis has duly been placed on the effectiveness of less intensive treatments for individuals suffering from alcoholism. With strong empirical support for brief psychosocial interventions

such as MET and CBT for alcoholism, it seems evident that programmes offering treatment in the UK without an evidence base are unjustified. Furthermore, given that TSF was excluded in UKATT investigations and encouraging results were afforded to brief interventions for alcohol treatment, it seems unlikely that 12-step approaches will be supported or considered in the provision of statutory UK alcohol treatment any time soon (if at all).

In light of the above, current alcohol treatment literature has not relented in its disapproval of 12-step programmes that do not provide empirical support for treatment interventions. For example, Miller, Wilbourne and Hettema (2003) have contended that conventional 12-step programmes in North America consist of mechanisms that have little, if any, empirical support. What Miller et al. (2003) vehemently advocate, is the substitution of such methods with evidence-based methods.

Indeed, there is renewed emphasis on the need to move research investigations into real world conditions. This has led David Barlow (a leading researcher in the field of psychological treatment) to announce that studies based on real world conditions are “the consensus that has emerged in the field” (Foxhall, 2000). Such assertions from leading authorities in psychopathology have contributed to major funding being directed toward effectiveness research.

The new funding that has been given toward effectiveness research includes: single-site grants for investigator-initiated studies; exploratory testing of common but relatively unproven self-treatments (e.g., self-help or support groups); integration of basic behavioural science and public health expertise in collaborative research on mental health disorders; and, research collaborations between academic health centres community oriented health-care organisations with access to large, stable and diverse client populations.

The widespread prevalence of alcoholism and its deleterious effects on the individual and society in conjunction with current psychological treatment research paradigms underscore the need to identify what works in existent routine clinical practice. The negative consequences of alcoholism have been well documented (Anderson & Baumberg, 2006). This includes interpersonal violence (Finney, 2003; White & Chen 2002; Wood, Vinson & Sher, 2001); sexual victimisation (Abbey 2002; Cloutier, Martin & Poole, 2002); risky sexual behaviour (Cooper, 2006); and, suicide (Ramstedt, 2001).

Indeed the high rates of comorbidity between alcoholism and other psychopathologies (Slaterry et al., 2003) account for the inevitability of its presentation in all areas of mental health service delivery. Thus practicing psychologists who do not even specialise in alcohol use disorders are, nonetheless, likely to encounter clients with such problems in every day clinical and counselling practice. Moreover, in the UK, record levels of alcohol illness have been reported. Hospital admissions for alcoholic liver disease have more than doubled in a decade, reaching 35,400 in 2004/2005; admissions for alcoholic poisoning increased to 21,700 from 13,600 over the same decade; in-patient care for alcohol-related mental health disorders increased by 75% to 126,300 admissions between 1995/6 and 2004/5; death rates linked to alcoholic liver disease increased by 37% to just over 4,000 between 1999 and 2004 (The Information Centre for Health and Social Care, 2006).

In response to such trends, the UK government has implemented a number of programmes via its *Alcohol Harm Reduction Strategy* (Prime Minister's Strategy Unit, 2004) that includes policy on the provision of specialist alcohol treatment services. The document *Models of care for alcohol misusers* (DH, 2006) details the UK government's vision in establishing criteria for commissioning and provision of local treatment systems for alcohol misuse. Within this

document two sets of standards (core and developmental) are promoted for better health in the UK.

Both the core and developmental standards cover seven domains including safety, clinical and cost-effectiveness, governance, patient focus, accessible and responsive care, care environment and amenities, and public health. With regard to the second domain it is explicitly stated that healthcare decisions and services should be based on what assessed research evidence has shown provides effective clinical outcomes (DH, 2006).

Given the above it is a critical time for the design and implementation of rigorous alcohol treatment outcome evaluation. The increasing pressure on treatment providers to demonstrate clinical outcomes and offer more accountability to clients, policy makers, funding bodies and the wider public must be addressed. Moreover, the NHS (under the National Treatment Agency for Substance Misuse; NTA) has released a recent key publication that has direct impact on alcohol treatment, policy and research. The publication was commissioned by the NTA to provide an evidenced-based expert review of the effectiveness of treatment for alcohol problems within the UK (Raistrick et al., 2006).

Within the publication, it is stated that: "Conclusion: 12-step residential treatment confers no added benefit compared with other forms of treatment and is less cost-effective than outpatient treatment" (Raistrick et al., 2006, p. 144). Although this statement is qualified a further 100 pages into the publication, it seems evident that practices and treatments without an evidence base will come under increasing scrutiny with funding withdrawn from services.

### 3.5 Research Aims and Hypotheses

In light of the above, the main aim of this investigation is to initiate and implement a systematic effectiveness outcome evaluation of a specialist non-statutory alcohol addiction treatment service.

In essence the treatment centre has three main objectives that are addressed in the research hypotheses:

- (I) **The primary objective of this research investigation is to identify the treatment effectiveness of a Minnesota Model alcohol addiction programme operating in a specific treatment centre<sup>1</sup>.** The long-term aim and objective of the centre is for residents and day clients to remain abstinent from all psychoactive substances, following completion of treatment.
  
- (II) Following the Minnesota Model of treatment, the centre attempts to activate spiritual experience or awakening amongst their therapeutic clientele. **Thus, the second objective in this study is to assess the association between having had a spiritual experience or awakening as a result of AA involvement and completion of treatment.**
  
- (III) The acceptance of the importance of peer relationships via ongoing affiliation with the AA Fellowship is another key aspect of Minnesota Model treatment. Further, it is maintained that ongoing active involvement in 12-step groups after treatment is an essential component of evidence-based chemical dependence treatment (Emrick & Tonigan, 2004). **Accordingly, the third objective of this investigation is to assess the association between AA meeting attendance and completion of treatment.**

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<sup>1</sup> For reasons of confidentiality and anonymity, it is not possible to name this centre.

- (IV) Two subsidiary hypotheses are also tested in this study that investigates the association between completion of treatment and abstinence over the most recent 30 and 90 days at follow-up.

The research hypotheses are as follows:

- 1) There will be a significant association between continuous abstinence at follow-up and completion of treatment.
- 2) There will be a significant association between having had a spiritual experience or awakening as a result of AA involvement and completion of treatment.
- 3) There will be a significant association between AA attendance over the most recent 90 days at follow-up and completion of treatment.
- 4) *There will be a significant association between abstinence from alcohol over the most recent 30 days at follow-up and completion of treatment.*
- 5) *There will be a significant association between abstinence from alcohol over the most recent 90 days at follow-up and completion of treatment.*

## 4 METHOD

### 4.1 Ethical Considerations

Ethical approval was obtained from City University prior to the collection of new data for this research investigation.

Fundamental ethical principals (i.e., respect, justice and beneficence) were adhered to when conducting the evaluation. Respect for the personal autonomy of potential participants was given that included their opinions and responses in communication with the author. Participants were recruited on an entirely voluntary basis having been fully briefed with regard to the purpose of the evaluation. The information acquired from the research was managed confidentially and any reports made public would be in the format of grouped data.

The principle of justice was applied through equity in procedures to all individuals who participated in the research. All participants received identical information at the recruitment stage. At follow-up, each participant was administered the same outcome measures.

The research outcome evaluation was designed to highlight gaps between treatment practice and research. More importantly, the evaluation will give some indication into the effectiveness of therapeutic intervention.

Ethical considerations regarding the therapeutic relationship were addressed as the author acted as group and principal therapist for a number of participants that were recruited to the study. The possibility of re-awakening any fraught or intense feelings toward the author was a risk. On the basis of this 2 participants were not contacted as they had particular issues with the author's race and standing in the organisation during their treatment.

## **4.2 Design**

A retrospective method was used in the design and the author was solely responsible for the implementation of the alcohol treatment outcome evaluation. A quasi-experimental pre-post outcome design was chosen to conduct the study due to its usefulness in producing results for accountability and programme improvement (Rossi, Freeman & Lipsey, 1999). An “intent-to-treat” outcome evaluation was employed in this study as the author endeavoured to assess the treatment effectiveness of an alcohol addiction treatment programme (McLellan et al., 1996). A further reason for the employment of the design was the limited resources available to the researcher. Methodological details of the study are presented below.

### **Setting**

The study was conducted within an independent treatment centre offering therapeutic rehabilitation programmes for recovering alcoholics. The organisation’s stated purpose is to support individual men and women to recover from alcoholism and achieve a fulfilled and sober life. It aims to achieve this purpose by providing a structured and supportive therapeutic regime that instils in the individual self-discipline and a wider sense of purpose. There are up to 18 residential and 12-day clients at any given time.

The organisation’s philosophy of care in the treatment of alcohol addiction has four identifiable key elements:

1. The possibility of change.
2. The disease concept of alcoholism.
3. Treatment goals.
4. The principles of Alcoholics Anonymous.

Long-term treatment goals are based on the notion that alcoholics are able to change their beliefs, attitudes and behaviours to maintain abstinence from all psychoactive substances and experience an improved lifestyle. Following the Minnesota Model, the therapeutic approach is based on a belief that alcoholism is an incurable condition. However recovery is possible through abstinence. Thus, the organisation maintains that only strict abstinence will enable the individual to achieve a valued lifestyle. To this end, the focus is upon supporting the individual to find the inner resources to achieve abstinence for a lifetime on a daily basis.

The duration of treatment at the centre is 6 months and a comprehensive treatment programme is offered. This includes group and individual therapy and counselling, written assignments, educational video and audiotapes, guest speakers, yoga, relaxation and exercise classes.

The model of treatment is structured on a 12-step programme utilising the philosophy of Alcoholics Anonymous and cognitive behavioural therapy (CBT). In essence, the CBT components employed in the programme are based on cognitive restructuring (Ellis, 1962; Beck, 1976; Meichenbaum, 1977; Burns, 1980). Thus, clients are viewed as having maladaptive thought systems that cause emotional and behavioural problems; their internal dialogues are, therefore, a focus in treatment as it is considered to be a foundation for responses to situations and events. All clients are required to attend a minimum of three AA meetings per week. Group sessions address issues such as identifying and expressing feelings; communication and assertiveness skills; anger and anxiety management; spiritual awareness and development; childhood, family and interpersonal relationships and relapse prevention.

There are three main groups at the centre to which all clients who complete treatment attend. Primary groups allow members to gain insight into their addiction and develop an understanding of the purpose and benefits of therapy. Transitional groups allow members to develop their self-

awareness and cultivate what was learnt in their initial group. They are also encouraged to be more spontaneous in their group and take further responsibility for their own lives.

Secondary groups are generally more intense and all members commence work on a written life story (mini-autobiography) that is presented to their peers. They also further examine and take full responsibility for their behaviour, address issues of guilt and shame, and develop healthy and appropriate coping skills. Personal issues are discussed in more depth including childhood, family and interpersonal relationships. After approximately one month in secondary group clients are gradually introduced to time out of group prior to leaving it completely. They are encouraged to make realistic plans for the future before completing their treatment.

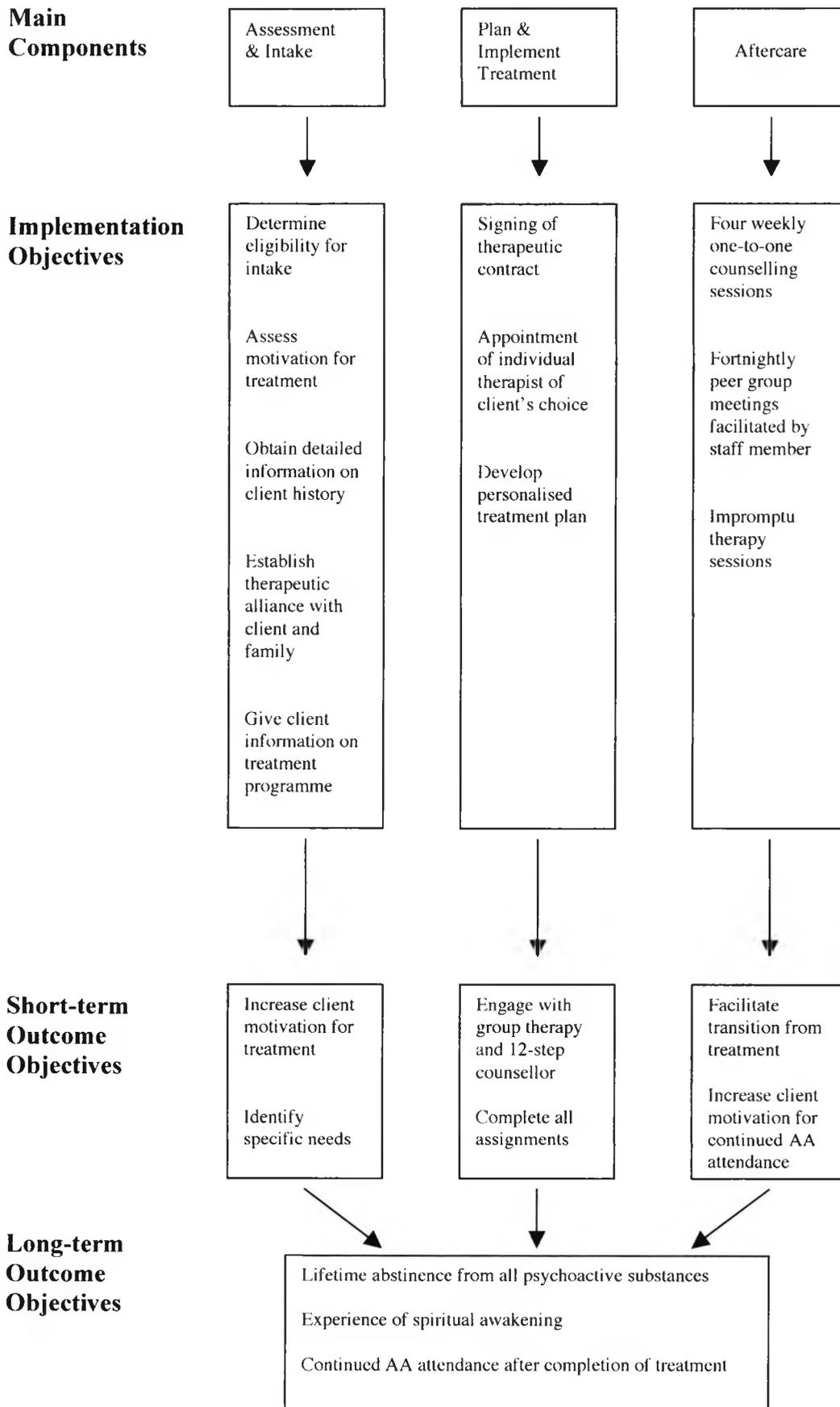
An open referral system is adopted by the organisation that may be accessed by potential clients, their family members or friends and mental health professionals (e.g., psychiatrists and detoxification managers). In practice, the majority of referrals are from local health authority care managers following a community care assessment. An after-care service is offered. This consists of fortnightly peer-group meetings facilitated by a staff member and 4 weekly one-to-one counselling sessions. Impromptu therapy sessions are also given that are tailored to individual needs.

The framework for therapeutic intervention is predicated on a detailed and thorough pre-treatment assessment (see **Figure 1.1**). All potential clients who are referred or self-refer undertake a comprehensive assessment by two members of staff to determine their suitability for treatment. The assessment process includes obtaining detailed information on the following: client demographics; drinking history; previous treatment; drug history; physical history; financial and employment status; legal history; family background; mental health; psychiatric history and motives for seeking treatment. Potential clients are sent an assessment application form (see

Appendix III) and asked to complete this and bring it with them on the day of their interview. Staff members then go through this form with the client to check what they have written is accurate and further clarify and explore issues that may arise as a result of the client seeking treatment at the centre. Assessment completion times vary between 45 and 90 minutes.

The treatment personnel comprise a chief executive, clinical treatment director, mental health nurse/clinical practitioner (RMN) and four specialist addiction counsellors. Other specialist service providers are contracted on an ad hoc basis (e.g., drama, art, yoga and aerobics).

**Figure 1.1 Logic Model for Centre's Alcohol Addiction Treatment Programme**



### 4.3 Sample

The study population comprised all clients (n=478) who were assessed at the centre between May 2001 and October 2005. These dates were chosen as during this time the author was employed at the centre, on a full-time basis, as a therapeutic psychologist. Efforts were made to contact all of the potential participants (n=478) by telephone. The sample consisted of all clients whose assessment application data were still held by the organisation.

The centre's administrative procedures involved shredding application forms that were two and three years old for day and residential clients respectively. This is done in order to provide space for new assessment data. The author manually conducted a detailed search of all archived pre-treatment assessment data between November 2005 and May 2006.

Development of a record keeping system and database design was an important part of the outcome evaluation. The organisation's referral file was obtained and used for cross-referencing throughout the investigation. The file contained: the names; gender; ethnicity; date of birth; age; referral source; referral name; funding; assessment and admission dates; and, waiting times for treatment of the target population. Once archived material had been located for a given individual, the author highlighted their name on the referral file. This process was repeated until the entire organisation's archived pre-treatment data had been searched.

A list was then compiled of all individuals in the target population with archived pre-treatment assessment data still held at the centre. All potential participants on the list were mailed over the course of four weeks. As informed consent forms were received photocopies of assessment data were made and stored under lock and key in one location to which the author had sole access.

Nominal data sheets were constructed for the purpose of data input. When all contacted individuals in the target population had given informed consent, an Excel database using ID numbers was created to transfer baseline information. This database was routinely backed-up by sending copies to the author's personal university web mail. A habit was made of routinely picking a few cases from the database to ensure that information corresponded with original records. All post-treatment data was coded and transferred onto a separate Excel file.

### **Introductory Letters and Consent Forms**

Introductory letters (detailing author, sponsorship and supervisory details) and informed consent forms were sent with pre-paid self-addressed envelopes. The self-addressed envelopes were to the author at the treatment centre and a request was made for consent forms to be returned within one week. Introductory letters invited participants to take part in the study and requested that all information was to be read carefully and discussed with others if necessary. Full details regarding the purpose and methods of the research and issues relating to confidentiality and anonymity were clearly explained.

The consent form (see Appendix V) detailed the reasons for conducting the evaluation research study and gave assurances of confidentiality, the timing of follow-up and types of questions that would be asked. It also indicated that any individual recruited had the right to decline participation and their decision would not influence current or future participation in the organisation's treatment programme.

The consent form recorded participant names, addresses and telephone numbers. It also requested the names and contact numbers of two other individuals who are related to the participant. These details were requested in the event of any difficulties encountered when trying to locate participants at follow-up.

An attempt was made, between June and September 2006, to contact all clients within the sample whose pre-treatment assessment data was still held by the organisation (n=241). This was done to maximise participant take-up and confirm current addresses for the sending of informed consent forms. Four potential participants had deceased.

Verbal contact was made with 91 potential participants, of those contacted 89 agreed to participate. A further 150 letters were sent between 16 June 2006 and 8 July 2006 to all potential participants to obtain informed consent. In total, 137 (56.85%) of the target population gave informed consent to participate in the study.

### **Follow-up Interviews**

Despite the difficulty involved in tracing clients by selecting a sample that is at the very beginning of the organisation's treatment process. To obtain the largest possible sample size, an attempt was made to recruit every individual that was assessed (during the aforementioned dates) at the treatment centre, regardless of their level of involvement in the programme. A further reason for the use of this method is due to the possibility of obtaining results that may be generalised to all clients irrespective of their level of involvement with the organisation. McLellan et al. (1996) maintain that such designs are a recommended minimum standard for alcohol treatment outcome evaluation. Given that the current study employed a retrospective design (within specified dates) the follow-up intervals varied between one to four years.

There is general consensus in the literature of follow-up studies with alcohol treatment clients that telephone interviews can provide valid outcome data when properly conducted (Tonigan, 2004). The author decided, therefore, to use telephone interviews on the basis of previous research and the practical advantages it offered with regard to case management. However, two interviews were conducted in person, by the author, due to chance meetings with participants on the

premises. The same protocol was used in these interviews as for telephone follow-up sessions. Follow-up tracking was based on card a file system.

Resource constraints led to all follow-up data being collected by the author. All interviews were conducted with a professional manner and a clear voice although this would not necessarily prevent some participants from 'faking good'.

Despite the above, it was felt that there were particular advantages regarding the conduct of follow-up interviews by the author. In his report to the National Institute on Alcohol Abuse and Alcoholism, Lettieri (1992) stated that outcome reliability actually depends on the methodological sophistication of the person gathering the data, the personal characteristics of the respondent, and the quality of rapport between the interviewer and respondent.

In support of Lettieri's (1992) report, Tonigan (2004) suggests that when outcome is conducted, particularly in the formative context, with the assumption that follow-up assessment has therapeutic benefit. A compelling argument may be made for either a trained interviewer or the client's therapist to be uniquely placed to collect reliable and valid data.

### **Preamble**

All follow-up interviews conveyed the following information to each participant:

1. "I'm calling with regard to the follow-up study that I am conducting which you were informed about."
2. "Initially I would like to thank you for agreeing to participate in this research study and remind you that your identity will be kept completely confidential. Your anonymity will

be maintained and information given in this interview will not be shared with any staff members at the treatment centre.”

3. “Your participation is entirely voluntary and you are free to withdraw from this interview at any time. I will be asking you some brief questions about your psychoactive substance use and AA participation. The interview will only take a few minutes to complete.”

The follow-up interview form contained a brief introductory section to record the participant’s identification number, date of interview, time commenced and contact code.

#### **4.4 Measures**

As stated, baseline measures were obtained from the archived pre-treatment assessment data. This included information on the following:

1. Date of Birth
2. Date of last alcoholic drink
3. Feelings about AA
4. Mental health problems and treatments
5. Number of suicide attempts
6. Gender
7. Ethnicity

Organisational administration files were obtained to determine assessment and treatment outcomes (i.e. assessed only; discharged; completed).

### **Development of the Outcome Questionnaire**

Organisational and research aims and case management issues regarding the resources required for data collection determined the rationale for the development of the follow-up questionnaire. As the author was solely responsible for the conduct of the entire project, it was necessary to use brief outcome measures (see Appendix IV). In addition the design of the questionnaire was influenced by current literature regarding the recommended conduct of alcohol treatment outcome evaluations (WHO, 2000).

Following the historical appreciation of the importance and necessity of alcohol consumption as a criterion for outcome, the author decided to use this as an initial measure to determine the effectiveness of the treatment programme. It is contended that the pattern and amount of drinking is recorded in alcohol treatment outcome evaluation (Sobell & Sobell, 1995).

A simple quantity-frequency (QF) measure based on the Maudsley Addiction Profile (MAP; Marsden et al., 1998) was chosen to elicit patterns and volumes of alcohol consumption. Thus, the amount of drinking on average drinking days (Q) and the average number of days when alcohol was consumed (F) were assessed. These figures (i.e., Q and F) were then multiplied to obtain an estimated total volume

As stated, the main outcome measure was chosen to determine the extent to which the organisation was achieving its long-term objectives (i.e., lifetime abstinence from all psychoactive substances). Two further main outcome measures were chosen that were also key objectives in the organisation's treatment programme. That is, the acceptance of the importance of peer relationships via the promotion of AA affiliation and the development of spiritual awareness.

### **Assessment Order Effects**

Connors et al. (1994) suggest much consideration is given to the use and sequencing of assessment items to account for potential order effects. Priming questions were used to offset potential order effects and minimise the influence that answering one set of questionnaire items had on others. For example, the author was particularly interested in assessing the relationship between continuous abstinence at follow-up and completion/non-completion of treatment. Thus, a decision was made to use quantity-frequency measures at the beginning of the questionnaire to minimise carry over effects. It was also decided that summative, 30-day measures would precede 90-day quantity frequency measures. Given the literature stating that a 30-day period may not yield a reliable and meaningful difference a 90-day period was also selected (WHO, 2000).

In a comparable manner the item regarding spiritual experience or awakening as a result of AA involvement preceded the question on AA attendance. Similar consideration was given to the ordering of questions regarding the use of illicit drugs.

In total, 11 measures were chosen which are detailed as follows:

1. Alcohol consumption in the most recent 30 days.
2. Number of day's alcohol was consumed in the most recent 30 days.
3. Amount of alcohol consumed in units in the most recent 30 days.
4. Alcohol consumption in the most recent 90 days.
5. Number of day's alcohol was consumed in the most recent 90 days.
6. Amount of alcohol consumed in units in the most recent 90 days.
7. Use of illicit drugs in the most recent 90 days.
8. Type of drug used.
9. Maintenance of continuous abstinence from all psychoactive substance use since assessment or date of leaving treatment centre.

10. Having a spiritual experience or awakening as a result of AA involvement.

11. Number of AA meetings attended in the most recent 90 days.

### **Data Input**

To maximise accuracy of data input the author employed the dual entry method. Thus, all pre-treatment baseline data was entered onto an Excel spreadsheet twice with the intention of locating errors that are within the normal range but incorrect. The same process was used for all post-treatment data.

Suggested guidelines were followed when reading Excel data into SPSS. Two separate SPSS files were created for baseline and outcome data. Follow-up SPSS data files were added to pre-treatment data with the assistance of the author's research supervisor to minimise chances of error.

A total of 27 variables were created for the purpose of statistical analyses (see Appendix VI). The column entitled "group" contained two categories of research participants: 1) individuals discharged from treatment and, 2) individuals who were assessed and completed treatment. The column entitled "Com" consists of 3 categories of research participants; 1) individuals who were assessed but not admitted to the treatment programme; 2) participants that were admitted but were discharged for various reasons; and, 3) participants who completed their treatment.

## 5 RESULTS

This chapter contains data analyses that are central to the research enquiry (data is collapsed where necessary). Descriptive statistics provide summaries of raw data showing the means, standard deviations and other relevant measures of dispersion. Inferential statistical analyses relating to outcomes address each hypothesis in turn. Given the pragmatic design of this study, it was not possible to control for possible significant differences between the means of baseline variables and follow-up periods. Nonetheless, statistical tests were run on specific pre-treatment baseline variables that may have influenced primary outcome measures. All tables (unless otherwise specified) reporting baseline data give statistics for the recruited sample (n=137) and tables showing follow-up data provide results from participants (n=104) who completed outcome measures.

### 5.1 Descriptive and Inferential Statistical Analyses

The following descriptive cross-sectional demographic data were collected from the baseline and outcome data. **Table 1.4** shows the ethnic and gender statistics for all participants who consented to take part in the research evaluation. It indicates that the gender mix is roughly even (46.7% and 53.3% for males and females respectively).

**Table 1.4** Frequency table for baseline ethnic and gender distribution of participants

		ETHNICITY		Total
		British White	Other	
GENDER	M	46	18	64
	F	55	18	73
Total		101	36	137

Observation of **Table 1.4** indicates that the majority of participants (n=101) identified their ethnicity as British white. A number of the participants (n=20; data not shown) who were of white European origin chose to specify their ethnicity. Of these 20 participants, ethnic descriptions included the following identities: British Other; European; Irish; Other; European Danish; British Australian; White European; White South African; Russian/German; White South American; and, British White Jewish.

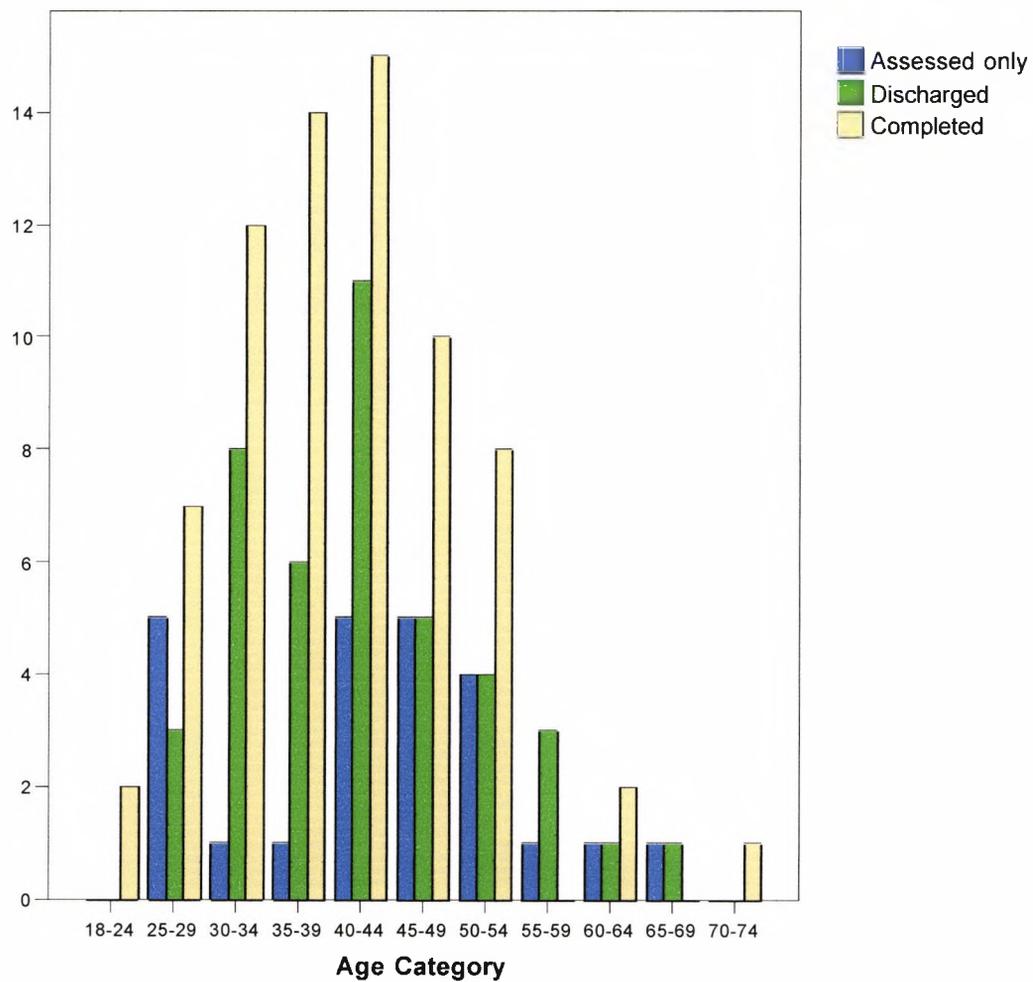
**Table 1.5** shows the mean age of all research participants (M=41.32) and the standard deviation (SD=9.84). It also gives the mean age and standard deviation for the three groups of participants.

**Table 1.5 Comparison of participants' age distributions at baseline**

	Mean	N	Std. Deviation
Assessed only	43.71	24	11.48
Discharged	41.93	42	9.41
Completed	40.15	71	9.45
Total	41.32	137	9.84

The bar chart in **Figure 1.2** shows the age distribution of all research participants and indicates that the majority of individuals (n=31; 22.6% of the selected sample) seeking treatment were in the age range of 40-44. The smallest age group of participants is 70-74 years (n=1; 0.72% of selected sample).

**Figure 1.2** Bar chart of baseline data on age distribution of participants



The next variable of interest is the participants' alcohol consumption patterns at baseline. **Table 1.6** shows the mean number of abstinence days that participants achieved at baseline.

**Table 1.6 Comparison of participants' abstinence data at baseline**

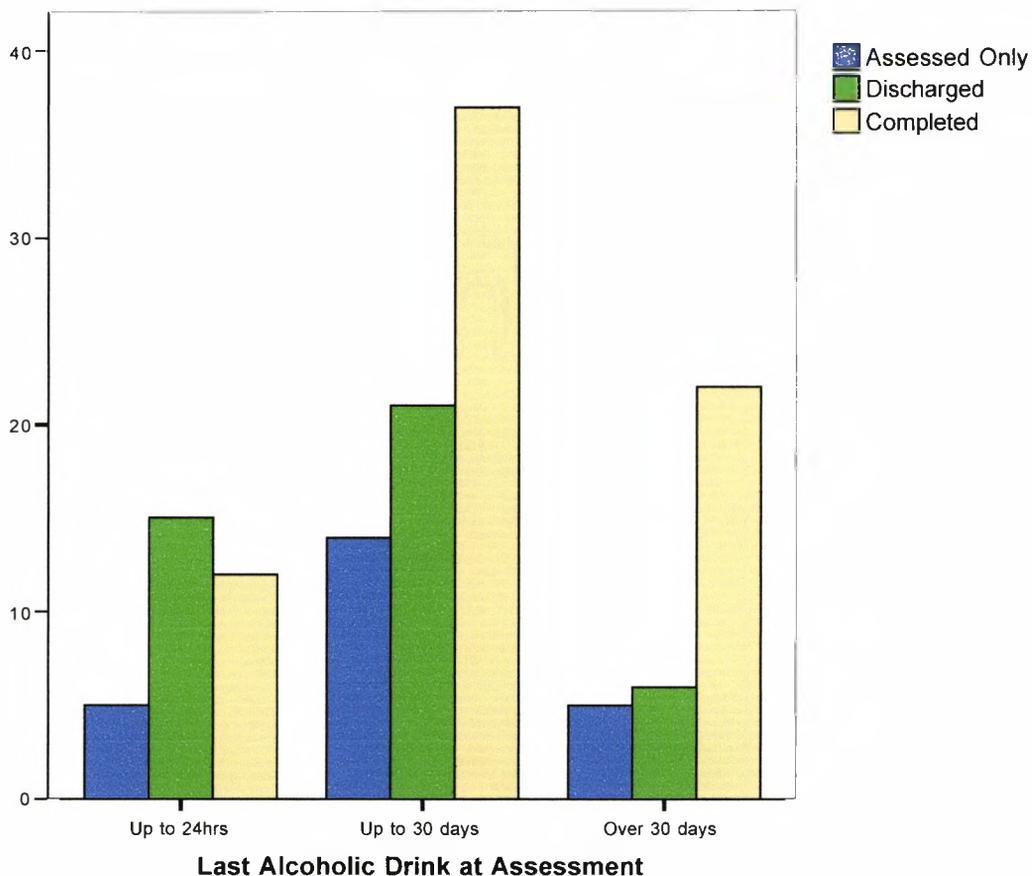
	Mean	N	Std. Deviation
Assessed only	26.50	24	43.93
Discharged	20.76	42	43.37
Completed	27.73	71	42.32
Total	25.38	137	42.72

The bar chart of baseline data regarding the date of last alcoholic drink is reported in three categories shown in **Figure 1.3**. Participants who had consumed alcohol within the last 24 hours, up to 30 days, and over 30 days ago, prior to their assessment are shown.

The majority of participants (n=72) had consumed their last alcoholic drink within the most recent 30 days prior to their assessment at the treatment centre. Participants who had consumed their last alcoholic drink within the most recent 24 hours prior to their assessment (n=32) made up the smallest category. **Figure 1.3** also shows that pattern of responses are similar for participants who reported consuming their last alcoholic drink within or over 30 days prior to assessment.

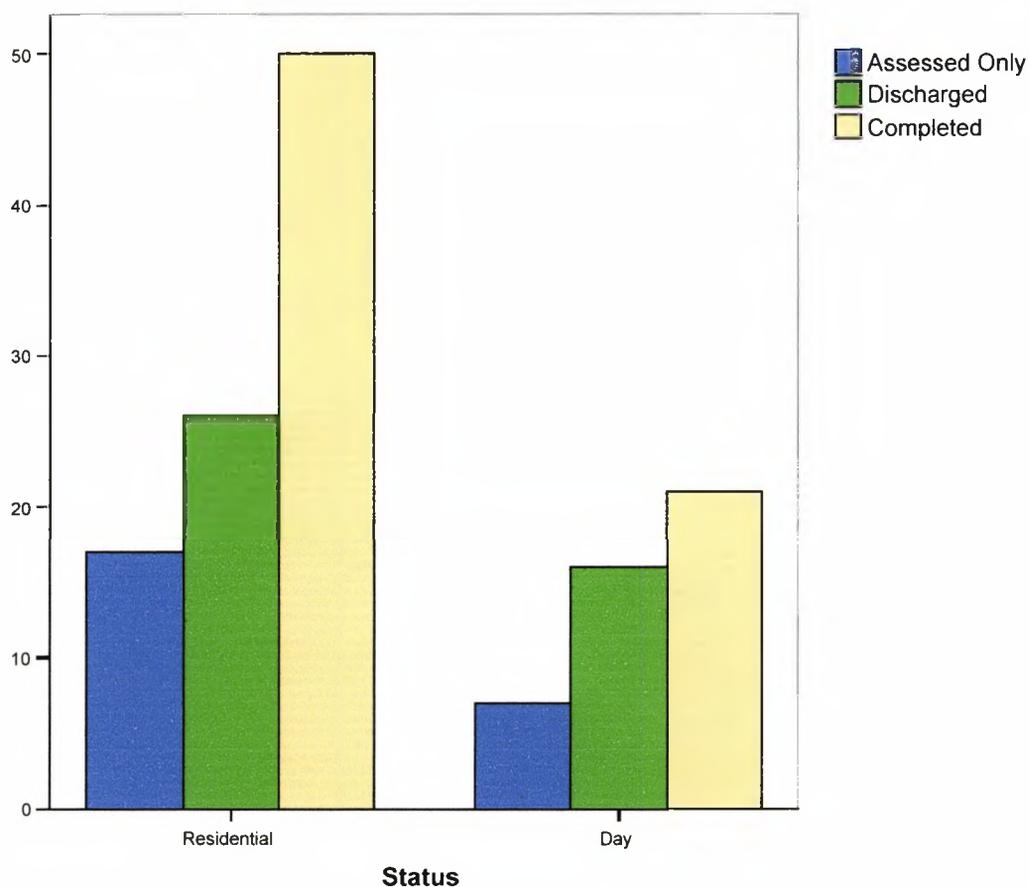
Of those consuming their last alcoholic drink within or over 30 days prior to assessment, participants who completed treatment made up the largest group. This seems to be consistent with literature regarding motivation and the cycle of change (Slattery et al., 2003; Raistrick et al., 2006).

**Figure 1.3** Bar chart of baseline data on participants' date of last alcoholic drink



**Figure 1.4** shows the number of participants (n=137) in the selected sample that were assessed for residential or day treatment. It also gives the status of participants regarding their involvement with the treatment centre (i.e., those that were assessed only, discharged or completed).

**Figure 1.4** Bar chart of baseline data on participants' treatment status



**Table 1.7** shows the mean follow-up periods for the three groups of participants and gives a comparison of alcohol consumption outcome data for the total sample. Participants that completed treatment (n=55) recorded the highest mean follow-up periods. The lowest mean follow-up periods are from participants who were assessed only (n=18).

**Table 1.7 Comparison of participants' follow-up periods and drinking outcome data**

	Mean follow-up period in years	N	Std. Deviation
Assessed only	1.33	18	0.49
Discharged	1.87	31	0.85
Completed	2.04	55	0.86
Total	1.87	104	0.84
	Mean No. of days used in 30	N	Std. Deviation
Assessed only	8.33	18	13.83
Discharged	8.68	31	12.30
Completed	2.64	55	7.44
Total	5.42	104	10.65
	Mean No. of units used in 30	N	Std. Deviation
Assessed only	5.00	18	9.29
Discharged	9.22	31	13.04
Completed	3.32	55	9.55
Total	5.37	104	10.88
	Mean No. of Days used in 90	N	Std. Deviation
Assessed only	25.44	18	41.22
Discharged	27.23	31	35.30
Completed	5.69	55	17.19
Total	15.53	104	30.14

	Mean No. of Units used in 90	N	Std. Deviation
Assessed only	7.74	18	12.23
Discharged	13.23	31	17.48
Completed	3.13	55	8.46
Total	6.94	104	13.08

### Feelings about AA

Participants' feelings (completers' and non-completers' of treatment) toward AA at baseline are given in **Table 1.8** and form three categorical responses (positive, mixed and negative). Eighty-two participants (59.9% of the total selected sample) stated having positive feelings toward AA. Of this group, there are 37 non-completers' and 45 completers' of treatment.

**Table 1.8** Frequency table for baseline data on participants' feelings toward AA

AA feelings	Participants		Total
	Non-completers'	Completers'	
Positi	37	45	82
Mixed	22	21	43
Negati	7	5	12
Total	66	71	137

The Pearson chi-square analysis in **Table 1.9** tested the strength of association between treatment completers' and non-completers' baseline feelings toward AA. There was no significant association with baseline feelings about AA between completers' and non-completers' of treatment ( $\chi^2 = 0.956$ ,  $df = 2$ ,  $p = 0.620$ ).

**Table 1.9 Pearson chi-square statistics for the association between treatment completers' and non-completers' baseline feelings toward AA**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.956(a)	2	.620
Likelihood Ratio	.957	2	.620
Linear-by-Linear Association	.900	1	.343
N of Valid Cases	137		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.78.

### Mental Health

Baseline data given in **Table 2.1** shows that 88 participants (64.2% of the total selected sample) reported experience of mental health problems and 48 participants (35% of the total selected sample) had no such experience. The crosstabulation in **Table 2.1** shows that in both groups (completers', n=70; and non-completers', n=66) experience of mental health problems were more prevalent than no such experience. There is one missing value within the presented data.

**Table 2.1 Baseline experience of mental health \* completers' and non-completers' of treatment crosstabulation**

Mental Health	Participants		Total
	Non-completers'	Completers'	
Yes	42	46	88
No	24	24	48
Total	66	70	136

The Pearson chi-square analysis in **Table 2.2** shows the strength of association for baseline reports of mental health problems between completers' and non-completers' of treatment. There

was no significant association in experience of mental health problems between completers' and non-completers' of treatment ( $X^2 = 0.064$ ,  $df = 1$ ,  $p = 0.800$ ).

**Table 2.2 Pearson chi-square statistics for baseline experience of mental health problems between completers' and non-completers' of treatment**

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.064(b)	1	.800		
Continuity Correction(a)	.005	1	.941		
Likelihood Ratio	.064	1	.800		
Fisher's Exact Test				.858	.470
Linear-by-Linear Association	.064	1	.801		
N of Valid Cases	136				

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 23.29.

### Suicide Attempts

**Table 2.3** gives baseline reports of suicide attempts. The crosstabulation shows the responses for three groups, participants who were assessed only or discharged and those that completed treatment. Eighty-one participants (59.1% of the total selected sample) said they had not attempted suicide and 56 (40.9% of the total selected sample) reported that they had made at least one attempt to take their own life. In all three groups the number of participants that reported attempts at suicide is less than those that stated otherwise.

**Table 2.3 Baseline reports of participant suicide attempts \* assessment outcome crosstabulation**

Suicide Attempt(s)	Participants			Total
	Assessed only	Discharged	Completed	
No	15	24	42	81
Yes	9	18	29	56
Total	24	42	71	137

The Pearson chi-square analysis in **Table 2.4** tested the strength of association between baseline reports of suicide attempts and assessment outcome. There is no association between suicide attempts and assessment outcome ( $X^2 = 0.181$ ,  $df = 2$ ,  $p = 0.913$ ). Therefore baseline reports on suicide attempts are not significantly associated with assessment outcomes.

**Table 2.4 Pearson chi-square statistics for participants' baseline reports on suicide attempts and assessment outcome**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.181(a)	2	.913
Likelihood Ratio	.182	2	.913
Linear-by-Linear Association	.032	1	.857
N of Valid Cases	137		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.81.

### Gender

**Table 1.4** shows the gender statistics for all participants in the study and indicates that there were slightly more females than males in all but one of the groups. The Pearson chi-square analysis in **Table 2.5** tested the strength of association between gender and assessment outcomes. There is no association between baseline reports on gender and assessment outcome ( $X^2 = 0.267$ ,  $df = 2$ ,  $p = 0.875$ ). Therefore gender is not significantly associated with assessment outcome.

**Table 2.5 Pearson chi-square statistic for gender status and assessment outcome**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.267(a)	2	.875
Likelihood Ratio	.266	2	.875
Linear-by-Linear Association	.046	1	.830
N of Valid Cases	137		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.21.

## Ethnicity

**Table 1.4** shows the baseline frequency statistics for ethnicity. The main category that participants chose to describe their ethnicity was British white (73.7% of the total). **Table 2.6** gives the Pearson chi-square analysis used to determine the association between ethnicity and assessment outcome. There is no association between baseline reports on ethnicity and assessment outcome ( $X^2 = 1.244$ ,  $df = 2$ ,  $p = 0.537$ ).

**Table 2.6** Pearson chi-square statistics for ethnicity and assessment outcome

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.244(a)	2	.537
Likelihood Ratio	1.229	2	.541
Linear-by-Linear Association	1.230	1	.267
N of Valid Cases	137		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.31.

## **5.2 Inferential Statistical Analyses Relating to Outcomes**

### **The association between continuous abstinence at follow-up and assessment outcome**

**H<sup>1</sup> There will be a significant association between continuous abstinence at follow-up and completion of treatment.**

A Pearson chi-square analysis was used to examine the statistical significance of associations between continuous abstinence at follow-up and assessment outcome. As stated, the total follow up sample (n=104) was divided into 3 groups based on participant assessment outcomes (i.e. assessed only, non-completers' and completers' of treatment). A crosstabulation table produced by SPSS in **Table 2.7** contains the number of cases that fall into each combination of categories.

**Table 2.7 Follow-up reports on continuous abstinence \* assessment outcome crosstabulation**

	Continuous Abstinence		Total
	Yes	No	
<b>Assessed only</b>	3	15	18
Expected Count	7.1	10.9	18.0
% within total	16.7%	83.3%	100.0%
% within group	7.3%	23.8%	17.3%
% of Total	2.9%	14.4%	17.3%
<b>Discharged</b>	6	25	31
Expected Count	12.2	18.8	31.0
% within total	19.4%	80.6%	100.0%
% within group	14.6%	39.7%	29.8%
% of Total	5.8%	24.0%	29.8%
<b>Completed</b>	32	23	55
Expected Count	21.7	33.3	55.0
% within total	58.2%	41.8%	100.0%
% within group	78.0%	36.5%	52.9%
% of Total	30.8%	22.1%	52.9%
<b>Total</b>	41	63	104
Expected Count	41.0	63.0	104.0
% within Total	39.4%	60.6%	100.0%
% within Sample	100.0%	100.0%	100.0%
% of Total	39.4%	60.6%	100.0%

The Pearson chi-square analysis in **Table 2.8** shows that no expected counts are less than five. The degrees of freedom (2) and value of the chi-square statistic (17.235) is given in **Table 2.8**

**Table 2.8 Pearson chi-square statistic for the association between continuous abstinence at follow-up and assessment outcome**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	17.235(a)	2	.000
Likelihood Ratio	18.036	2	.000
Linear-by-Linear Association	14.398	1	.000
N of Valid Cases	104		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.10.

This analysis clearly indicates that being assessed and completing treatment has a very significant association ( $p < 0.0001$ ) with the ability to maintain continuous abstinence from all psychoactive substances at post-treatment follow-up periods of between one to three or more years. Therefore, Hypothesis 1 is supported.

This highly significant result indicates that there is an association between treatment groups at follow-up. The pattern of responses given by the participants in each of the three groups (i.e., assessed only, non-completion and completion) is significantly different. This highly significant finding reflects the fact that participants who completed treatment are more likely to be abstinent at follow-up than those who did not commence treatment or were discharged.

This finding is highlighted by the odds ratio. **Table 2.7** shows 32 out of the 55 participants maintained continuous abstinence at follow-up while 23 had relapsed. Thus, of the participants completing treatment, the probability of maintaining continuous abstinence is 32/55 or 0.581 and

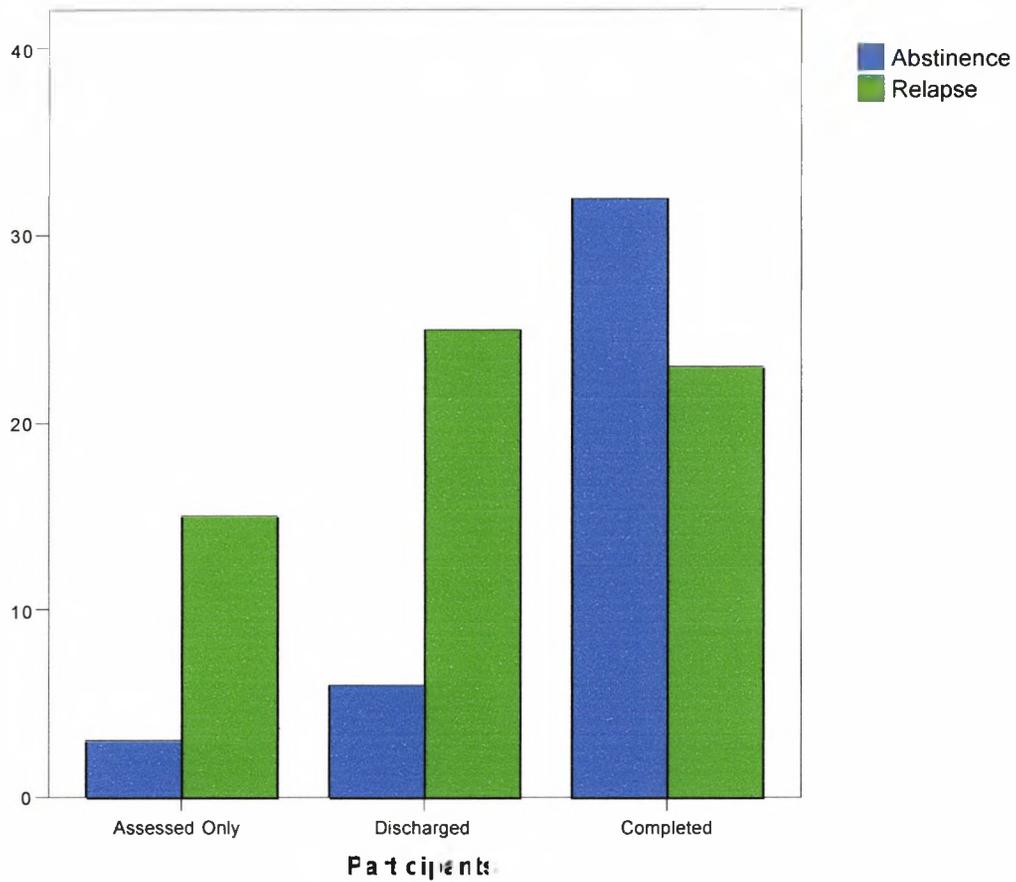
the probability of relapsing is 23/55 or 0.418. The odds, for the completion group, in maintaining abstinence relative to relapse are 32/23 or 1.391.

It follows, that the odds in maintaining continuous abstinence relative to relapse for participants who were assessed only or discharged are 0.2 and 0.24 respectively. Thus the probability of maintaining continuous abstinence for participants who were assessed only or discharged is almost identical.

Given the above, the odds ratio of the probability of participants maintaining abstinence at follow-up via completion of treatment versus those who were assessed only or discharged can be stated. The odds for those that completed treatment divided by the odds for participants who were assessed only or discharged is 6.995 and 5.796 respectively. Thus participants who completed treatment are between six and seven times more likely to maintain abstinence at follow-up than those who were assessed only or discharged.

**Figure 1.5** clearly highlights the odds ratios in the three groups; the pattern of responses for participants who completed treatment is in reverse to those that were assessed only or discharged. Therefore, it is concluded that assessment followed by completion of treatment significantly influences the likelihood of maintaining continuous abstinence at follow-up.

**Figure 1.5** Bar chart of grouped participants' responses to continuous abstinence at follow-up



An additional statistical test produced by SPSS in **Table 2.9** measures the strength of the aforementioned associations. The Contingency coefficient statistic (0.377) represents a strong association between completion of treatment and maintenance of continuous abstinence at follow-up. This value is highly significant ( $p < 0.0001$ ) indicating that the results are unlikely to have happened by chance.

**Table 2.9 Symmetric Measures for grouped participants' responses to continuous abstinence at follow-up and assessment outcome**

	Value	Approx. Sig.
Nominal by Nominal Contingency Coefficient	.377	.000
N of Valid Cases	104	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

**The association between treatment completers' and non-completers' in having a spiritual experience or awakening as a result of AA involvement**

**H<sup>2</sup> There will be a significant association between having had a spiritual experience or awakening as a result of AA involvement and completion of treatment**

The crosstabulation for participants' responses to having had a spiritual experience or awakening as a result of their involvement in AA are grouped into two categories. The two groups represent completers' and non-completers' of treatment and are given in **Table 3.1**. Of the 104 participants that were followed-up 96 (92% of the total outcome sample) gave responses to this item.

**Table 3.1 Participants' responses to having had a spiritual experience or awakening as a result of AA involvement \* completers' and non-completers' of treatment crosstabulation**

	Spiritual experience or awakening		Total
	Yes	No	
Non-C	15	30	45
Comp	36	15	51
Total	51	45	96

**Table 3.1** shows 51 participants (53.1%) said ‘yes’ and 45 participants (46.9%) said ‘no’ to having had a spiritual experience or awakening as a result of their involvement in AA. The Pearson chi-square analysis in **Table 3.2** shows the significance of the association between reports of having had a spiritual experience or awakening and completion of treatment. The value of the Pearson chi-square is highly significant ( $p < 0.0001$ ) and clearly indicates that completing treatment has a very significant association with reports of having a spiritual experience or awakening.

**Table 3.2 Pearson chi-square statistic for completers’ and non-completers’ responses to having had a spiritual experience or awakening as a result of AA involvement**

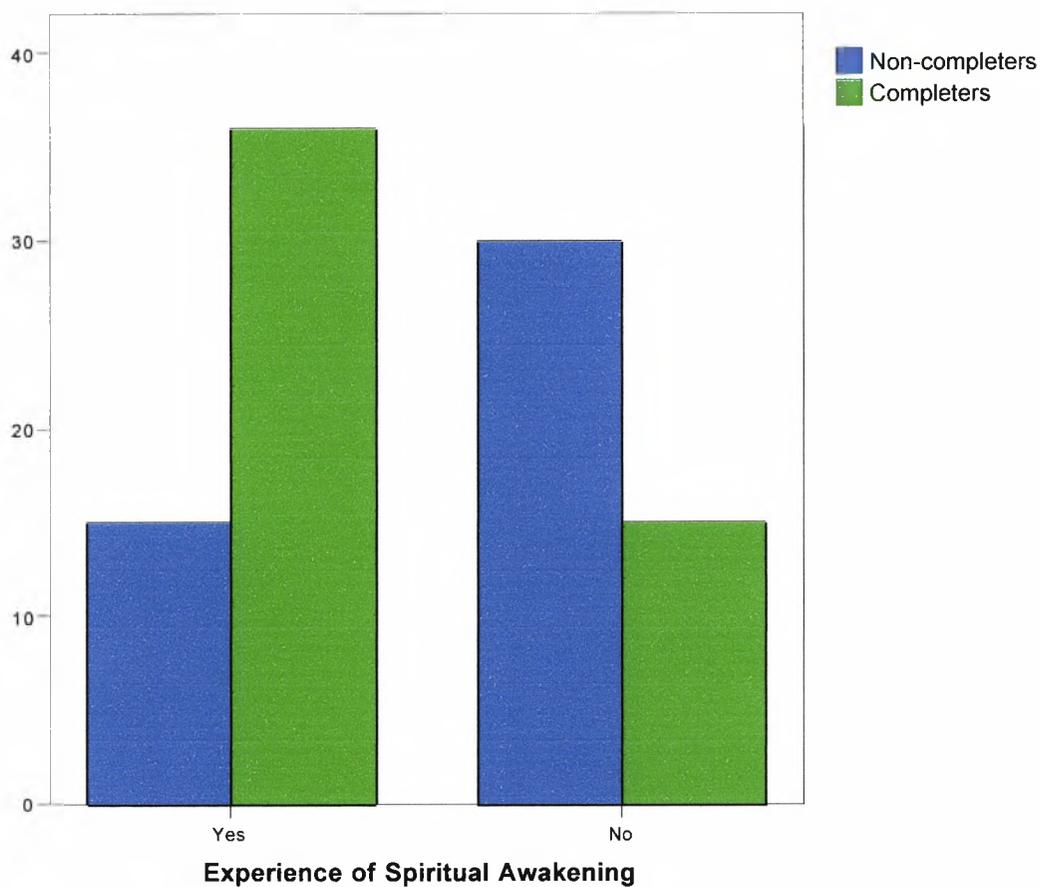
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	13.324(b)	1	.000		
Continuity Correction(a)	11.870	1	.001		
Likelihood Ratio	13.631	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	13.185	1	.000		
N of Valid Cases	96				

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 21.09.

**Figure 1.6** clearly highlights the pattern of responses for participants who completed and those that were assessed only or did not complete. It is concluded that assessment followed by completion of treatment is significantly associated with reports of having a spiritual experience or awakening as a result of AA involvement. Therefore Hypothesis 2 is supported.

**Figure 1.6** Bar chart of treatment completers' and non-completers' responses to having had a spiritual experience or awakening as a result of AA involvement



**The association between completing treatment and AA meeting attendance in the most recent 90 days at follow-up**

**H<sup>3</sup> There will be a significant association between AA attendance during the most recent 90 days at follow-up and completion of treatment**

Participants' responses to attendance at AA meetings during the most recent 90 days at point of follow-up are given in **Table 3.3**. Responses are averaged and divided into 3 categories (no attendance, less than 3 meetings and 3 or more meetings per week) for completers' and non-completers' of treatment.

**Table 3.3 Participants' responses to AA meeting attendance during the most recent 90 days at follow-up \* treatment completers' and non-completers' crosstabulation**

	AA meeting attendance per week			Total
	None	Less than three	Three or more	
Non-C	23	10	16	49
Comp	18	11	26	55
Total	41	21	42	104

A crosstabulation table produced by SPSS is shown in **Table 3.3**. The Pearson chi-square analysis in **Table 3.4** examines the strength of association between AA meeting attendance in the most recent 90 days at follow-up and completion/non-completion of treatment.

**Table 3.4 Pearson chi-square analysis of the association between treatment completers' and non-completers' AA meeting attendance during the most recent 90 days at follow-up**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.701(a)	2	.259
Likelihood Ratio	2.717	2	.257
Linear-by-Linear Association	2.673	1	.102
N of Valid Cases	104		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.89.

The Pearson chi-square statistic is not significant ( $p < 0.259$ ) indicating that there is no association between treatment completers' and non-completers' AA meeting attendance in the most recent 90 days at follow-up. Therefore Hypothesis 3 is rejected and the null hypothesis supported.

**The association between treatment completers' and non-completers' abstinence from alcohol during the most recent 30 days at follow-up**

**H<sup>4</sup> There will be a significant association between abstinence from alcohol during the most recent 30 days at follow-up and completion of treatment**

Participants' responses to the use of alcohol in the most recent 30 days at point of follow-up are given in **Table 3.5**.

**Table 3.5 Alcohol consumption during the most recent 30 days at follow-up \* treatment completers' and non-completers' crosstabulation**

	Alcohol Use in the most recent 30 days		Total
	Yes	No	
Non-C	19	30	49
Comp	10	45	55
Total	29	75	104

Analyses of the response to alcohol consumption in the most recent 30 days at point of follow-up are given in **Table 3.6**.

**Table 3.6 Pearson chi-square statistic for treatment completers' and non-completers' response to alcohol consumption in the most recent 30 days at follow-up**

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	5.465(b)	1	.019		
Continuity Correction(a)	4.489	1	.034		
Likelihood Ratio	5.514	1	.019		
Fisher's Exact Test				.028	.017
Linear-by-Linear Association	5.413	1	.020		
N of Valid Cases	104				

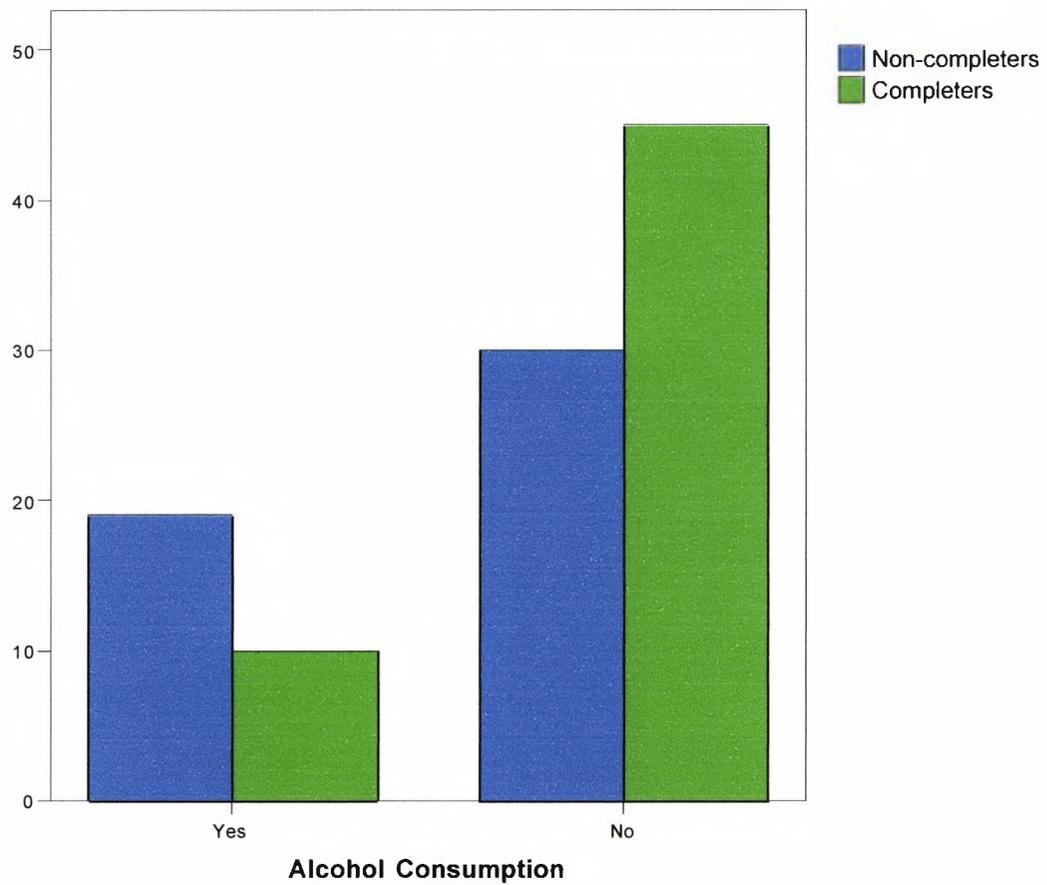
a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.66

The value of the Pearson chi-square is significant ( $p < 0.019$ ) and indicates that completion or non-completion of treatment has a significant association with abstinence in the most recent 30 days at point of follow-up. **Table 3.6** includes the degree of freedom (1) and value of the Likelihood ratio (5.514) that is significant ( $p < 0.019$ ). Therefore the probability of obtaining the current outcome data is maximized. The degree of freedom (1) and value of the Linear-by-linear association (5.413) is also significant ( $p < 0.020$ ).

**Figure 1.7** shows a bar chart of participant responses to alcohol consumption during the most recent 30 days at follow-up. The bar chart clearly shows a contrast in participant responses with non-completers' of treatment being the minority amongst those reporting abstinence. Completers' of treatment, however, are in the minority of participants reporting alcohol consumption in the most recent 30 days at follow-up.

**Figure 1.7** Bar chart of treatment completers' and non-completers' response to alcohol consumption during the most recent 30 days at follow-up



**The association between treatment completers' and non-completers' abstinence from alcohol during the most recent 90 days at follow-up**

**H<sup>5</sup> There will be a significant association between abstinence from alcohol during the most recent 90 days at follow-up and completion of treatment**

Responses to the use of alcohol in the most recent 90 days at point of follow-up are given in **Table 3.7**.

**Table 3.7 Alcohol consumption during the most recent 90 days at follow-up \* treatment completers' and non-completers' crosstabulation**

	Alcohol Use in the most recent 90 days		Total
	Yes	No	
Non-C	24	25	49
Comp	11	44	55
Total	35	69	104

The Pearson chi-square analysis in **Table 3.8** shows that being assessed and completing treatment has a significant association with maintaining abstinence from alcohol during the most recent 90 days at follow-up. Therefore, Hypothesis 5 is supported.

**Table 3.8 Pearson chi-square statistic for treatment completers' and non-completers' response to alcohol consumption in the most recent 90 days at follow-up**

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	9.747(b)	1	.002		
Continuity Correction(a)	8.492	1	.004		
Likelihood Ratio	9.900	1	.002		
Fisher's Exact Test				.003	.002
Linear-by-Linear Association	9.653	1	.002		
N of Valid Cases	104				

a Computed only for a 2x2 table

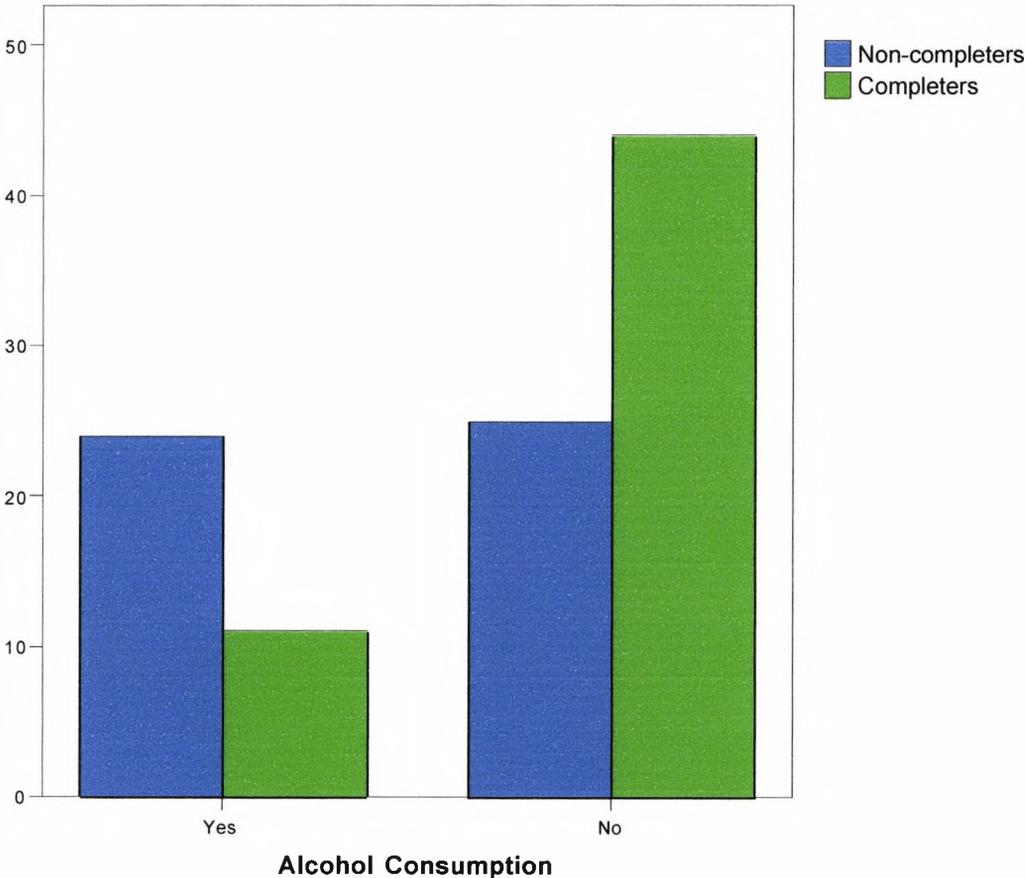
b 0 cells (.0%) have expected count less than 5. The minimum expected count is 16.49.

**Table 3.7** shows that 44 out of the 55 participants (who completed treatment) maintained abstinence during the most recent 90 days at point of follow-up while 11 had consumed alcohol. Thus, of the participants completing treatment, the probability of maintaining abstinence is  $44/55$  or 0.8 and the probability of relapsing is  $11/55$  or 0.2. The odds, for the completion group, in maintaining abstinence relative to relapse are  $44/11$  or 4. It follows, that the odds in maintaining abstinence relative to relapse for participants who were assessed only or discharged are  $25/24$  or 1.042.

Given the above, the odds ratio of the probability of participants maintaining abstinence during the most recent 90 days at point of follow-up via completion of treatment versus those who were assessed only or discharged can be stated. The odds for those that completed treatment divided by the odds for participants who were assessed only or discharged is 3.838. Thus participants who completed treatment are nearly 4 times more likely to maintain abstinence during the most recent 90 days at point of follow-up than those who were assessed only or discharged.

**Figure 1.8** clearly highlights the odds ratio in the two groups: the pattern of responses for participants who completed treatment is in contrast to those that were assessed only or discharged. Therefore, it is concluded that assessment followed by completion of treatment is significantly associated with reports on maintaining abstinence during the most recent 90 days at point of follow-up.

**Figure 1.8** Bar chart of participants' responses to alcohol consumption in the most recent 90 days at follow-up



## 6 DISCUSSION

This chapter will review major findings and research objectives. The clinical relevance of this study will also be addressed and its findings will be related to similar studies. Where applicable, alternative explanations of findings will be stated and comments shall be made with regard to the limitations of this study. Ethical and other implications of this study shall also be considered and suggestions for further research will be made that have arisen as a result of this investigation.

Overall, the results of the outcome evaluation supported hypotheses 1, 2, 4 and 5. Hypothesis 3 was not supported. An interpretation of the results will be made in conjunction with published literature discussed in previous chapters.

### 6.1 Main Findings

The findings show that there are statistically significant and clinically relevant outcomes that have emerged from this research investigation. The most relevant finding, in light of current alcohol outcome literature and organisational objectives, are the differences found in outcomes between groups of participants who were completers' and non-completers' of treatment.

A further significant and main finding is in direct contrast to previous studies and challenges the Minnesota Model theory of therapeutic intervention as applied to the treatment of alcohol addiction within this setting. The significance and hypotheses of the main findings are discussed in turn, as follows:

## Hypothesis One

*There will be a significant association between continuous abstinence at follow-up and completion of treatment*

The Pearson chi-square analysis for hypothesis one produced a highly significant result ( $p < 0.0001$ ). This finding indicates a strong association between completion status and outcome. Consistent with treatment objectives, results show that participants who complete treatment are more likely to be abstinent at follow-up than those who were assessed only or discharged. At one to three or more years follow-up (of the 55 participants that completed treatment) reported continuous abstinence rates were 58.18% ( $n=32$ ).

The above result is groundbreaking in comparison to reported continuous abstinence outcomes for UK Minnesota Model programmes in the alcohol treatment literature. For example, the Castle Craig Hospital ECU (2000) study reported continuous abstinence rates of 44% for participants that completed treatment with a mean follow-up period of less than 18 months. Morojele and Stephenson (1994) report 12-month post-treatment follow-up abstinence rates of 49%. Moreover, Hazelden (one of the pioneering Minnesota Model programmes) outcomes reported by Stinchfield and Owen (1998) show abstinence rates of 52.8% at 12-month follow-up.

More recent European outcomes reported by Bodin (2006) and Grønbaek and Nielsen (2007) show abstinence rates of 31% and 35% respectively, at 12-month follow-up for participants engaged with Minnesota Model treatment. With regard to the Bodin (2006) study, post-treatment abstinence rates had reduced to 19% at 24-month follow-up.

More importantly, the author's finding answers the intricate question of whether individuals who obtain a specific treatment experience better outcomes than those who do not. Indeed, a sustained criticism of Project MATCH is that (despite the considerable expertise and expense involved)

investigators overlooked the significance of including an untreated comparison group in its design. Thus, although good post-treatment outcomes were achieved it is not known if similar results would have occurred if participants remained untreated.

What is particularly revealing about this finding is highlighted in the respective odds ratio for the three groups. Participants who did not complete the treatment programme (i.e., those who were assessed only or discharged) have similar odds (0.2 and 0.4) in maintaining abstinence relative to relapse at follow-up.

Remarkably, as stated, participants who completed their treatment programme had odds of 1.391 in maintaining abstinence relative to relapse at follow-up. The odds for those that completed treatment divided by the odds for participants who were assessed only or discharged is 6.995 and 5.796 respectively. It followed, therefore, that participants who completed treatment are between six and seven times more likely to have maintained continuous abstinence at follow-up than those who were assessed only or discharged.

In light of the systematic review by Ferri et al. (2006) on AA and other 12-step programmes for alcohol dependence the above finding seems to be particularly relevant. Ferri et al. (2006) conclude that no experimental studies unequivocally demonstrate the effectiveness of AA or 12-step approaches for reducing alcohol dependence or problems. The finding in this study would appear to provide further indication that this may not be the case for all 12-step programmes. The highly significant findings may represent the variance in treatment conception and delivery between Minnesota Model programmes. On the other hand, there may be other factors that may account for the results.

Given the above it would appear that abstinence outcomes in this study are similar to or better than those in current alcohol treatment literature. However, researchers in the field of therapy outcomes (e.g., Luborsky, Singer & Luborsky, 1975; Luborsky et al. 2002) show findings of a non-significant effect size between the outcomes of different therapies. Indeed, such findings are supported by results of the two most extensive (and expensive) alcohol treatment trials in North America and the UK (i.e., Project MATCH and UKATT).

Inevitably, this raises the debate of the legitimacy of total reliance on the medical model of psychology and psychotherapy that posits particular treatment effects for clients with specific diagnoses. Furthermore, studies that have examined other features of this model (e.g., component (dismantling) approaches; adherence to a manual; and, theoretically relevant interaction effects) have found little evidence to demonstrate its validity (Messer & Wampold, 2002).

In consideration of the above, it appears that the attribution of outcomes in this study may be located in areas that are extrinsic to Minnesota Model treatment itself. There is increasing evidence that attests to the commonality of mechanisms in varying therapeutic modalities that are the main determinants of treatment outcome. This includes reported evidence that elicits common factors prevalent in therapeutic delivery such as therapist effects (e.g., therapist-client alliance and therapist allegiance to a theoretical orientation). For example, Raistrick et al. (2006) state that therapist characteristics may account for between 10-50% of treatment outcome variance.

Another explanation for the attribution of outcomes in this study relates to the alcohol treatment literature on high drinking severity. Research evidence has consistently shown that high drinking severity is a strong predictor of adverse drinking outcomes after treatment. Further, high drinking severity at baseline is more frequently followed by abstinence as a recovery path than lower levels of drinking severity in treated and untreated individuals (Dawson et al., 2005; Vaillant,

1995; Miller, Leckman, Delaney & Tinkom 1992). Thus, for example, it may be argued that participants maintaining continuous abstinence constitute a very specific treatment group and would have achieved long-term sobriety using any evidenced-based approach that was delivered well.

Indeed, there are further factors that may explain follow-up outcomes in continued abstinence. There is growing evidence demonstrating that duration and continuity of care is more important than the amount or intensity of care. Findings by Ouimette et al. (1998) show research participants who obtained mental health care over a longer interval had better 12-month substance use outcomes than those who received a shorter interval of care.

### **Hypothesis Two**

***There will be a significant association between having had a spiritual experience or awakening as a result of AA involvement and completion of treatment***

Consistent with alcohol treatment objectives, research findings reveal a highly significant ( $p < 0.0001$ ) association with spiritual experience or awakening as a result of AA involvement and completion of treatment. Again, this finding would suggest that the treatment centre in question is meeting its treatment goal with regard to facilitating the development of spiritual awareness or experience among programme completers'.

An immediate question that may be raised with regard to the above finding is that participants completing treatment had better conceptual understandings or higher levels of spirituality than non-completers'. Thus, it may be argued that participant pre-treatment characteristics were predictive of responses to having a spiritual experience or awakening and treatment completion.

Given the non-existence of measures of spirituality in assessment procedures at the treatment centre in question. The design of this study did not afford the possibility of assessing relationships between pre-treatment levels of spirituality and treatment outcome.

Indeed, Sterling et al. (2006) report findings from recent research that is of significance to this finding. Previous research has demonstrated the association between spiritually based treatment programmes and recovery from alcoholism (Stinchfield & Owen, 1998; Bodin, 2006). However, it is often noted that such programmes may be ineffective for individuals who are not inclined to spirituality as a concept or method for treatment (Emrick & Tonigan, 2004).

It may be concurred that individuals would benefit from being offered treatments that correspond to their level spirituality. Thus, it is hypothesised that individuals would be more receptive to treatment, less likely to terminate treatment prematurely and more likely to report a reduced desire to continue drinking at the end of therapeutic intervention.

Sterling et al. (2006) tested this hypothesis by recruiting 405 participants who completed pre and post-treatment measures on level of spirituality and addiction severity. Participants were assigned to either Minnesota Model treatment or more conventional medical model based treatment that did not utilise the concept of spirituality in therapy. Both treatment modalities included participants with wide ranging levels of spirituality. Remarkably, findings revealed that incompatible matches between participants' level of spirituality and type of treatment received did not result in premature termination of treatment or adversely effect abstinence rates. Further, participants with low levels of spirituality who were delivered Minnesota Model treatment achieved satisfactory post-treatment outcomes.

It seems apparent, therefore, that recent findings by Sterling et al. (2006) are consistent with the author's findings. Indeed, they conclude that despite individual belief systems, exposure to the concept of spirituality contribute to optimal post-treatment outcomes. Sterling et al. (2006) hypothesised that individuals would achieve better treatment outcomes if specific conditions were met. Namely, individuals with pre-treatment levels of spirituality that are congruent with the type of therapy delivered would be ideally matched. Thus, individuals on appropriately matched programs would evidence better post-treatment outcomes.

In examining their entire sample, Sterling et al. (2006) found no matching effects between participant levels of spirituality and type of programme delivered. However, when analyses were restricted to participants in the upper or lower quartiles in spirituality a paradoxical effect was observed. Individuals with low spirituality scores that attended programmes in which spirituality was not a feature or emphasised had significantly poorer drinking outcomes that included abstinence efficacy and desire to drink.

Furthermore, findings are consistent with results obtained from hypothesis one that attests to the effectiveness of treatment in maintaining continuous abstinence. As stated, Jung précis the *sine qua non* of Minnesota Model treatment in his dictum *spiritus contra spiritum*. It may be posited, therefore, that there is a strong association with hypothesis one and two that is predictive of treatment outcomes. Indeed, there has been research that explains the possible connection between treatment, abstinence and spirituality.

Tonigan's (2003) 10-year follow-up study of 224 participants from Project MATCH found that spirituality affects treatment outcomes albeit indirectly. It was found that increases in spirituality predicted behaviours such as honesty and responsibility. As indicated in chapter two,

development of these attributes in Minnesota Model programmes are prerequisite to treatment objectives.

Clients on Minnesota Model programmes 'work through' the first five steps of AA. The importance of honest and responsible behaviour is made explicit in steps one, four and five of the 12-steps of AA. Tonigan's (2003) findings showed that increases in spirituality predicted such behaviours and, in turn, promoted abstinence from alcohol.

### **Hypothesis Three**

***There will be a significant association between AA attendance during the most recent 90 days at follow-up and completion of treatment***

The finding for hypothesis three is not statistically significant ( $p < 0.259$ ) and suggests that the treatment centre in question is not achieving one of its aims. That is, following Minnesota Model treatment, the centre attempts to foster acceptance of the importance of peer relationships via ongoing attendance and affiliation with the AA Fellowship.

As stated, there is a large volume of research that documents the effectiveness of AA in facilitating individuals to maintain abstinence from alcohol. Clients completing Minnesota Model treatment are expected to continue with the 12-steps of AA as they are only taken through steps one to five on completion of their programme. Thus, in theory, clients attending the treatment centre in question are still in the process of developing appropriate levels of spirituality that will foster maintenance of continued abstinence upon completion of treatment. It is maintained that continued AA affiliation after completion of treatment is paramount to continued abstinence (Emrick & Tonigan, 2004).

In light of the above, there is considerable evidence that demonstrates the necessity of continued AA affiliation upon completion of Minnesota Model treatment. Humphreys, Huebsch, Finney and Moos (1999) and the Project MATCH Research Group (1998b) provide empirical support for this proposition in their extensive investigations. They demonstrate that Minnesota Model oriented treatment results in a higher percentage of client involvement in 12-step groups that, in turn, produces higher abstinence rates.

Indeed, Humphreys et al. (1999) and Project MATCH Research Group (1998b) findings are of considerable concern as they contradict the author's findings. Specifically, the findings from this investigation indicate that completion of treatment is associated with abstinence but not AA attendance at post-treatment follow-up. This raises fundamental questions with regard to the specific process, mechanism or systems that contribute to effective treatment and desired outcomes at the treatment centre and the Minnesota Model programme in general. An immediate question that arises relates to possible mechanisms other than continued AA attendance or involvement that effect abstinence at follow-up.

In light of the above, analyses by Moos (2003) regarding principles and puzzles in effective treatment and recovery will be addressed as it facilitates further examination of the questions raised in this study. In these analyses reviews of selected principles and unresolved puzzles are presented with regard to the context of psychoactive substance use disorders and the structure, process, and outcome of treatment.

The principles address the process of problem resolution, duration and continuity of care, delivery of treatment by specialist versus non-specialist providers, alliance, goals and structure of treatment, characteristics of effective intervention, and the outcome of treatment versus remaining untreated. Unresolved puzzles address conceptual understandings of single and multiple client

treatment episodes, and effective client-treatment matching strategies. They also focus on connections between theory and process of treatment, integration of treatment and self-help, and development of models that address contextual aspects of treatment.

Findings from this study reflect the fact that individuals diagnosed as alcohol dependent exist in a complex web of social, cultural, political and economic interactions. It may be argued, therefore, that abstinence at follow-up is attributed to the same set of factors that maintain the resolution of problems without treatment. Thus, although treatment initially effects change, other factors that do not necessarily match Minnesota Model post-treatment protocol, may play a more enduring role.

In addition, it is contended that any distinction between life context, informal help or formal treatment is arbitrary (Moos, 2002). What are of primary importance are individual life contexts. In other words, life settings and treatment programmes are comparable as both establish a context for individual development or dysfunction and involve common individual-environment matching processes. Thus, it is maintained that there are no compelling reasons to distinguish between the contexts in which cognitive and behavioural processes occur as, the dynamics underlying these processes are the same.

With regard to the two subsidiary hypotheses, results showed that participants completing treatment were more likely to be abstinent from all psychoactive substances in the most recent 30 and 90-days at follow-up. This finding is consistent with hypothesis one and will not be addressed further.

## 6.2 Limitations of the Research

There are significant limitations with this study that have inevitable implications for the reliability and validity of its main findings. Arguably, the most notable limitation of this investigation relates to the research design employed for treatment outcome evaluation. Other methodological considerations that limit the findings of this research will also be presented below.

The author chose a single-group design for pragmatic reasons. However, such designs pose threats to internal validity (e.g., statistical regression to the mean and maturation) and may account for significant improvements in post-treatment outcomes (Bodin, 2006). Further, if it is taken that (in comparison with other disorders/illnesses with a chronic and fluctuating course) treatment for alcohol addiction is often sought at times of extreme hardship and distress. It follows that desired post-treatment outcomes might, to some extent, be viewed as the natural course of the disorder (Room, 1980; Vaillant et al., 1983; Bodin 2006).

Although the author designed the research instrument used in this investigation to address treatment objectives specific to the organisation. It may be argued that the justification for content-specific measures rarely compensates for the loss in measurement reliability. Given that measurement provides the foundation for outcome evaluation, there are instrument reliability statistics that are commonly reported in alcohol-related literature (Tonigan, 2004). The importance of using instruments with reliable psychometric properties is underscored by the net effect of measurement error attenuating the magnitude of an observed correlation (Hunter, Schmidt & Jackson, 1982). Such instruments provide reliability coefficients that indicate whether variability in client responses represents “true” or masked scores. Thus measurement error, or lack of reliability, may have obscured relationships of interest and negate conclusions drawn by the author with regard to treatment effectiveness.

The absence in employment of stringent diagnostic criteria in the treatment centre's assessment procedure limits the extent to which findings in this investigation are valid. Consequently, the investigation is open to criticism with regard to the diagnostic authenticity of the population sample. However, it is notable that a significant majority of referrals are from professionals with appropriate knowledge and expertise in alcohol treatment (e.g., psychiatrists and community care managers within the UK alcohol treatment sector).

With regard to the selected sample, the response rate for this population may be viewed as a further limitation. Follow-up outcomes are reported for 76% (104/137) of the research participants. One person had deceased; another individual was at an acute stage of alcohol intoxication; one individual refused to continue any further; and, 30 participants could not be traced in the available time period. Research evidence suggests that reported follow-up outcome results are likely to be superior to the non-followed-up group or the sample as a whole (Moos and Bliss, 1978; Pittman and Tate, 1969). This is primarily due to the fact that individuals who are not contacted at follow-up tend to have poorer outcomes than participants who are traced at post-treatment follow-up.

The validity of self-reported outcome measures is a further limitation that may be attributed to this investigation. Although the use of collateral informants was considered it was not included in the design of the study as the author felt it would have an adverse impact on sample size. Further, it may be argued that the advantages of using collateral informants do not necessarily outweigh the associated disadvantages.

Clearly, it is not possible to establish conclusive findings on the basis of self-report measures. To establish conclusive findings with regard to self-reported substance use, biochemical corroboration of participant reports would have been necessary. However, as indicated, there was

not complete reliance on self-report measures as the author was known to participants and did not receive any contradicting accounts of drinking histories.

Given the relative uniqueness of the independent treatment setting in which this investigation was undertaken, it is difficult to make generalisations to other settings. As stated, the statutory UK alcohol treatment sector gives scant, if any, regard to Minnesota Model methods and it is not offered within its repertoire of therapeutic interventions. Further, selection factors that may influence referrals exacerbate this issue. For example, individuals being selected for referral who seem motivated for abstinence as a treatment goal or have expressed appreciation and/or understanding of AA.

Finally, it is important to state that this research investigation employed no qualitative analyses of data. Given the current emphasis on research designs incorporating quantitative and qualitative analyses of data (Orford et al., 2006), this research investigation is limited by the fact that it did not consider participant perspectives on change and processes in alcohol addiction treatment.

### **6.3 Implications of the Research**

With regard to the complete absence of information on treatment effectiveness outcomes with the organisation in question, the author contends that this research evaluation is an exploratory study that future researchers may benefit from. As stated, alcohol addiction is endemic within contemporary UK society and effective evidenced-based treatments are urgently sought and in high demand. Given the highly significant findings in the association between continuous alcohol abstinence and completion of treatment. It is maintained that this investigation is of outstanding medical and clinical importance.

It is also maintained that findings pertaining to spirituality are of considerable importance.

Spirituality is increasingly seen as an effective component in alcohol treatment. Indeed, Heather (2007) acknowledges the relevance of spirituality in a recent journal interview and states that it does seem to be a component in effective alcohol treatment and recovery.

Further, it is maintained that the findings of this study have important implications for future practice, training and research in alcohol treatment. Of concern is the fact that minority groups are not accessing the service of the treatment centre in question, yet it lies in the heart of a black and multiethnic neighbourhood. This is of particular concern as it is stated that: "All services should aspire to be ethno-culturally competent as might be appropriate to their particular locality" (Raistrick et al., 2006, p. 5). Moreover, key findings of a recent Department of Health report states that black and minority ethnic groups have a similar prevalence of alcohol dependence compared with the white population (Drummond et al., 2005).

As stated, the majority of participants (n=101; 73.7% of selected sample) reported their ethnicity as British White. Upon further exploratory analyses of ethnic background it was found that 20 participants had phenotypic characteristics that are Caucasian. These participants chose to describe their ethnicity in ways that did not match selected descriptions on their assessment application form. As mentioned, of these 20 participants ethnic descriptions included the following identities: British Other; European; Irish; Other; European Danish; British Australian; White European; White South African; Russian/German; White South American; and, British White Jewish. Given the above, the ethnicity statistics for the selected sample is alarming. This research evaluation clearly demonstrates national concerns regarding equity of access to talking therapies and alcohol treatment in particular (Raistrick et al., 2006).

The reasons for such ethnicity statistics in this study are likely to be multi-factorial and have a socio-cultural basis. Socio-cultural barriers to health may occur at the organisational (leadership/workforce), structural (processes of care), and clinical (service provider – client/patient encounter) levels. Thus, a possible interpretation for the ethnicity statistics in this study could be due to the lack of cultural competence that is common in the UK mental health system in general (Peterson & McBride, 2002). Cultural competence in the delivery of health care is said to be demonstrated when the following is acknowledged and incorporated at all levels: (1) the importance of culture; (2) assessment of cross-cultural relations; (3) vigilance toward the dynamics that result from cultural differences; (4) expansion of cultural knowledge; and, (5) the adaptation of services to meet culturally unique needs (Betancourt, Green, Carrillo & Ananeh-Firempong, 2003).

Other factors that may account for the ethnicity statistics in this study may be related to the social determinants of health that are external to the health care delivery system. For example, it may be argued that there are variations in individual and group health beliefs, values, preferences and behaviours. This may include differences in recognition of symptoms; thresholds for seeking care; the ability to communicate symptoms; and, expectations of care that include preferences for or against diagnosis and therapeutic intervention (Betancourt et al., 2003).

A further practice implication that has arisen as a result of this study relates to the assessment process of the treatment centre in question. As stated, assessment procedures do not afford the use of conventional alcohol dependence diagnostic criteria or addiction severity measures. Consequently, there were no systemised data on the type and quality of alcohol use disorders (e.g., dependence or misuse) that made up the treatment centre's clientele.

Furthermore, the use of diagnostic criteria and other measurements may allow for more suitable selection procedures at assessment and will aid future outcome evaluation. Indeed, it may be that the majority of participants who were assessed only or discharged differed significantly in their type and quality of alcohol addiction to those that completed the programme.

As stated, the author's findings show highly significant ( $p < 0.0001$ ) associations between responses to having had a spiritual experience or awakening, abstinence and completion of treatment. However, there was no association between completion of treatment and AA meeting attendance at post-treatment follow-up. This finding is particularly significant with regard to research that demonstrates the potential for recovery amongst individuals who are reluctant to participate in 12-step programmes or practices.

Given the centrality of the concept of spirituality in Minnesota Model treatment, it would seem appropriate for exploration of this concept to be made explicit at assessment. This investigation has highlighted its complete absence in the assessment and selection procedures of the treatment centre in question. Further, the findings from this evaluation concerning the relationship between participant responses to having had a spiritual experience or awakening and completion of treatment accentuate its importance, particularly with regard to assessment and therapeutic intervention and planning.

It is contended that the findings of this study point toward the necessity of research and development in a novel alcohol addiction treatment programme. This will include mechanisms of efficacy demonstrated in 12-step practices and programmes but excludes connotations of religiosity and dependence on AA attendance.

Dolman (2002) conducted a qualitative study at the National Alcohol Unit (UK) that assessed attitudes to spirituality and its potential role for recovery. Twelve unstructured interviews were conducted with patients in a hospital ward that included data on participant attitudes toward religion, spirituality and AA. It was found that over 50% of participants felt they were neither religious nor spiritual and made clear distinctions between the two concepts. However, religion was perceived as being negative whereas spirituality was generally regarded as a positive attribute. Furthermore, Dolman (2002) reported that AA was almost unanimously disliked due to its religious connotations. What is more revealing is that the majority of participants did not anticipate attending AA meetings following hospital discharge, this was in despite of evidence presented to them that AA might be beneficial. This study has confirmed, as stated by hypothesis two, that spiritual experience or awakening is positively associated with long-term abstinence following treatment.

#### **6.4 Recommendations for Future Research**

As mentioned, there may have been significant threats to reliability due to the author being known by participants in the study. Thus, it would be highly recommended that an independent researcher repeat this study. Ideally, this would be an individual that has had no prior contact with the treatment centre's clientele.

Given the findings of the three main outcome measures, there are immediate issues that may be addressed in future investigations by the research author. If findings in this investigation are taken at face value, they represent some of the most impressive outcomes in comparison to the general trends reported in the alcohol addiction treatment literature. Initially, future research by the author may seek to establish more conclusive findings with regard to participants' self-report of continuous abstinence at follow-up. Clearly, bio-chemical corroboration of participant self-reports would be considered necessary. This could be conducted using stratified random sampling

techniques on the group of participants who claim to have maintained continuous abstinence at follow-up. Bio-chemical measures that are capable of detecting long-term alcohol use would be particularly advantageous.

It is also contended that there would be much value in obtaining qualitative data from two groups of key participants that have emerged as a result of the author's research enquiry. That is, qualitative research with participants who have managed continuous abstinence at follow-up and with those who, were either discharged early or completed treatment.

Further research using in-depth focus groups with the two identified key groups of participants may reveal significant attitudes and behaviours that contributed to follow-up outcomes. This would allow a focus on the specific dimensions of Minnesota Model treatment processes that are pertinent to recovery from alcoholism. The information obtained from this endeavour may be used to enhance treatment practice interventions. For example, data may be obtained to determine participant understandings of spirituality that contributed to desired post-treatment outcomes. Furthermore, continued research with the author's sample may lead to the development of preventive strategies and alternatives to existing systems of alcohol addiction treatment.

A randomised controlled clinical trial could also be conducted that included the treatment organisation in question and other comparable but different treatments. It is suggested that randomisation is designed to produce treatment groups that are likely to be equivalent in all aspects except the treatment itself. The implementation of a RCT would be highly recommended, particularly if conclusive findings were established with regard to participant self-reports of continuous abstinence at follow-up. Moreover, an RCT design would allow causal inferences to be made about treatment intervention and outcomes. Indeed, given recent government initiatives on the provision of evidence-based UK alcohol treatment it is contended that such research would

be timely. This would allow clients access to new evidence-based treatments and potentially save the social and health care service significant economic costs.

Following findings by Orford et al. (2006) the author would recommend combining qualitative and controlled trial methods as there is paucity of research in this area of alcohol treatment literature. Notably, there have been qualitative studies of clients' post-treatment experiences (e.g., Edwards et al., 1992) and change processes of addicted individuals who have not received treatment (e.g., McIntosh & McKeganey 2000; Bischof et al., 2003). However, to date, there is no established tradition of combined experimental (or quasi-experimental) outcome research with qualitative analyses of participant experiences.

Combining qualitative research with this investigation may add important insights into recent post-UKATT research findings. The expanded model of change presented by Orford et al. (2006) identifies three key areas (addressed in Moos's, 2003, review) in alcohol treatment outcome processes. This is known as the catalyst system (pre-treatment factors), the treatment system (therapeutic intervention factors), and the change system (post-treatment factors).

With regard to the key groups of participants identified in this investigation further qualitative analyses of participant accounts of change processes may determine the crucial system(s) that contributed to continuous abstinence. Such qualitative analyses may hold further invaluable insights for UK alcohol addiction treatment practice and research.

Bodin's (2006) findings also show that treatment is only one of many variables that contribute to post-treatment outcomes. Other predictive variables of treatment outcome included pre and post-treatment factors such as baseline participant characteristics; client satisfaction; post-treatment 12-step group affiliation and, completion of aftercare. It is contended, therefore, that in light of

Bodin's (2006) findings and recent UK alcohol treatment research, qualitative analyses with participants in this study are highly recommended.

An inadvertent outcome of this investigation is the possibility of having obtained a relatively homogenous research sample. Given the prospect that there are exceptional groups of individuals characterised by distinctive demographics, motivations, life contexts and coping skills (Moos, 2003), further research on the selected sample from this study may seek to identify ethnic, social and genetic subgroups in which novel principles or alternative processes of recovery and relapse are discovered.

Finally, perhaps the most beneficial prospect for the advancement of alcohol treatment outcome research, future investigations may be based on the rapid developments in neuroscience. Given the major developments in understandings of brain correlates and alcohol addiction coupled with the lack of consensus regarding the most salient outcome measures, future research may utilise neuroscience technology to provide quantitative outcome measures such as changes in brain mechanisms and functioning in relation to pre and post treatment episodes. Indeed, such a focus for future studies would provide unlimited opportunities for the development of neuropsychological models based on current psychosocial treatment and theory (i.e., classical and operant conditioning, social learning, motivation and spiritually based interventions).

## **6.5 Conclusions**

Statistical analyses from this investigation would appear to address at least three of the six fundamental questions that alcohol treatment outcome evaluations seek to answer. Thus, the following conclusions are suggested for this research investigation: (1) treatment is better than no treatment; (2) having some treatment is not as effective as completing treatment; and, (3) exposure to treatment is not worse than non-exposure.

As stated, the findings from this investigation are not conclusive due to the reliance on self-report outcome measures. Further, the quasi-experimental design of the study does not warrant absolute or definite conclusions to be made about treatment intervention and evaluation outcomes. That is, a successful outcome does not necessarily imply causality from treatment intervention. It is possible that a variable (or confounding factors) other than treatment intervention may have caused part or all of the evaluation outcomes. Nonetheless, the author maintains that tentative conclusions may be drawn from the research findings. These are summarised as follows:

- Of the participants that completed treatment 58% (approximately 3 out of 5) had achieved long-term treatment programme objectives of abstinence from all psychoactive substances at follow-up of one to three or more years.
- Participants who completed treatment are six to seven times more likely to be abstinent relative to relapse from all psychoactive substances at follow-up than those who were assessed only or discharged from treatment.
- There is an association between abstinence from alcohol and completion of treatment during the most recent 30 and 90 days at follow-up.
- Assessment followed by completion of treatment has a significant association with responses to having a spiritual experience or awakening at follow-up of one to three or more years.
- Contrary to programme objectives, there is no association between completion of treatment and AA meeting attendance in the most recent 90 days at follow-up.

## **PART C – Practice Component**

# Binge Eating

*A COMBINED CASE STUDY AND PROCESS  
REPORT USING CBT FOR BULIMIA NERVOSA*

## 7 BEGINNINGS

### **Rationale for presenting study**

There is a high prevalence of eating disorders in contemporary society with an estimated 1.15 million sufferers in the UK alone. The clinical implications of such a high prevalence of eating disorders are equally alarming. In addition to a range of health problems that include heart, kidney and gastro-intestinal problems, eating disorders account for the highest rate of mortality for any given psychiatric condition (Eating Disorder Association, 2000).

This combined case study and process report is presented as it exemplifies the many pitfalls and associated difficulties when working with clients diagnosed with highly complex eating disorders. It demonstrates how I initially struggled with client non-compliance when using cognitive-behavioural therapy (CBT) to address my client's binge eating problem.

Furthermore, given the overall finding that less than a third of clients entering treatment with binge eating disorders will be abstinent at follow-up (Agras, 1993), it was felt that presenting this case study would offer unique learning opportunities that would deepen my understanding and ability to address such problems in counselling psychology practice.

### **Summary of theoretical approach**

Cognitive-behavioural therapy (CBT) derives its theoretical origins from the Stoic philosopher Epictetus, who in the first century AD observed that 'People are disturbed not so much by events as by the view which they take of them'. In contemporary practice it is an integration of cognitive therapy (Beck 1970, 1976) and behaviour therapy (Bandura 1977). Thus in CBT treatment a client is helped to recognize patterns of distorted thinking and dysfunctional behaviour.

Considerable emphasis is placed upon expressing concepts in operational terms and on the empirical validation of treatment.

In relation to eating problems, the CBT model posits that socio-cultural pressures on women to be thin lead some to overvalue the importance of body weight and shape (Wilson & Pike, 2001).

This causes those diagnosed with an eating 'disorder' (e.g., anorexia nervosa and bulimia nervosa, BN) to restrict their food intake in rigid and unrealistic ways – a process that leads to physiological and psychological susceptibility to periodic loss of control over eating. CBT was used as a first-line approach as it is generally regarded as the treatment of choice for binge eating problems (Fairburn & Cooper, 1989; Fairburn, Marcus & Wilson, 1993; Wilson & Pike, 2001). The National Institute for Clinical Excellence (NICE, 2004) supports this view and states that CBT for BN should be offered to adults with bulimia nervosa.

There is consistent evidence from controlled clinical trials showing CBT to produce significant lasting reductions in binge eating and other hallmark symptoms of BN (Wilson & Pike, 2001). In a recent study, Hay, Bacaltchuk and Stefano (2004) evaluated the efficacy of CBT in the specific treatment of bulimia nervosa and provided a body of evidence that supported the use of CBT for BN. Their study was particularly relevant with regard to my client's problems as it evaluated the efficacy of CBT for the purging type of BN.

### **Referral and Setting**

As mentioned earlier, the treatment centre in which I worked offers individual-specific residential programmes, day treatment, and continuing aftercare utilising the principles of Alcoholics Anonymous and CBT. The underlying philosophy of treatment is that each individual is unique and requires specific help and support at different stages of their recovery. My client (who I shall

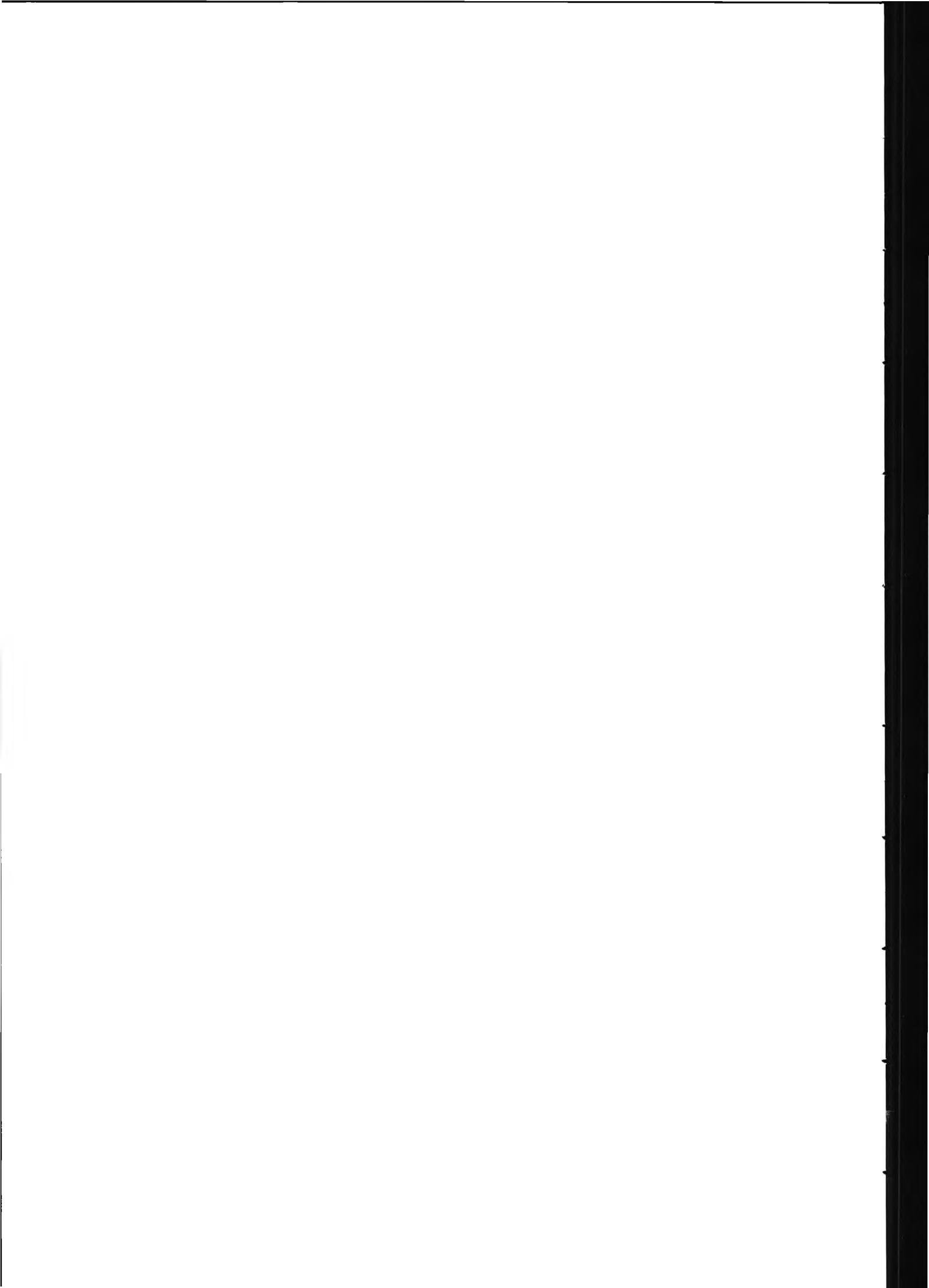
call "Sara", a pseudonym) made a self-referral stating that she wanted to focus on overcoming her eating problems.

Sara had previously attended the centre as a day client to address her alcohol dependence. I worked with her in individual and group therapy during this period when she successfully completed her six-month alcohol addiction treatment programme. Having discussed her present concerns with the clinical treatment director. It was agreed that Sara would be offered counselling with me, as I had been her chosen individual therapist during her alcohol addiction treatment programme.

### **Presenting problem and convening the first session**

I felt it was necessary to explore with Sara what motives she had in seeking counselling at this time and her expectations in therapy. She stated it was necessary to specifically address her eating problems in therapy as it was driving her "nuts". She maintained, "binge-eating" still controlled her life and wanted it "sorted out". Sara mentioned that she still used food to suppress feelings and this was beginning to have an intolerable negative impact on her life in sobriety. She stated that, despite the improvements in her life since completing alcohol addiction treatment, she still feels like an "outsider" within her family and wider social network. She had recently been in conflict with significant family members and stated "I told my mother some home truths about how my childhood really was...she wasn't emotionally available".

Furthermore, Sara's understanding of her on-going recovery from alcoholism necessitated the willingness and ability to change all destructive and self-defeating behavioural patterns by using the tools and resources available to her. She felt the need to re-evaluate her own commitment and strength in sobriety after hearing about the alcohol relapse of peers in her former treatment group



and had used food to deal with her feelings of fear. She stated that “the relapse [of peers] really shook me...and I feel this could happen to me”

Thus, what particularly motivated Sara to seek counselling was her feeling that, despite her 18 months of sobriety, she was still “using food to suppress feelings” and had found it difficult to reveal to anyone the extent and nature of her eating problems. Sara stated that something she had not achieved in sobriety was an ability to make friends and her difficulty with trusting others was a major contributing factor. She also expressed much insight into the factors maintaining her eating problem which was punctuated with comments such as “I can see my whole life more clearly now” and “I can see why I did the things I did very clearly”.

Sara articulated a clear desire to focus on the factors (which included body image difficulties, socio-cultural pressures, purging behaviour and affective symptoms) that were maintaining her binge eating patterns saying “I am ready to target that...it’s a big secret I have to carry around with me all the time. It’s a great escapism for me, just like I suppose alcohol used to be and keeps me away from others”. CBT directly addresses the proximal antecedents to binge eating and I attempted to clearly explain this to Sara. She was able to comprehend what this entailed saying “I think that is the way forward”.

### **Profile of client, family and social history**

Sara is a 39-year-old female with olive toned skin and dark brown hair. She has a very slender build (visibly extremely thin) and presents in smart casual attire. Sara has symptoms of severe perimolysis (enamel erosion) that make the lingual margins of her teeth appear rounded and smooth. Despite her complex problems, Sara had always been employed up until her consumption of alcohol went out of control. She worked as a credit and financial controller, an accountant, P.A. to a managing director, and held various administrative temping positions. At

the time of presentation for therapy, Sara had commenced her 2<sup>nd</sup> year in a college-counselling course. We had addressed the appropriateness of her choice of course so soon after completing her initial treatment at the centre.

Sara's relationship with her siblings is "distant". She has a particularly conflicting relationship with her youngest sibling and stated that there were "lots of unsaid feelings between them and [doesn't] trust her at all". Sara lives with her 12 year-old son and describes her relationship with him as "a good relationship considering everything". She suspects that her son might possibly be aware of her eating problems but it is "never spoken about or discussed" as she binges secretly. Sara has never attempted suicide or self-harm.

Sara was born in the Middle East and grew up with her three siblings, white Western European mother and Arabic father. She is the eldest of three daughters and has one older brother. Sara lived an extremely privileged (economic/social) lifestyle due to her father's senior ministerial post in government. Her father had to flee the country and live in exile in Britain when she was 14 years old. Sara's parents divorced shortly after they arrived in Britain. She lived with her mother and her siblings went to stay with relatives in another Middle Eastern country. There is no known family history of eating disorders or mental health problems.

Sara's relationship with her parents has always been difficult. She described her relationship with her mother as "not great...she tries to control and put me down and makes me feel like a loser". Sara said her father "was a very angry, violent and controlling man during [her] teenage years". They did not speak to each other for many years when she first lived in Britain. Sara stated that although they speak now "it's not a father-daughter relationship and it never will be".

At the age of 14, Sara stated that she became anorexic and then obese aged 18. She was diagnosed (aged 24) as a multi-impulsive bulimic (Lacey & Evans, 1986) whilst resident at an eating disorder unit. She was unable to complete her treatment as she relapsed on alcohol after eight weeks. Sara attempted to address her alcohol dependence (through treatment) 10 years later after several detoxifications and intermittent drug use (cannabis, amphetamines and cocaine) but relapsed after three weeks on an alcohol treatment programme. Her longest period of sobriety prior to her initial attendance at the centre was three months.

Sara reported that her drinking became heavy when her property was repossessed (aged 30) and went out of control (aged 34) when her former husband abused her and her amphetamine use was problematic. Sara attended a staying stopped group (aged 35) at a Community Alcohol Team within a hospital but relapsed within 2 months.

### **Initial assessment and formulation of the problem**

I assessed Sara using the 12<sup>th</sup> edition of the Eating Disorder Examination (EDE 12.0D) by Fairburn and Cooper (1993) and based my initial formulation on this interview (see Appendix VII). This included weighing Sara and measuring her height to obtain her Body Mass Index (BMI). Her BMI (18.36) was obtained for its use in place of weight tables and as a measure for medically accepted figures for ideal weights<sup>2</sup>. The EDE provided three levels of descriptive data concerning Sara's eating disorder psychopathology.

### **Specific Psychopathology**

Sara's "binge eating" occurred approximately 20-22 times per week. These episodes constituted "binges" as defined by DSM-IV-TR (i.e., uncontrolled consumption of what others would regard

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<sup>2</sup> The body mass index is a measure of body fat based on height and weight and is calculated by weight in kg/[height in m]<sup>2</sup>. Accepted figures (Fairburn & Cooper, 1993) for being underweight (below 18), a healthy weight (20-27), and overweight (27 or more).

as a large amount of food). Sara would regularly resort to self-induced vomiting to influence her shape and weight. Her self-evaluation was excessively affected by her body shape and weight.

Sara's parents were highly critical of her during childhood and adolescence. This appears to have contributed to a failed effort in finding mutuality and understanding in her parental relationships. Consequently, this represented a fundamental challenge to her identity and resulted to aversive emotional states such as shame and a sense of low self-worth and esteem. Feeling insecure about her identity (particularly during her cultural transition from Arabic to Western society) and how she is valued by others, led Sara to focus on physical appearance which provided a concrete method to construct an identity.

Sara's belief - "my shape and weight will always influence how others view me", "others cannot be trusted" and "I will always be judged worthless." – cause her to feel inadequate and lonely. These beliefs also affect her self-esteem and lead to unassertiveness that exacerbates her anger and fuels the belief "I am totally alone". It is at these times, when Sara is experiencing stress or negative affect, that she is most vulnerable with regard to 'acting out' or binge eating episodes.

When Sara experiences negative self-focused affect it causes painful self-awareness and she attempts to escape this by limiting her cognitive focus from more abstract levels (e.g., negative self-evaluation) to concrete and immediate environmental stimuli (i.e., food). Although binge episodes provide Sara with initial relief, they are followed by negative automatic thoughts (e.g., "I must have put on loads of weight"). Invariably, it seems that it is the purging following binge episodes that relieves stress and negative affect. However this relief is temporary and leads to feelings of guilt, shame and being out of control.

Privacy and isolation are also very significant factors in Sara's maintenance of her cycle of binge-purge episodes as she was more likely to binge when home alone. Being alone seemed to exacerbate aversive self-awareness in Sara and she tried to escape this by diverting to lower levels of cognitive awareness that often trigger binge episodes. Furthermore, privacy and isolation can be a trigger in itself for Sara by providing an opportunity to engage in a socially unacceptable but tempting behaviour pattern.

### **Negotiating the client contract and therapeutic aims**

I had established a strong working alliance with Sara when she first attended the centre and this facilitated the process of agreeing on a contract and therapeutic goals. It was mutually agreed that I would offer Sara 20 sessions of counselling over the course of approximately six months. Therapy appointments would be 50 minutes in duration and we would initially meet twice a week for the first three weeks. Therapeutic aims included reducing feelings of hunger, managing dysphoric mood states and body-image difficulties, and coping with environmental sources of stress.

Following Fairburn and Cooper (1993) there would be three main stages in therapy with a review between sessions 8-10:

1<sup>st</sup> stage: Presenting cognitive view of the maintenance of eating problems.

2<sup>nd</sup> stage: Developing cognitive and behavioural coping strategies to overcome problems.

3<sup>rd</sup> stage: Relapse prevention strategies.

## 8 Development of therapy and Process report

### **Therapeutic plan and main techniques used**

In essence, there were two major aims that contributed to therapeutic planning:

- 1 Explain rationale underlying CBT approach.
- 2 Replacing binge eating with a stable pattern of regular eating.

With regard to the above, the main techniques adopted were used to help Sara and I examine her eating habits and the circumstances in which problems arise. They can be presented as follows:

### ***Use of monitoring sheets***

This involved Sara monitoring her food intake, binge-eating episodes, and triggers of those episodes. The information was mainly used to shape three or more meals per day and identify and change maladaptive cognitions about self, food intake, weight, and body shape. This part of the treatment plan caused Sara much anxiety and in hindsight I could have spent more time discussing her concerns about this.

### ***Behavioural prescriptions***

Weighing at weekly intervals was introduced as an important part of treatment as Sara seemed obsessed with inconsequential daily fluctuations in weight.

### ***Individualised psycho-education***

This was used to repeatedly clarify the cognitive view of BN (see Appendix VIII). For example, when Sara gave information that linked behaviour (bingeing) thoughts (not doing homework) and feelings (failure) together, I would demonstrate this relationship. Thus, allowing Sara to gain an understanding of the mechanisms that maintain her eating problem.

### **The therapeutic process and relationship**

The process of therapy was largely influenced by the therapeutic alliance, homework assignments and validating Sara's feelings. I would frequently become frustrated with Sara's communication pattern (see CD transcript below) as it was difficult for me to "stay on task" (adhere to treatment plan) using a CBT framework. During these times I would question my own engagement with Sara and the CBT therapeutic process. My feelings of uncertainty were coupled with an increasing awareness that I was overly focused on productivity and rationality. Sara may have picked up on this.

Sara seemed reluctant to give categorical answers and appeared to question her own thoughts. When this occurred I would often interrupt her train of thought as the initial emphasis in therapy was placed on helping Sara to become adept at identifying rather than questioning thoughts and feelings (Fairburn & Cooper, 1989).

At the beginning of sessions Sara's body language would indicate that she was not ready to assess problems from a CBT framework and required a more person centred approach. She wouldn't make eye contact (which was unusual for her) and appeared compliant rather than engaged. Invariably, any comments made by Sara at the beginning of sessions suggested that she required validation of her feelings and perspective. This led to increased awareness of my own processes. I realised that if I was not careful we were likely to be heading towards a therapeutic impasse. It was evident that, at the beginning of counselling sessions, I was still enrolled as a change agent armed with my techniques and treatment plan that seemed in opposition to Sara's need for validation.

My main difficulties were caused by the varied dimensions of non-compliance presented by Sara in therapy and how I struggled to address this within a CBT framework. For example, Sara

returned to our 2<sup>nd</sup> therapy appointment without her monitoring sheets. Indeed, I felt this was a critical point in counselling, as non-compliance with homework assignments would effectively sabotage the process of therapy. In hindsight, I realised that Sara's non-compliance was due to her fear of being judged. I could have been more explicit (as stated by Fairburn & Cooper, 1989) when explaining to Sara that it is likely her non-compliance stems from a fear of the unknown. A feeling that therapy is leaning towards unacceptable intrusiveness and realization that certain fundamental and private aspects of herself were going to be revealed. I could have then reminded Sara of the rationale for exploring her thoughts, feelings and behaviours to encourage her to embark upon the CBT process. Alternatively, I could have explored Sara's fears and how she coped in previous attempts at addressing her binge eating in therapy.

### **CD Transcript notation**

The notation system used in this report is adapted from Faidley and Leitner (1993).

**Speaker:** "T" is therapist and "C" is client.

**Silence:** Silences within and between speakers are marked by a series of dots (e.g., a three second silence would be shown as "...").

**Unintelligible words:** Unclear words or sounds are noted as dots within parenthesis, as in "(...)".

**Speech features:** Italics are used if there is a marked increase in emphasis or loudness. All other speech features are also explained in italics.

### **Lead-in to the session**

The following transcript is taken from my second appointment with Sara (19.25 minutes into the session). Sara had returned to therapy without her monitoring sheets (CBT homework assignment) and I was attempting to understand why this had happened.

Initially I reacted with some surprise. I felt I had clearly communicated that recording and reviewing homework assignments was an essential first step in addressing and overcoming Sara's eating problem. Sara stated (in a way that seemed unclear to me) that she had many difficulties with monitoring and wasn't sure if she was able to continue with her therapy. I try to clarify what Sara is expressing and the transcript picks up from this point.

### **CD, transcript & commentary**

**T1:** Ok. Again I want...I want to try and establish what it is that you're saying to me. You know...whether you feel...you don't wanna go on because you don't feel ready? Or you've just found it extremely difficult and you...you need to express this to me fully so that I'm aware that...you know...if we do decide to continue this is...you know...we've got to address this...you know...these feelings that you've been having...having started completing your monitoring sheets.

Comm. 1. *At this point in the session, as mentioned earlier, I was acutely aware that I was beginning to become more frustrated with Sara's communication pattern as it was difficult for me to "stay on task" using a CBT framework. Thus, instead of criticising or judging her conversational style, I endeavoured to clarify the type and quality of resistance that I felt my client was exhibiting. Following Leahy's (2003) model of cognitive resistance, I felt that Sara was either resistant to the procedure in CBT or was seeking further validation and I tried to make this explicit to her.*

*I felt that the intervention used had a significant impact on Sara and this was demonstrated by the silence that followed as she grappled with cognitive dissonance (Festinger, 1957).*

**C1:** “.....” Don’t know. “.....” Don’t know if I should wait a bit longer before I start or...  
“.....” I don’t know I’ve got conflicting...

**T2:** Mm...I don’t know...perhaps...perhaps we can...we can revisit...revisit the model that we’re using to address this problem...you know...and obviously, as I said, we’re using a cognitive model and “.....” there’s quite a clear pattern...

Comm. 2. *Sara was unable to give a categorical answer and seemed to begin questioning her thoughts. I rather hastily interrupted her train of thought as, at this first stage of therapy, emphasis is placed on helping clients to become adept at identifying rather than questioning thoughts and feelings (Fairburn & Cooper, 1989).*

*I also felt it was a good opportunity to use Sara’s problematic thoughts to reinforce the cognitive model that we were using and I began to sketch the cognitive view of the maintenance of bulimia nervosa (Fairburn et al., 1993).*

**C2:** Yeah...

**T3:** For what happened there...(pointing towards cognitive model that I had just drawn)...you know and...“.....” ultimately the problem is about low self-esteem...

Comm. 3. *It seemed apparent from Sara’s body language that she was not ready to assess her problems from a CBT model at this stage. Her head lowered, she did not maintain eye contact with me (which was unusual for her) and appeared compliant rather than engaged. Her subsequent comment seemed to indicate that she required further validation and increased awareness of my own processes.*

*As stated earlier, I realised that if I was not careful we were likely to be heading towards a therapeutic impasse. I was still acting as a change agent armed with my techniques and treatment plan that seemed in opposition to Sara’s need for validation.*

**C3:** Mm...

**T4:** And concerns about your shape and weight.

**C4:** Mm...I mean one guy came in yesterday and he came up to me...obviously I just remember this...and he came up to me and he goes “you look really nice”...you know...and I could of...I

was *mortified* because like, everybody was there. But just...I don't know I thought...when was the last time anyone said that to me...even though I didn't believe him. To tell you the truth...

**T5:** You didn't believe him?

Comm. 4. *In addition to clarifying Sara's thoughts I feel that I could have addressed her negative self-evaluation that was made explicit from her comment. Indeed, it is maintained that it is important to address cognitive distortions that are not necessarily related to the specific psychopathology of BN (Fairburn & Cooper, 1989).*

**C5:** No I didn't, I just...you know...whatever...I just tried to get something out of it (...)

**T6:** I mean my feelings...my feelings is that...you know...you've...this has been a major secret of yours and...and obviously once you've exposed a secret...you know...perhaps you feel quite vulnerable...and when you feel vulnerable...you know...it makes you feel very afraid. It's also affected your...your behaviour around your son and you're not liking that...I mean at some stage...you know...perhaps your son is going to have to know.

Comm. 5. *I endeavoured to summarise key factors expressed by Sara that were inhibiting her progress in therapy. I attempted to do this for 2 specific reasons. Firstly, I felt that Sara was placing too many items on her agenda and I wanted to convey that we are working on specific problems related to her binge eating. Secondly, I wanted to try and bridge the gap between her need for validation and my desire to address important aims in the first stage of CBT therapy for BN which includes reducing secrecy and enlisting the cooperation of friends and relatives (Fairburn et al., 1993).*

**C6:** He must know...you know

**T7:** He must know...yeah...

**C7:** Don't you think? He's gotta...I mean I just like...I know he doesn't talk about it and never mentions it, but he must know. But it's just one of them things that we never talk about...but he must know what goes on when I disappear into the bathroom and...he must have some kind of idea or heard. But I think he just feels like...well at least she's not drinking.

**T8:** I just want to go back to this cognitive model again. At what point did you feel there's no way I can continue with this. Or did you not think that? Did you just think...wow...I didn't realise it was going to affect me in the way it has done?

Comm. 6. *Again, in relation to my intervention at T1 and subsequent comments I wanted to further explain the rationale underlying CBT and clarify Sara's thoughts and feelings. However, I was also beginning to feel that I was repeating the phrase 'cognitive model' too often and could have said something like 'the way we've agreed to look at this problem!'*

**C8:** I think it's...it's that now...when I do binge and vomit...because I know that you know and also...I'm so angry about it more so than I ever used to be. I'm just so wild with myself and also because I know you're gonna have to be told about it I suppose. It's just that whole thing. It's just like...Oh fucking hell man...[breaks into despairing laughter]. It's just not good...you know. It's not like, I suppose drinking where I could just put the bottle down.

**T9:** You sure it's fucking hell man, and not fucking hell Frank? [Simultaneous laughter]

Comm. 7. *I felt that my intervention at T8 achieved my desired outcome and I genuinely felt a sense of optimism that therapeutic movement had occurred allowing me to stay 'on-task'.*

*I thought that it would be appropriate to inject humour into our collaborative therapeutic relationship. Inviting Sara to laugh with me was an invitation to share and, as such, it would be supportive in a caring and empathic way that would build confidence between us.*

*Following cognitive theorists such as Dryden (1995) clients suffer emotional dysfunction when their thinking is irrational. Thus humour was also used as a way of 'untwisting' Sara's cognitive distortions.*

**C9:** Maybe?

**T10:** Maybe? Ok...so lots of anger...lots of anger?

**C10:** Yeah! It's pressure on me...you know...and then not only that you're gonna want me to come and tell you exactly...and I'm just like...fuck...*[despairing laughter]*. I find it really sort of...I'm so in the limelight.

**T11:** So...I guess what you're saying is that your having to put an extreme...extreme...a lot of trust in me...

Comm. 8. *My intervention at T9 seemed to allow Sara to re-frame and distance herself from problematic thoughts. This gave me a feeling that a sense of perspective and safety had been created to further clarify what she was trying to convey.*

*Furthermore, I felt that we were about to finally draw some conclusions to the problematic thoughts and attitudes that Sara seemed to be harbouring.*

**C11:** Totally...and...and...and so much honesty...and so much...I just don't know if I've got it in me. To be that honest...*[laughs]* you know...and I don't wanna end up lying because it's wasting your time and mine also.

**T12:** We've already established that we're not...we're not going to do that.

Comm. 9. *I feel that my intervention here was inappropriate and far from empathic as Sara seemed to activate my own cognitive schemas about fairness and perfectionism. As soon as she mentioned the word lying, my whole demeanour changed significantly. My tone of voice and facial expression indicated that I was taking an authoritative stance as if to say 'don't you dare waste my time'.*

*An alternative intervention might have involved me simply being assertive about my feelings.*

**C12:** I know it's just...so one part of me says we might as well...you know...

**T13:** So that's what we're looking at...can I put my complete...

**C13:** In a way it would be easier just not to...rather than be dishonest...

**T14:** Mm. Ok. So do you think that's the...you know...the underlying problem? Can I trust Frank to this extent? Where I'm sharing so much of my life with him...you know...things that I haven't shared with anyone...

Comm. 10. *Following my intervention at T11, I was trying to show Sara that I understood her predicament and acknowledged her genuine dilemma. She was in a situation where she was faced with two alternatives, each with significant cost: whatever choice she made, it is possible that it will initially be more costly than beneficial.*

*Indeed, I felt that this was a critical point in our session and I could have considered alternative interventions. For instance I could have explained to Sara (as stated by Fairburn & Cooper, 1989) that it is likely her resistance stems from a fear of the unknown. A feeling that therapy is leaning towards unacceptable intrusiveness and realization that certain fundamental and private aspects of herself were going to be revealed. I could have then reminded Sara of the rationale for exploring her thoughts feelings and behaviours to encourage her to embark upon the CBT process.*

**C14:** Yeah...and I also think that...you know...how you're going to...I suppose there is that thing about how you're...

**T15:** How I'm perceiving you?

Comm. 11. *I hypothesised from Sara's reticence and soft tone of voice that she feared being judged by me. Following my intervention at T11 and T14, I attempted to finish her sentence for her to show that I understood how she feels.*

**C15:** How you're gonna... Yeah!

**T16:** The same way I've always perceived you...

**C16:** You know...to see that...me telling you what my binge entails and writing it down and everything else...how often it happened and...and everything else...

**T17:** Remember...remember...remember you've already kind of told me the extent of the problem when we done the assessment.

Comm. 12. *I felt Sara's last comment demonstrated a particular kind of validation resistance that Leahy (2003) refers to as 'self-invalidation'. She seemed to express this by lowering her expectations of my ability to be non-judgemental in therapy.*

*Again I was feeling very wary that I might be failing to validate and satisfy Sara's needs, as she seemed to have developed a generalised low expectation of need gratification.*

**C17:** It's a different story writing it down...I tell you...

**T18:** *Sure!* But it's not a different story to me...like I said...I mean, I understand that but I'm just addressing the fact that you said...um...it's gonna be difficult for you...you know...writing it down and then going through it...you know going through the monitoring sheet with me and writing down the amount you've been eating. You know...you've got concerns about how I'm going to be viewing you.

Comm. 13. *At this point I felt that Sara was still ruminating about how awful things are and was doing this to seek further validation of her feelings.*

**C18:** And also the fact that I've found out...and also the fact that I am having to write it down...within itself is setting up another binge. Cause I'm so anxious about the whole thing...having to actually... "..." it just feels like the bulimia has got worse in a sense...because of all this. And I...you know I just don't...I just I just thought fuck it, I can't write this anymore. I just can't...because I'm wanting to have another binge...I just can't...

**T19:** Ok. Lets...lets look at this model. When did you last binge?

Comm. 14. *When information emerges that reinforces some aspect of the cognitive view of the maintenance of BN. It is maintained that the therapist should repeatedly return to the cognitive view of the problem (Fairburn & Cooper, 1989; Fairburn et al., 1993; Wilson & Pike, 2001).*

*Given Sara's comment at C18, I genuinely felt I had a golden opportunity to return to the cognitive model I had previously sketched. This necessitated me being firm and authoritative as I felt Sara would continue with her own agenda if I were not more directive than I had been.*

**C19:** "... Yesterday afternoon.

**T20:** Yesterday afternoon. Ok...and what...what...what were you doing...what were the associated thoughts...associated feelings...what triggered that binge?

Comm. 15. *I felt a sense of jubilation at this point and was somewhat surprised as my intention of obtaining a categorical answer from Sara (C19) was achieved. This allowed me to pursue the intervention made at T19.*

**C20:** "... I was sort of worried.

**T21:** And what were you worried about? What were you concerned about?

Comm. 16. *Following my intervention at T19 I was attempting to further clarify Sara's thoughts and feelings.*

**C21:** Um... "... that I haven't done my homework...that um... "...." this now...doing this.

**T22:** And how did it make you feel about yourself...that you haven't done your homework?

Comm. 17. *Not wanting to depart from my objective at T19 I decided to try and keep things simple by limiting exploration of feelings around not doing homework assignments.*

**C22:** Like a failure.

**T23:** A failure. Ok... and what's...

Comm. 18. *I felt the intervention made at T19 was in the process of yielding genuine therapeutic returns. Sara had given information that linked behaviour (bingeing) thoughts (not doing homework) and feelings (failure) together.*

*It was evident that I had the opportunity of trying to use my skills as a therapist to demonstrate this relationship to Sara.*

**C23:** (...) It made me feel like a real failure...

**T24:** So from that...that binge it took you straight to feelings of...would you say failure...would you associate it with low self-esteem?

Comm. 19. *I became mindful during the middle of my sentence that I was about to jump ahead of myself and put words into Sara's mouth. I wanted to make sure that she understood the association between feelings of failure and low-self esteem for herself.*

**C24:** Yeah.

**T25:** Ok. So that binge led straight to feelings of low self-esteem.

Comm. 20. *At this point I begin to point out the relationship between binge eating and feelings of low self-esteem. I used the diagram (starting from the bottom of the figure, as suggested by Fairburn et al., 1993) I had sketched earlier in the session to elucidate this connection. In hindsight I feel that I could have re-drawn the figure (see comm. 2) in stages incorporating Sara's experiences and terms.*

**C25:** Mm.

**T26:** Ok...

**C26:** *But* I was feeling low esteem before the binge even.

**T27:** Ok...ok...so...I mean we can start up here if you like [*simultaneous laughter*]

Comm. 21. *Sara attempted to discredit the cognitive model I had sketched by stating that her feelings of low self-esteem preceded bingeing. I nonchalantly conveyed to her that it doesn't really matter which way she decides to view the figure as it still matched her experience.*

**C27:** Yeah...

**T28:** What I'm saying is that you're caught in a vicious circle.

Comm. 22. *At this point I feel that Sara is beginning to accept the cognitive view of the maintenance of bulimia nervosa and I wanted to explain how she is caught in a self-defeating cycle. However, in hindsight I feel the intervention at T28 would have been more therapeutic if it was phrased as a question (e.g., 'do you feel that you're caught in a vicious circle?').*

**C28:** Yeah and sometimes I don't know which one comes first anymore really...

**T29:** This is what I'm saying...and you know... and ultimately it's the relationship between your low self-esteem and concerns about shape and weight that's underlying all this behaviour...

Comm. 23. *Following Fairburn et al. (1993) I wanted to point out how episodes of loss of control over eating tend to worsen self-esteem, thereby exaggerating feelings of ineffectiveness and intensifying concerns about shape and weight.*

**C29:** Mm...

**T30:** You know...its concerns about your shape, your weight and feelings of low self-esteem...and that's what's triggering this cycle.

**C30:** Being unaccepted...maybe that's why I felt different last night?

**T31:** Being unaccepted...low self-esteem...

Comm. 24. *I felt that my intervention at this point was said hastily and I could have allowed Sara to make the connection between non-acceptance and low-self esteem.*

**C31:** That's probably why I felt different last night because I felt part of something...even though it was temporary, obviously... "....." Oh dear...*it's just a nightmare innit?*

**T32:** I think you're doing...extremely well.

Comm. 25. *Given Sara's comment (C31), I felt she was beginning to catastrophize by escalating the intensity of how she viewed her problems in order to seek further validation.*

**C32:** How am I doing really well?

**T33:** *Well, for a start you've showed up for sessions...you haven't missed any sessions. Now I think there's one part of you that's really frightened and scared and doesn't want to do it because of that. And there's another part of you that is extremely determined and wants to get rid of this problem.*

Comm. 26. *Following my comments (comm. 25) I try and inject a sense of optimism in my tone of voice. I also attempted to bolster Sara's morale, validate her feelings and demonstrate empathy.*

**C33:** Yeah...I mean when I came up here and saw that your car was not in the drive I felt quite excited...I thought maybe he's not coming (*bursts into laughter*). Then I wouldn't have to tell you anything...

**T34:** The fact that...the fact that you're here today tells me...this is my feeling...this tells me that you really want to go through with this but...perhaps you need extra support.

Comm. 27. *At this point I thought it was appropriate to own my feelings and state how I felt about Sara's progress and what she needed to keep her in therapy*

**C34:** Totally. I...I just don't know what to...Totally...I...I just felt like I've been sent home with this... with this sheet of paper and...and...you know...and I'm just like what? You know...and I felt so alone in it as well. It's not something that...(...)

**T35:** I kind of anticipated this and this is why I suggested we have a minimum of two sessions a week to start of with.

Comm. 28. *Again I was trying to demonstrate that I understood how Sara felt and anticipated her difficulties. Although sessions are usually held once a week, it is maintained that clients who binge several times a day should be seen twice weekly at first and reduced to weekly*

*in the light of progress (Fairburn et al., 1993). Furthermore, I was simply trying to convey that I was willing to 'be with' Sara during her times of difficulty.*

**C35:** Mm... "...." mm...yeah you did.

### **Making use of supervision**

Supervision was used to address the impact of working with complex and demanding issues presented by Sara. At times, my own cognitive schemas about perfectionism or 'acceptable standards', judiciousness, freedom and responsibility were activated. When this occurred it transpired that I seemed to be less empathic and would take a more authoritative stance in therapy.

In light of the above, I also used supervision to explore other personal schemas that hindered the process of therapy with Sara. For example, I acknowledged that my schema of autonomy made it difficult to tolerate Sara's constant need for validation as this seemed to infringe on my own boundaries.

I also became more aware of the assumptions I held and my strong focus on goal attainment and was challenged to develop a case conceptualisation of why Sara had such strong needs for validation. Consequently, I developed, when necessary, a position of curiosity rather than a demanding stance regarding the lack of goal attainment.

### **Changes in the therapeutic process over time**

During the course of therapy Sara made some progress in her engagement with CBT. For example, she was able to re-frame and distance herself from problematic thoughts with regard to completing homework assignments. This had a profound impact in many important ways. Initially, it bolstered our therapeutic alliance as Sara started to share her most fiercely guarded secrets about her binge eating behaviour.

Sara was also able to reduce her ruminating thoughts and tendency toward placing too many items on her agenda. This allowed us to work on specific problems that conveyed the relationship

between feelings of low self-esteem, binge eating, extreme concerns about shape and weight, and self-induced vomiting. However, despite the progress made, Sara relapsed on alcohol. I was particularly saddened by this event as I felt Sara had worked so hard in her alcohol recovery. Her relapse marked a full return to the maladaptive thoughts and behaviours originally associated with her use of the substance.

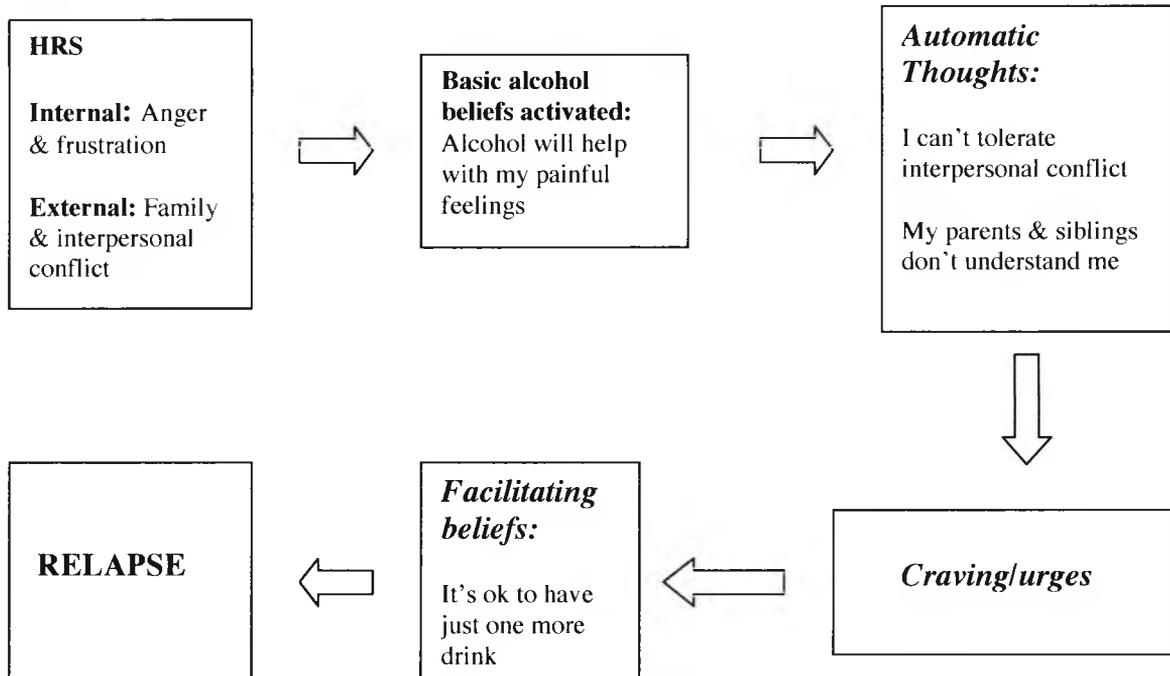
Sara was devastated by her relapse and attributed this event to a rare family encounter (all her siblings travelled to England for their first family reunion) that triggered unresolved interpersonal conflicts and, feeling betrayed by someone she considered as her only true friend. She also stated that she resumed contact with one of her peers who had relapsed and invited her home. Sara first relapsed on this occasion.

In light of the above, there was a significant change in the therapeutic process. Sara's main concern had changed from binge-eating and self-induced vomiting to alcohol dependence/recovery. This warranted a re-assessment of her self-efficacy and commitment to positive change in addition to a CBT reformulation in case conceptualisation and therapeutic plan (Lacey, 1986).

### **Changes in the formulation and therapeutic plan**

As stated, the main changes in formulation and therapeutic planning occurred when Sara relapsed on alcohol. She was vulnerable to high-risk stimuli (HRS) (Marlatt & Gordon, 1985). These were the internal (anger and resentment) and external triggers (interpersonal conflict with family and friends) that stimulated Sara's appetite for alcohol. Therapeutic aims had changed (in collaboration with Sara) to educating her and attempting to help her understand the cognitive process of her relapse (see **Figure 1.9**).

**Figure 1.9 Cognitive model of Sara's relapse**



## 9 Conclusion of therapy and review

### **The therapeutic ending**

Sara did not attend any further counselling sessions after she relapsed on alcohol for the second time. Although I was concerned about Sara's well being she had conveyed a high level of motivation to resume her journey in recovery. I felt that we had thoroughly explored the factors that seemed to trigger her relapse and Sara expressed awareness and understanding of this and took full responsibility for her actions.

At the end of our last session Sara stated:

“I think I need to forgive myself...I need to work on my self-esteem and [develop my] spirituality. Until that's fixed nothing else is gonna go”.

### **Evaluation and professional development**

Initially, my main objective in counselling was to understand and help Sara overcome the difficulties she encountered when trying to monitor her eating behaviour. Although I feel that our goals were achieved to an extent as Sara returned to subsequent sessions with fully completed monitoring sheets (see Appendix IX). There were, however, obstacles that hindered the process of therapy that can be attributed to my own shortcomings when working within a CBT paradigm.

In retrospect, when I suggested that Sara undertake homework assignments, I did not involve her in the decision-making process. Consequently, I failed to identify any concerns that she may have had about completing such tasks. Thus, as a result of assigning homework tasks unilaterally, I tacitly undermined the collaborative therapeutic relationship that I endeavoured to uphold.

Sara seemed to suggest that the setting of homework assignments set her up to fail. What I have learnt from this is the importance of setting homework assignments bilaterally. Furthermore (and as a way of avoiding similar problems in the future) framing homework as practice and learning rather than evaluating may address these issues.

## **PART D – Critical Literature Review**

# *Spirituality in Psychology and Therapy*

## 10 OPENING

Psychological and spiritual traditions have engendered different languages and metaphors for describing the human condition. It is these descriptions and metaphors that have resonated most deeply with human existence over time. Both spiritual and psychological systems attempt to explain who we are, to what is unhealthy (and healthy) about the human condition, and to the possibilities for change and transformation. Current literature suggests that a synthesis of spiritual and psychological approaches may unearth a common methodology for stimulating growth and change in counselling psychology practice.

### **Rationale and purpose of review**

The concept of spirituality has re-emerged as an important clinical and research focus in professional psychology and therapy literature. In an article published by the American Psychological Association entitled “Spirituality, Religion, and Health: *An Emerging Research Field*” Miller and Thoresen (2003) maintain that the investigation of spiritual factors in health is clearly warranted and clinically relevant. The value of considering spiritual perspectives in clinical theory, assessment and treatment is exemplified in special issues and sections focusing on research in spirituality and health that have appeared in scientific journals. These include *Psycho-Oncology* (Russack, Lederberg, & Fitchett, 1999), the *Journal of Health Psychology* (Thoresen & Harris, 1999), *Twin Research* (Kirk & Martin, 1999), and the *Annals of Behavioural Medicine* (Mills, 2002).

Following the recent interest in the study of spirituality, researchers such as Miller and Thoresen (2003, p.12) have been led to maintain that, “it is a true frontier for psychology... with high public interest”. Spirituality is increasingly being understood as a particularly important topic in the field of therapy that complements previous phases of research interest (West, 2000).

With regard to Counselling Psychology, it is maintained that the theoretical and philosophical tenets of the profession are inextricably linked to current understandings and research on spirituality and therapy (Rowan, 2005a). In light of the aforementioned literature, the current review seems timely and relevant.

Indeed, various faith communities have traditionally attempted to address emotional and psychological issues from a spiritual perspective. In its current form this is exemplified in the emergence of, for example, pastoral counselling. This is where counselling is conducted within the context of the faith community. However, the rise of modernity, it is said, marked the death of

faith and religion and brought forth, according to the phrase made famous by Max Weber: “the disenchantment of the world”. Thus, many intellectuals viewed ‘scientific’ psychology as an advance on spiritual and religious understandings of psychology and health.

Nonetheless, the percentage of clients presenting with religious or spiritual problems in therapy is increasing and well documented (Hay, 2001). Furthermore, the inclusion of “religious or spiritual problem” as a diagnostic category in DSM-IV-TR acknowledges that such issues may be a focus for psychiatric and psychological assessment and treatment (Lukoff, Lu & Turner, 1996).

It is imperative to note that whilst the literature on spirituality in psychology and therapy is growing most focus on a specific viewpoint (Cortright, 2007). This inevitably hampers attempts to incorporate the concept of spirituality in counselling psychology training programmes (De Acutis, 2005).

The purpose of the current review then is an attempt to consider some of the major developments in literature on spirituality that seem pertinent to research, theory and clinical practice of counselling psychology. It is noted, therefore, that many seemingly disparate issues in the aforementioned literature will be identified and critically discussed.

## **Brief History of Spirituality in Psychology and Therapy**

The origin of the study of psychology has ancient sources, circa 3200 BCE, where Kemitic<sup>3</sup> systems incorporated theory and practice (applications/techniques) to guide human beings in transformation to an ultimate state of development (Azibo, 1996). During the sixteenth century the Latin word *psyche* (human spirit or soul) was coupled with *logos* (word or study) to form *psychology*. Marko Marulic (1450-1524) the famous Croatian poet and humanist first used the word psychology in his account of the human soul. By 1732 it was being used in a more contemporary manner through Wolff's works (*Psychologia empirica* and *Psychologia rationalis*, 1732-1734) in Germany (Kruno, 1964).

Wilhelm Wundt (1832-1920) is often credited for the founding of modern psychology, however he states that: “[Gustav] Fechner was the first to introduce exact methods...principles of measurement and experimental observation for the investigation of psychic phenomena” and further asserts that modern “psychology has assumed a really scientific character, and may keep aloof from all metaphysical controversy”<sup>4</sup>

It seems then that despite Fechner's writings in *On Life after Death*, outlining his theory of a spiritual dimension in humanity, Wundt decidedly ignored this aspect of his model. This seems to have influenced the course and thinking of Western psychology's most notable pioneers who have also ignored or 'pathologized' spirituality.

In *Civilization and Its Discontents* Sigmund Freud reduced the “oceanic experience” of mystics to “infantile helplessness” and a “regression to primary narcissism” (Epstein, 1996, p. 32). B. F. Skinner, who pioneered understandings of modern behaviour modification principles, did not

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<sup>3</sup> Kemitic – Egypto-Nubian civilization of the Nile Valley (Bynum, 1999).

<sup>4</sup> Quoted in translator's Preface, *On Life after Death*, by G. Fechner, trans. H. Wernecke, (1835), Chicago: Open Court Publishing, (1945).

publish a single word on spirituality. Furthermore, Albert Ellis (one of the founders of cognitive psychology) stated that: “Spirit and soul is horseshit of the worst sort... a lot of transcendentalists are utter screwballs” (Heery, 2001). Indeed, Ellis and Yeager (1989) dedicate an entire book on making a direct and consistent attack on spirituality in psychology. In their work they question the scientific status of transpersonal therapy and associate it with religion and mysticism.

### **Defining Spirituality**

Current literature and discussions amongst professionals on spirituality seem to suggest that a single operational definition of what it is can be difficult to state (Miller & Thoresen, 2003).

Within psychology and therapy related literature spirituality is given a range of meanings that seem to revolve around the following four main themes:

1. ***Spirituality basically means the transpersonal.*** This definition is favoured by theorists such as Rowan (2005b) who see this term as more scientific and questions the validity of the term spirituality as it is often used in a broad and unspecified manner. He maintains that more precision is required as:

“there can be prepersonal spirituality (involving a lot of fear and traditional beliefs), personal spirituality (often located within a religious tradition) and transpersonal spirituality (opening us up and leading us on).”

(Rowan, 2005b, p. 11).

2. ***Spirituality involves peak experiences that may occur at any age and stage of human development.*** The most notable exponent of this definition is Abraham Maslow who states:

All peak experiences may be fruitfully understood as completions-of-the-act...or as the Gestalt psychologists’ closure, or on the paradigm of the Reichian type of complete orgasm, or as total discharge, catharsis, culmination, climax, consummation, emptying or finishing.

(Maslow, 1968, p. 111).

It is important to note that peak experiences are not a stage but a state of consciousness that can arise during, for example, heightened awareness in sport, watching a beautiful horizon or listening to an especially moving piece of music. There is, it is argued, a glimpse of the world of spirit during such times that may be ignored or made meaningful. Davis, Lockwood and Wright (1991) found that peak experiences were often not reported by individuals because they were seen as special and intimate moments that may be devalued if shared; and were often beyond their ability to describe in words.

Nonetheless, arguments abound with regard to aligning spirituality with peak experience, as it is also potentially manifest in ordinary day-to-day activity. For example, Berger (1970) asserts that spirituality is embedded in the fabric of everyday life and refers to human existence as having five “signals of transcendence” (order, hope, play, humour and damnation). He describes a mother soothing a frightened child at night as intimating a belief in ultimate order or reality, a trust in ‘being’, a conviction that ‘all will be well’.

3. ***Spirituality is a separate developmental line itself.*** This interpretation is still supported by Evelyn Underhill’s classic masterpiece *Mysticism: A Study in the Nature and Development of Spiritual Consciousness*, first published in 1911. She divides Western mysticism into three general hierarchical stages; namely, nature mysticism (an expansion of consciousness to embrace the stream of life); metaphysical mysticism (developing to formless cessation); and, divine mysticism (which Underhill divides into dark night and union).

A more recent and highly regarded exponent of this definition, akin to Kohlberg’s theory of moral development and Piaget’s model, is James Fowler’s stages of faith (Fowler, 1981). In the first three stages of faith development (*intuitive-projective*, *mythical-literal* and *synthetic-conventional*) individuals rely on some authority outside themselves for spiritual beliefs (e.g., religious institutions).

The fourth stage (*individuating-reflective*) involves a radical shift from dependence on others' spiritual beliefs to development of one's own. In the fifth stage (*conjunctive*) individuals still rely on their own views but are less preoccupied and dependent on fixed truths and more accepting of others' point of view. They also tend to be more tolerant and begin contemplating serving others.

Individuals who move to the final stage of faith development (*universalizing*) are considered to be rare. Such individuals begin to search for universal values (such as unconditional love and justice) and self-preservation becomes irrelevant. Martin Luther King, Mother Theresa, Mahatma Ghandi and Nelson Mandela may be considered as examples of this form of spiritual development.

However, Fowler (1981) himself states that sequential theories of development implicitly reserve 'true' spirituality for adulthood - this has led to research on childhood experiences of the numinous. In their exploration of spiritual awareness in children, Hay and Nye (2006) develop three categories: *Awareness sensing* – focusing on the here and now; *Mystery-sensing* – wonder and awe of, for example, a starry sky, and; *Value-sensing* – the experience of delight and despair in everyday life. They reported that children often found it difficult to express their spirituality or felt embarrassed as they deemed it to be socially unacceptable. It was found that some children were afraid of being laughed at or thought stupid or insane, not only by their peer group, but within their families as well.

4. ***Spirituality is an attitude (such as trust, compassion, openness and love) that may occur at any stage of development.*** Although this definition is common, it is also problematic. Can narcissistic love be considered "spiritual"? Does compassion suddenly appear or does it develop?

In light of the above, it is evident that the concept of spirituality is multidimensional and defies simple and discrete boundaries. It is no surprise then that (as stated earlier) there is procedural tension with regard to incorporating spirituality in counselling psychology training programmes (De Acutis, 2005).

Nonetheless, there are operational definitions within the literature that seem particularly relevant for therapy. Given that the origins of counselling psychology in the UK is strongly connected to humanistic and existential thinkers such as Abraham Maslow, Carl Rogers, Rollo May and Emmy van Deurzen (Strawbridge & Woolfe, 2003). The following meaning of spirituality may be considered as a preliminary working definition for counselling psychology practice:

Spirituality, which comes from the Latin *spiritus*, meaning 'breath of life', is a way of being and experiencing that comes through awareness of a transcendent dimension and that is characterised by certain identifiable values in regard to self, others, nature, life, and whatever one considers to be the Ultimate.

(Elkins, Hedstorm, Hughes, Leaf & Saunders 1988, p. 10).

Elkins et al. (1988) derived the definition given above when they decided to explore spirituality from a humanistic and phenomenological perspective by investigating what people meant by the word spiritual. Their research was based on the following assumptions: 1) spirituality is different from religiosity; 2) a spiritual dimension is existent; 3) spirituality is a human phenomenon that potentially exists in all people and; 4) spirituality is a multidimensional construct that can be identified, defined and assessed.

## 11 The Psycho-Spiritual Framework

If the profession of counselling psychology seeks to integrate spirituality in its training programmes, practitioners will need to recognise the similarities and differences between 'impaired' psychological and spiritual functioning. Indeed, psychologists have noted that spirituality can be understood, for some people, as frameworks that orient them to the world and provide motivation and direction for living (Hill & Pargament, 2003). It becomes necessary then to delineate the overall framework in which any given clients' problems or issues may be located and addressed.

### **The Spiritual Dimension**

Understandings of spirituality in psychotherapeutic literature tend to focus on Eastern and Western traditions. Western spirituality has emphasised the Personal Divine, theistic or theistic-relational tradition (as expressed in mainstream Christianity, Judaism and Islam) and stress the reality of the soul (considered to be the aspect of human existence that transcends birth and death). That is, the individual seeks a personal relationship with what they consider to be the Divine. It is contended that the soul exists in relation to the Divine, when this is broken emptiness or existential alienation is inevitable. The 'spiritual remedy' to this condition is re-establishing this connection to the Divine or with Spirit (Cortright, 2007).

In contrast, spirituality in Eastern (nondual) traditions (as expressed in mainstream Buddhism) give emphasis to the idea of pure spirit and stress the illusory nature of self and the existence of a formless, impersonal spiritual reality that is nameless. Meditation practice is the standard prescription for engaging the individual in a process of refining perception (and bringing

awareness to unconscious conditioning) to experience the ultimate illusory and empty nature of self (West, 2000).

It is worth noting that there are other spiritual traditions that hold both theism and nondualism as equal aspects of the Divine. Spirituality as expressed in Hinduism offers this particular view and is held in individuals from other traditions. Bynum (1999) asserts that the African intuition of reality, which enfolds material, and spiritual aspects of existence, also allows one to hold theistic and nondual aspects of spirituality.

For the sake of brevity, the enduring work of Huston Smith (1976) recognises and explains the four dimensions of reality that is used in the framework of all spiritual traditions:

1. Body
2. Mind
3. Soul
4. Spirit

The levels of body and mind are axiomatic and routinely studied in medical science, psychology and therapy. The level of soul is considered to be the ultimate realm of individuality and a vehicle for individual expressions of spirituality. The dimension of spirit transcends subject-object duality (hence the term nondual) and all existence is perceived as a manifestation of the One. Whilst soul is the dimension of identity that relates to the Divine, spirit is identity with the Divine (Cortright, 1997).

It is worth noting that Smith (1976) adopts the “perennial philosophy”<sup>5</sup> which has been strongly critiqued as being insufficient for explaining the underlying theory of major spiritual traditions

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<sup>5</sup> Perennial philosophy, a phrase first coined by Aldous Huxley (1894-1963), refers to the core areas of agreement between the world’s spiritual traditions.

(Walsh & Vaughn, 1993). One of the main criticisms stems from postmodern thought that would render the hierarchical nature of the perennial philosophy as politically incorrect.

Freeman (2006) notes that those who wish to attack perennialism within the transpersonal movement could do so quite easily by adopting a constructivist (or contextualist) position. As Daniels states “experiences themselves (rather than simply their post-hoc interpretations) are profoundly and irrevocably determined by predisposing personal, social and cultural factors including religious doctrines and particular forms of spiritual practice” (Daniels, 2005, p. 238). Thus, it can be said that there is no single underlying reality or pure unmediated spiritual experience to discern.

Ferrer (2002) makes a scathing (although somewhat sympathetic) attack on transpersonal theorists who adopt the perennial philosophy and breaks away from essentialist and constructivist approaches to spiritual reality. He maintains that both approaches “are burdened by a host of Cartesian-Kantian prejudices” (Ferrer, 2002, p. 156). Accordingly:

spiritual paths can no longer be seen either as purely human constructions...or as concurrently aimed at a single, predetermined ultimate reality...Once we *fully* exorcise the Cartesian-Kantian spell in spiritual studies and give up our dependence on essentialist metaphysics, in contrast, the various spiritual traditions can be better seen as vehicles for the participatory enaction of different spiritual ultimates.

(Ferrer, 2002, p. 157).

Notwithstanding the above, perennial philosophy seems to hold much of its value and has evolved and developed in contemporary psychological and therapeutic literature (Rowan, 2005b). It is claimed that hierarchy is but one way of organising and presenting such thought and is not an integral part of the perennial philosophy (Rothberg, 1986).

In sum, all spiritual frameworks, whether theistic-relational or nondual, maintain that the fundamental nature in human identity is a spiritual being, essence or soul. It is argued that a lack of consciousness or ignorance with regard to this aspect of being is the ultimate source of human suffering and pain (Cortright, 1997).

### **The Psychological Dimension**

If it is taken that the object of study in psychology is that of human consciousness<sup>6</sup> and its manifestation in behaviour. It follows that it is precisely the area of consciousness in which there is a discernable meeting ground with spirituality. The general framework that is used for understanding the history of psychology (as it relates to therapy) may be viewed in terms of schools or forces that evolved from studying consciousness (Walsh & Vaughan, 1993). They are often referred to as the First Force (behaviourism), the Second Force (psychoanalysis), the Third Force (existential-phenomenological/humanistic psychology) and, the Fourth Force (transpersonal psychology).

There is, however, contention within the literature of psychology and spirituality that there is a new emerging paradigm. This is currently known as Integral Psychology (often associated with the positive psychology movement) and claims to embrace the enduring insights of previous schools, expand understandings of what human consciousness is and, perhaps more importantly, what it might become.

*Behaviourism* began in the late 19<sup>th</sup> century with the famous experiments conducted by Pavlov and led to important therapeutic advances that are evident in contemporary psychotherapeutic

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<sup>6</sup> The term 'consciousness' is arguably an elusive term. It has been used philosophically for four main topics: knowledge in general, intentionality, introspection and phenomenal experience. *Concise Routledge Encyclopedia of Philosophy* (2000). Indeed, research and theoretical debate regarding the concept of consciousness has increased dramatically that has led to the development of peer-reviewed journals such as *The Journal of Consciousness Studies*.

practice, research and literature (Hawton, Salkovskis, Kirk & Clark, 1989). Indeed, cognitive-behavioural therapy (CBT, the most widely known clinical expansion of behaviourism) is the evidenced based treatment of choice for most forms of psychological problems presented by clients within NHS Primary Care Trusts (Salkovskis, 2004).

The impact this has had on counselling psychology training, practice and research may be gleaned from Bellamy's assertion that:

We are now, however, in a situation in which more than half of the trained members of the Division [of Counselling Psychology] work in the NHS...and many of our trainees intend to seek NHS posts when qualified.

(Bellamy & Van Scoyoc, 2005, p. 22)

Paradoxically, the behavioural school's language and use of metaphor is similar to many of the spiritual traditions, for it attributes suffering to inappropriate conditioning. It proposes that the basis of psychological problems stem from conditioning to dysfunctional or irrational ways of perceiving, thinking, and behaving (Beck, 1970).

It is of little surprise then that the spiritual practice of mindfulness is currently being seen as cutting edge practice and research in CBT (Chadwick, Taylor & Abba, 2005). However, whereas spiritual practices will stress the importance of freedom from all conditioning, behaviourists focus on more adaptive and flexible conditioning.

*Psychoanalysis* expanded the restricted view of self in behaviourism and had a revolutionary impact in the field of psychology and therapy. It was the first enduring depth psychology in that it considered the conscious and unconscious mind (Ellenberger, 1981). The pioneering efforts of

Sigmund Freud and his contemporaries was an extraordinarily brilliant synthesis of the prevailing scientific ideas.

Furthermore, what is not commonly known is that Freud integrated esoteric Hebrew spiritual teachings and Jewish folklore culture, particularly as it was expressed in Europe (Bakan, 1990). Freud seems to have utilised ideas from the Talmudic<sup>7</sup> methodology of seeking the source of truth assumed to be hidden in the source of text. In Talmudic methodology emphasis is given on seeking out the “original meaning of things” which parallels psychodynamic thinking (Bynum, 1999).

Epstein (1996) states that Freud’s relationship to the psychological study of spirituality is analogous to his relationship to the psychology of women. Thus, it is claimed Freud pioneered essential aspects of the study of spirituality while remaining confused about its place in a healthy psyche.

The spiritual path is ultimately about confronting one’s own inherent narcissism, after all is said and done. Freud laid the foundation, however incomplete, for this understanding.

(Epstein, 1996, p. 33)

*Humanistic/Existential-phenomenological* approaches in psychological therapy developed in the early 1950s in contention with the domination of behaviourism in psychology and psychoanalysis in psychotherapy. McLeod (2003) states that during this time a growing number of psychologists were reluctant to embrace the insights of behaviourism and psychoanalysis as adequate and full accounts of human development and experiencing. Two of the most prominent psychologists of

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<sup>7</sup> *Talmud* [Aramaic from Hebrew = learning] - The collection of ancient Rabbinic writings consisting of the Mishna (text of the oral law) and the Gemara (commentary on the Mishna), constituting the basis of religious authority in Orthodox Judaism. *The Columbia Electronic Encyclopedia, Sixth Edition. Columbia University Press* (2003).

this time were Carl Rogers and Abraham Maslow whose work has had an enduring influence in psychology and therapy.

Indeed, it was Maslow (1962) who publicised the term *humanistic psychology* and criticised Freud for studying pathology as opposed to health. Consequently, this led Maslow to gather substantial empirical and phenomenological evidence to create the first map of human growth and potential that has essentially been validated by subsequent research (Rowan, 2005b). The basis of Maslow's model is that individuals have a hierarchy of *deficiency to being* needs, as these needs are met a process of self-actualization is triggered. The failure to actualise this innate human potential results in psychological suffering.

The existential-phenomenological approach questions human nature from the assumption that it is open-ended, and capable of an enormous range of experience (Spinelli, 2003; van Deurzen, 2002). Its origins were from the writings of the Danish philosopher Soren Kierkegaard, whose enquiry into the nature of existence was perceived as a conversation between life and death. When individuals are confronted with the inevitability of death the response is dread or angst. According to Kierkegaard the answer to this dread or angst was a very spiritual one, faith (Warnock, 1970).

Despite Kierkegaard's enquiries leading him further into spirituality (with the exception of Buber and Tillich) most of the influential existential thinkers who followed (e.g. Nietzsche, Sartre and Camus) rebuked his spiritual perspective. This led to a focus (and study) of the human "lived experience" and a methodology for this purpose - phenomenology<sup>8</sup>. Consequently, the study of existential-phenomenological psychology and therapy was divorced from any of its initial

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<sup>8</sup> *Phenomenology* refers to the study of phenomena (or 'the appearance of things') in order to clarify how the objective world is humanly experienced and presents itself to our consciousness (Spinelli, 2003, p.180).

theological or theoretical constructs and critiqued psychoanalysis for being too intellectual and removed from fundamental life issues (Cortright, 1997).

It is worth noting, however, that there are still many contemporary existential thinkers who incorporate spirituality in their work. For example, the eminent UK based existential counselling psychologist, Emmy van Deurzen includes spirituality in her research, theory and practice. She distinguishes between four levels of existence, *Umwelt*, *Mitwelt*, *Eigenwelt* and *Ueberwelt* (physical, social, psychological and spiritual) in which people encounter the world and shape their attitude from their experience (van Deurzen, 2002).

*Transpersonal* psychology and therapy developed (in the mid-1960s) from an informal study group led by Anthony Sutich (founding editor of the *Journal of Humanistic Psychology*). The group included eminent thinkers such as Abraham Maslow, Viktor Frankl, Michael Murphy and Stanislav Grof who were dissatisfied with the focus on the individual self in humanistic psychology (Chinen, 1996).

In transpersonal approaches psychological development and health is specifically located and placed in a larger context of spiritual unfolding (West, 2000). It was Roberto Assagioli (1975) who first used the word 'transpersonal' in relation to therapy and his model of psychosynthesis was a development of Jung's work that made a very important distinction between the transpersonal and collective unconscious.

In reality, there exists not only a difference but an actual antagonism between these two conceptions of 'archetypes' and from this confusion between them arise various debatable consequences, debatable at the theoretical level and liable to be harmful in therapy.

(Assagioli, 1967, p. 8)

Assagioli (1965) conceptualized two distinct stages in healthy adult development. The first stage (*personal psychosynthesis*) involves integration, control, and balancing of the subpersonalities<sup>9</sup> of the psyche through the development of a conscious centre for the personality, known as the *I*. The second stage (*spiritual psychosynthesis*) involves the development of a spiritual centre for the personality called the *self*. At this stage a natural outcome of contact between the *I* (personal centre) and the creative and transforming spiritual energies of what Assagioli called the *superconscious*<sup>10</sup> occurs.

Whitmore (2004) explains how Assagioli distinguishes between superconscious activity (the transpersonal) and Spirit (currently known as the self with a capital S) that goes beyond the superconscious.

To have a true experience of the Self, however, it is necessary to disidentify also with the superconscious. This is very difficult because superconscious states can be so...meaningful that we easily become attached to and identified with them.

(Whitmore, 2004, p. 129)

In general, the transpersonal view is that a complete concept of mental health must include psychological and spiritual dimensions. However, precisely how an integration of spirituality and psychology should be (if at all) has yielded no clear agreement (West, 2000). This has led to a proliferation of transpersonal approaches. Some of the main ones amongst psychosynthesis are Michael Washburn's recent innovations in Jung's analytical psychology; Stanislav Grof's holotropic model; existential transpersonal psychotherapy; transpersonal psychoanalytic

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<sup>9</sup> *Subpersonality* (revised def.) Any aspect of the whole person which can be personified including the real self as described in humanistic psychology, the soul as described in Jungian studies (e.g. Hillman, 1975), and the spirit as described in mysticism worldwide (Rowan, 2005b, p.236).

<sup>10</sup> *Superconscious* (def.) a transpersonal and transcendent fountain of spiritual energy that can be contacted through a wide variety of techniques and practices such as meditation, active imagination, and music. *Textbook of Transpersonal Psychiatry and Psychology* (1996).

psychotherapy; body-centred approaches and; Hameed Ali's diamond approach<sup>11</sup>(currently the fastest growing transpersonal approach; Davis, 1999).

However, contemporary theorists such as Rowan (2002; 2005a) do not view transpersonal therapy as a specific school but rather as a dimension of all therapeutic endeavours. The late Petruska Clarkson (2003) gives credence to this view when she contends that the transpersonal relationship is one of five types of relationship in therapy. Along with the working alliance, the transference-countertransference relationship, the authentic relationship and the developmentally needed relationship.

As stated earlier, it is claimed that there is a new emerging paradigm attributable to a widely known and influential writer in the field of consciousness, spirituality, psychology and therapy, known as Ken Wilber. West (2000) states that:

Indeed he has been described as 'the Einstein of the transpersonal'. Consequently any consideration of spirituality and therapy which also includes the transpersonal has to take in Wilber.

(West, 2000, p. 92)

Remarkably, Wilber has created a synthesis of unprecedented scope among diverse schools and disciplines including psychology, philosophy, sociology, anthropology, and religion. Wilber's first book, *The Spectrum of Consciousness* published in 1977, was the first methodical attempt to show how the consciousness of mystical states maps onto the consciousness of neurosis or psychosis.

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<sup>11</sup> *Diamond Approach* – Primarily a spiritual practice (although used in therapy) that incorporates recent developments in psychology and spirituality. In essence it is an integration of object relations and body sensing with Sufism (Davis, 1999).

A very important idea that developed from Wilber's first publication that has significant therapeutic implications is what he calls the "pre/trans fallacy" (Lukoff et al., 1998; Kaspro & Scotton, 1999; Rowan, 2005b). Beginning with Freud, there has been a historical tendency for Western psychology to equate prepersonal and transpersonal states together and viewing psychotic episodes and transpersonal experiences as one and the same. This is primarily due to an unwitting acceptance of Aristotelian logic<sup>12</sup> and confusion between pre-rational and trans-rational stages of development (as both are non-rational).

Wilber (1977) suggests that consciousness displays a spectrum of levels and states with corresponding unconscious structures and contends that different schools of psychology address different levels of this spectrum. He maintains that the different schools are not contradictory or antagonistic, but complementary, each holding a partial truth. It is this spectrum view of consciousness that informs the current infrastructure of Wilber's ontological, epistemological, developmental, and evolutionary theories.

Since *The Spectrum of Consciousness* Wilber has published over 24 books, numerous papers and journal articles. Currently, Wilber (1995, 2000) has included a socio-cultural dimension to his work and refers to it as the 'All-Quadrant, All-Level' (AQAL) model. The model has five key aspects known as quadrants, levels, lines, states and types. These are the five irreducible categories of Wilber's model of manifest existence. He maintains that any comprehensive application of psychology necessitates inclusion of these five categories.

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<sup>12</sup> Aristotle (384-322 B.C.), in *Prior Analytics*, proposed that there are three "Laws of Thought" – 1. The Law of Identity (*A is A: Everything is itself*) 2. The Law of Noncontradiction (*Nothing can be both A and not-A*) 3. The Law of Excluded Middle (*Everything is either A or not-A*). It is axiomatic that these are general and not necessary truths. *Concise Routledge Encyclopedia of Philosophy* (2000).

Wilber's recent book *Integral Spirituality* (2006) is a development of the AQAL model that offers a 'post-metaphysical' underpinning to traditional spirituality and metaphysics. He proposes an 'integral methodological pluralism' (IMP) or a pragmatic way to analyze and implement a true integral approach in a postmodern world.

## 12 Integral Psychological Framework

Given the profession of counselling psychology is committed to recognizing and establishing the value of all major traditions in psychology with emphasis on the relational aspects of therapy. As well as specifically adopting an attitude that necessitates a holistic and developmental view of an individual's life (Strawbridge & Woolfe, 2003). A brief review of Wilber's integral framework (as it relates to therapy) seems necessary as it claims to embrace the enduring truths of all the main schools in psychology and provides a developmental model that spans the entire spectrum of human growth from birth to enlightenment.

In *Integral Psychology* Wilber (2000) refines his 10 developmental stages<sup>13</sup> (referred to as fulcrums F-0 to F-9) and links them to specific 'pathologies' and therapies. In essence, Wilber combines and extends Piaget's model (and other Eastern and Western developmental theories) with his own interpretation of the perennial philosophy. His basic premise is that:

Each of those self-stages (or fulcrums) ideally involves both *differentiation* and *integration* (transcendence and inclusion). The self differentiates from the lower level (e.g. body), identifies with the next higher level (e.g. mind), and then integrates the conceptual mind with the feelings of the body. A failure at any of those points results in pathology...or narrowing of the self in its otherwise expanding journey.

(Wilber, 2000, p. 93)

Wilber (2000) divides these pathologies into three categories, lower, intermediate and higher (or prepersonal, personal and transpersonal). He associates what he calls lower pathologies (F-0 to F-3), such as psychosis, narcissism or borderline personality disorder with failures in early development. At the intermediate level (F-4 to F-6) Wilber includes 'script pathology', neuroses

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<sup>13</sup> Wilber's developmental stages: F0 - pleroma; F1 - physical self; F2 - emotional self; F3 - self-concept; F4 - role self; F5 - mature ego; F6 - centaur; F7 - psychic; F8 - subtle, and; F9 - causal. (Wilber, 2000, p.197).

and existential distress. Beyond these fulcrums the transpersonal domain begins to come into focus, not simply as passing peak experiences, but as new and higher structures – with new and different pathologies. For example, kundalini crises, the dark night of the soul or the spiritual emergencies as described by Stanislav Grof (1992).

For each of the fulcrum disorders, Wilber suggests a fulcrum-specific treatment:

Intense regressive therapies...attempt to re-experience aspects of the earliest fulcrums (pre-, peri-, and neonatal; F-0 and F-1). Psychoanalytic ego psychology and self psychology tend to deal with the next but still rather early fulcrums...Cognitive and interpersonal therapy tend to focus on beliefs and scripts (F-4 and F-5). Humanistic-existential therapies tend to deal with all those issues *and* on actualizing an authentic self...transpersonal therapies, while addressing all those personal fulcrums...include approaches to the higher spiritual domains.

(Wilber, 2000, p. 99)

Although Wilber (2000) states that the general levels of therapy that he outlines will inevitably have a great deal of overlap between them; that they are broad guidelines as to what might be expected and are, therefore, meant to be suggestive only. Nonetheless, it can still be argued that, the foundation of Wilber's (1977; 1995; 2000) model may be interpreted as excessively rigid and hierarchical.

Ferrer (2002) criticises Wilber's theory for being too authoritarian and argues for a more relational and participatory spirituality. Criticisms of Wilber's theory are also derived from Jungian and existential-phenomenological perspectives. Washburn (1990) challenges Wilber by claiming that there are at least two separate models and patterns of spiritual development or transcendence. He agrees that Wilber's view is one model of "a ladder to oneness" that is drawn from Eastern spirituality; but explains another by expanding on Jung's theory<sup>14</sup> of transpersonal development. Drawing from a more Western perspective of a "spiral to integration" Washburn

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<sup>14</sup> According to Jung, in the first half of life one develops the ego. In the second half of life the inward journey is emphasised more, one returns to the beginning and knows it for the first time (Washburn, 1990).

(1990) contends that for transpersonal development to occur it necessarily requires a U-turn, “a return to origins...a going back before a higher going forth”.

It is apparent that there is an inevitable paradigm clash between the completely materialist existential-phenomenologist, such as Ernesto Spinelli (who views the self as indefinable other than in a relational context) and those that have a more spiritual outlook (e.g., Emmy van Deurzen). With this discrepancy in philosophy, Wilber’s model comes under fierce attack and is open to significant criticism from various theorists in the existential school (May, 1986; Schneider, 1987; 1989; Spinelli; 1994). Schnieder (1989) makes the most scathing and direct attack by stating that the very transpersonal states that Wilber defines are not provable, logically contradictory, and humanely impossible.

Wilber’s professional status as a philosopher and theoretical psychologist as opposed to a clinician is a further significant criticism made by those who draw attention to this fact (Grof & Grof, 1986; Heron, 1998). Hence, they argue that although his model is strongly organised at the level of ideas, it is not based on clinical facts. Cortright (1997) takes this criticism a step further by stating that Wilber attempts to squeeze Aurobindo’s<sup>15</sup> model into his own view of the Impersonal Divine. Despite Aurobindo’s integral philosophy manifesting a view of spirituality that balances the Personal with the Impersonal Divine.

Notwithstanding these significant criticisms of Wilber, his theory is still at the cutting edge of psychological and spiritual discourse and therefore relevant to any developments in counselling psychology theory, research and practice. Indeed there are notable strengths to his model that may

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<sup>15</sup>*Aurobindo Ghose (1872-1950)* - Also known as Sri Aurobindo, fashioned an entire worldview, a system intended to reflect both science and religion and to integrate several concerns of philosophy – epistemology, ontology, psychology, ethics – into a single vision. *Concise Routledge Encyclopedia of Philosophy* (2000).

be utilised in therapeutic research and practice. For example, Wilber (1995, 2000) offers a coherent model and presents a useful map that illuminates and furthers understandings of the intersection between psychology and spirituality.

Indeed, Rowan (2002, 2005a) maintains that Wilber's model may be particularly relevant for the training of future counselling psychologists and psychotherapists. This is partly due to Wilber incorporating the evolution of consciousness in his recent AQAL model that provides a more inclusive historical and spiritual context for individual psychological development.

It is contended that Wilber's ideas may be extended or adapted to further complement and resonate with the ethos of counselling psychology practice. The idea that all psychologies are valid is not foreign to counselling psychology and offers an integrative viewpoint that simply places various psychological models at different developmental stages or levels. Moreover, such thinking may be utilised to address pertinent clinical matters that transcend psychological modalities and professions.

## 13 Clinical Practice and Training Issues

There are key clinical practices and training issues that are prominent in the literature on spirituality, psychology and therapy that may enable counselling psychologists to further differentiate their practice from other professions (e.g., clinical psychology). This may have the additional affect of bolstering practitioner and trainee self-perceptions of competence and alleviate concerns about the need to compete with (or measure up to) allied professions. Given the limitations of what can feasibly be included in the current review, two key issues will be highlighted and addressed.

*Metaskills*<sup>16</sup> refers to the concept that the beliefs a therapist holds about the world, is manifest in therapeutic process. The subtle way of being (of the therapist) may be identified, examined and actually considered to be skills used in therapeutic encounters Hamano (2004).

According to Mindell (1996) the study of metaskills is based on the notion that therapy consists of factors that go beyond the application of theory and technique. It emphasises the ‘feeling background’ in therapy that implicitly or explicitly influences the quality, tone and atmosphere of therapeutic encounters. Mindell (1996) states that it is aligned with the perennial philosophy that attests to the perpetual flow of life and events – the therapist that utilises this attitude will attend to their own flow, being aware of what feelings and emotions are present in them, at any given time. It is this very awareness that rises to the level of being a metaskill when the therapist is consciously (not only being aware of their feelings) able to integrate this awareness to the service of the client.

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<sup>16</sup> *Metaskills* – a relatively new concept in therapy developed by Amy Mindell (1996) referred to as the ‘bottom line’ in therapeutic endeavours. They determine how a therapist affects the personal development of their client, independent of learned theories, models or techniques.

It follows that a lack of awareness in the concept and use of metaskills may undermine the techniques used in therapeutic endeavours. Furthermore, it is contended that unawareness amongst counselling psychology trainees and practitioners about their own unique metaskills (fundamental feelings, beliefs, and attitudes) may have devastating implications, particularly in multicultural therapeutic endeavours (Buabeng, 2000).

***Multicultural therapy*** involves the acknowledgement of difference among clients and lays emphasis on the importance of racial, cultural, and familial factors that affect interaction between two or more people (Pederson, 1991). Spirituality is often an integral component of culture that may be addressed by counsellors' engaged in multicultural therapeutic encounters (Richards & Bergin, 1997). It follows that an understanding of spirituality and how it is incorporated in therapy when the culture of origin of the client is very different from the therapist may be particularly valuable. However, much of the literature in this area seems to segment multiculturalism and spirituality (Fukuyama & Sevig 1997).

Indeed, the work of Fukuyama and Sevig (1999) has been pioneering as it presents a coherent theory and methodology for integrating spirituality into multicultural counselling offering ideas for practical application and a multitude of research studies. Their work is comprehensive and clearly differentiates healthy and unhealthy expressions of spirituality. Fukuyama and Sevig (1999) contend that spiritual values and multicultural values are closely linked and inform the respective processes of spiritual involvement and multicultural learning. Furthermore they maintain in order to approach being truly multicultural and spiritual integration is necessary.

## 14 Summary

In conclusion, it seems fitting to address concerns voiced by Lane and Corrie (2006) regarding the future and influence of counselling psychology. Following Strawbridge and Woolfe (2003) they state that the activities, role and identity of counselling psychologists cannot be divorced from the economic, political and social contexts in which they operate. Lane and Corrie (2006) further assert that:

...we must address questions such as: 'What is it that makes counselling psychology unique amongst the psychological disciplines?' What is it that brings 'added value' as each discipline within psychology seeks to define (and redefine) itself in an increasingly competitive market place.

(Lane & Corrie, 2006, p. 17)

In light of this review (which is by no means exhaustive) and in response to Lane and Corrie (2006), it seems that counselling psychology, by its very nature and philosophical underpinnings is constantly in the process of being redefined as the cultural, socio-economic and political contexts of our lives change. Given that counselling psychology is still relatively new, in comparison to allied professions, it is incumbent upon each trainee and practitioner to forge the way ahead.

It is suggested then that expressed attention to the inclusion of multicultural and spiritual aspects of counselling psychology, in training and practice, may be necessary as there is growing evidence of their relatedness (Fukuyama & Sevig, 1999). Furthermore, the combination of these variables in theory, research and practice may provide an expanded (and unique) view of counselling psychology that is consistent with the complex ecological, cultural, socio-economic and political changes impressed on our global village.

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## APPENDICES

## **APPENDIX I**

Letter to the author from the  
Alcohol Education and Research Council

# aerc Alcohol Education and Research Council

Room 408  
Horseferry House  
Dean Ryle Street  
London  
SW1P 2AW  
Tel: 020 7217 8028/8896  
Fax: 020 7217 8847  
Email: [andrea.tilouche@aerc.org.uk](mailto:andrea.tilouche@aerc.org.uk)

Chairman: Dr Noel Olsen *MSc, FRCP, FFPHM*

Members:

Dr Jonathan Chick	Mr Peter Harraway
Ms Jean Coussins	Professor Gerard Hastings
Ms Joyce Craig	Professor Richard Hobbs
Professor Ilana Crome	Dr John Kemm
Ms Rhoda Emlyn-Jones	Dr Pui-Ling Li
Professor David Foxcroft	Ms Gaye Pedlow
Mr Ian Ford	Mrs Daljit Sidebottom

Director: Professor Ray Hodgson  
Grants & Committees Manager: Mrs Andrea Tilouche

Our reference  
TC 05/03

Your reference

Mr Frank Buabeng

7 September 2005

Dear Mr Buabeng

## **AERC Studentship**

Your Studentship Agreement has now been signed and a copy is attached for your records. Two further copies attached, please pass these to your Course Supervisor and Grant Administrator.

Good luck with your studies!

Yours sincerely



Andrea Tilouche

*Enc*

## APPENDIX II

The Twelve Traditions of Alcoholics Anonymous

# THE TWELVE TRADITIONS OF ALCOHOLICS ANONYMOUS

(Short Form)

1. Our common welfare should come first; personal recovery depends upon A.A. unity.
2. For our group purpose there is but one ultimate authority - a loving God as He may express Himself in our group conscience. Our leaders are but trusted servants; they do not govern.
3. The only requirement for A.A. membership is a desire to stop drinking.
4. Each group should be autonomous except in matters affecting other groups or A.A. as a whole.
5. Each group has but one primary purpose - to carry its message to the alcoholic who still suffers.
6. An A.A. group ought never endorse, finance or lend the A.A. name to any related facility or outside enterprise, lest problems of money, property and prestige divert us from our primary purpose.
7. Every A.A. group ought to be fully self-supporting, declining outside contributions.
8. Alcoholics Anonymous should remain forever non-professional, but our service centers may employ special workers.
9. A.A., as such, ought never be organized; but we may create service boards or committees directly responsible to those they serve.
10. Alcoholics Anonymous has no opinion on outside issues; hence the A.A. name ought never be drawn into public controversy.
11. Our public relations policy is based on attraction rather than promotion; we need always maintain personal anonymity at the level of press, radio and films.
12. Anonymity is the spiritual foundation of all our traditions, ever reminding us to place principles before personalities.

(Source: Alcoholics Anonymous World Services, 2002)

## APPENDIX III

Copy of Research Participant's Archived  
Assessment Application Form

**Note** – Specific details have been marked in the interest of client confidentiality and anonymity.

ASSESSMENT APPLICATION

FULL NAME:

DATE OF BIRTH:

How do you like to be addressed?

HOME ADDRESS:

TELEPHONE NO:

CURRENT ADDRESS:  
(If different)

RELIGION:

MARITAL STATUS (Please tick one):

- (a) Single
  - (b) Cohabiting
  - (c) Married
  - (d) Separated
  - (e) Divorced
- If (d) or (e) when:

REFERRED BY:  
(eg self, social worker, detox unit, GP)

AND OTHER SUPPORT AGENCIES:  
(eg probation officer, social worker)

DRINKING HISTORY

Age commenced drinking:

Age when heavy:

All previous treatment for alcoholism, including dates and duration of stay:

Current treatment.

Date of last alcoholic drink:

Please describe your drinking pattern:

Have you ever attended AA?

What are your feelings about it?

State longest period of sobriety:

### DRUG HISTORY

Please state all drugs used/abused, whether prescribed or otherwise, eg cannabis, slimming tablets, heroin, ecstasy, anti-depressants:

Drug	First used	Last used	Amount/cost per week/day
Tobacco			

PHYSICAL HISTORY

Have you ever had any major illness or operation?  
Please give details:

Are you experiencing any physical problems related to your drinking?

Do you have any current health problems?

Have you ever had a fit?

Have you ever had any eating problems?

Are you currently on any medication?

Do you have any known allergies?  
eg food, insect bites, medication

FINANCIAL INFORMATION

Please declare all sources of income, ie benefits, Income Support, pensions, employment:

State any debts, outstanding bills to date:

Please give a brief description of your work history and your usual occupation:

FAMILY BACKGROUND

Mother's age:

Occupation:

If deceased, date and cause: †

Attitude to your drinking: †

Does she drink? †

Please describe your relationship with your mother:

Father's age: †

Occupation:

If deceased, date and cause:

Attitude to your drinking: †

Does he drink?

Please describe your relationship with your father:

Are your parents still married to each other?

Brothers/sisters - name, age attitude to alcohol, relationship:

Is there any history of alcohol/drug abuse amongst your relatives?

Is there any known history of mental health problems in your family:

Current partner's age:

First name:

Occupation:

Please describe your current relationship with your partner:

Do you have any children? State ages, sex and relationship with them:

Do any of your children have a ~~social~~ worker?

Previous marriages (name, age). When divorced:

### PSYCHIATRIC HISTORY

Please describe any mental health problems and treatments - give dates of admissions to hospital:

Have you attempted suicide or tried to harm yourself? Please give details:

### LEGAL HISTORY

Please describe any criminal record - give dates of convictions and details of offences, including any drink driving:

Are you on probation? Please give details:

Please describe any involvement in illegal activities not prosecuted for:

FURTHER INFORMATION

What areas do you think you need to work on? What do you think you need to change?

Why do you want to stop drinking now?

How can \_\_\_\_\_ help you?

Do you have any other problems?

## EQUAL OPPORTUNITIES STATEMENT

wishes it to be known that it has an Equal Opportunities Policy. This means that:

1. The organisation will seek to ensure equality of opportunity and treatment for all persons, including residents, day clients and the staff team.
2. No person or group of persons applying for treatment as a resident or day client or for a job, will be treated less favourably than any other person or group of persons because of their race, colour, ethnic or national origin or because of their religion, gender, physical disability, marital status or HIV status.
3. To help it fulfil its commitment to equal opportunity, will collect and monitor records of the ethnic origin of all those applying to it for treatment and all those interviewed for employment within the organisation.
4. In hiring contractors and other agencies to work for it, will be mindful of its commitment to equality of opportunity.
5. In the composition and operation of its Management Committee, will be mindful of its commitment to equal opportunity.

## SELF-ASSESSMENT FORM

As an equal opportunity policy, which aims to ensure that all job applicants, employees, residents and day clients are treated fairly and equally regardless of race, creed, disability, sex or sexual orientation. In order to satisfy ourselves that the policy is being carried out efficiently, we ask that you assist us to monitor the policy by completing this form.

Your reply will be confidential and will be used for monitoring purposes only.

We would appreciate your co-operation in completing this form.

1. Please indicate the description which you feel is the most appropriate description of your ethnic origins:

African .....

Afro-Caribbean .....

British White .....

British Black .....

British Other .....

Chinese .....

European .....

Irish .....

Other .....

2. Please indicate your sex:

Male ..... Female .....

3. Are you registered disabled?

Yes ..... No .....

## **APPENDIX IV**

Evaluation Research  
Outcome Questionnaire

## Research Participant Questions

Initially I would like to thank you for agreeing to participate in this research study and remind you that your identity will be kept completely confidential. Participant anonymity will be maintained and information given in this interview will not be shared with any staff members at \_\_\_\_\_. Your participation is entirely voluntary and you are free to withdraw from this interview at any time.

I will be asking you some brief questions about your psychoactive substance use and AA participation. The interview will only take a few minutes to complete.

- 1** Have you consumed any alcohol in the past 30 days?      **YES**      **NO**

**If yes (skip question 4) enter:**

(1) number of days used in past 30 days \_\_\_\_\_

(2) amount used on a typical day in the past 30 days [verbatim] \_\_\_\_\_

---

---

- 2** Have you consumed any alcohol in the past 90 days?      **YES**      **NO**

**If yes (skip question 4) enter**

(3) number of days used in past 90 days \_\_\_\_\_

(4) amount used on a typical day in the past 90 days [verbatim] \_\_\_\_\_

---

---

**3** Have you taken any illicit (non prescribed) drugs in the past 90 days? **YES** **NO**

**If yes** enter type of drug/s used [verbatim] \_\_\_\_\_  
\_\_\_\_\_

**4** Have you maintained continuous abstinence from alcohol and drugs since your assessment or date of leaving the programme at \_\_\_\_\_? **YES** **NO**

**5** Have you had a spiritual awakening as a result of your involvement in AA? **YES** **NO**

**6** During the past 90 days how many AA meetings have you attended? \_\_\_\_\_

**END OF INTERVIEW**  
**THANK RESPONDENT FOR THEIR PARTICIPATION**  
Note Completion Time --/--hrs

## APPENDIX V

Copy of Research Participants'  
Informed Consent Form

Note – Specific details have been omitted in the interest of confidentiality and anonymity.

Dear

### **INVITATION TO TAKE PART IN A RESEARCH STUDY**

You are being invited to participate in an evaluation research study. Before you decide it is important to understand why the research is being done and what it will involve. Please take time to read the following information and discuss it with others if you wish.

I will be conducting the research and am sponsored by the Alcohol Education and Research Council (AERC). The project will form part of my Doctoral studies and is supervised by Professor David Marks at City University, London.

#### **PURPOSE OF THE RESEARCH STUDY**

This project will evaluate the outcome of day and residential programmes for alcohol dependent individuals. All assessment application data held at X Alcohol Treatment Centre between May 2001 and October 2005 will be analysed following standard consent procedures. This data includes information about you, which is why I am seeking your consent.

All participants in this project will initially be followed up by mail or telephone between June 2006 and November 2006. The follow-up interview will be brief and ask about your drug and alcohol use and other relevant behaviours during the last 90 days. The study will also seek to explore the relationship between assessment application data and psychoactive substance use at follow-up.

Your cooperation in this research is extremely valuable and may help you and others similar to you in the future.

#### **CONFIDENTIALITY AND ANONIMITY**

Your identity will be kept completely confidential, as the data provided will be coded in numerical form. Any information that you provide at follow-up will not be shared with any staff members at X. Any documents and all published reports will be reported as grouped data and not refer to individuals. Subject to provisos on anonymity, confidentiality and data protection information obtained may be used as secondary data.

Your participation is entirely voluntary and you are free to withdraw at any time.

I will be happy to answer any questions you have about this study. You may contact me at the address given above. Thank you for your time.

**If you decide to participate in this research study, please sign and return the enclosed consent form, within one week, in the self addressed envelope to: Frank Buabeng, Principle Researcher, \_\_\_\_\_**

### INFORMED CONSENT

PLEASE READ THIS FORM CAREFULLY AND RETURN IT IN THE SELF-ADDRESSED ENVELOPE. THANK YOU VERY MUCH FOR YOUR COOPERATION.

This form deals with your consent to take part in a follow-up study conducted by Frank Buabeng. The purpose of the study is to help evaluate services offered by X.

In consenting to participate in this study I understand that:

1. I will initially be contacted by Frank Buabeng or his research assistant by mail or telephone for a brief follow-up interview between June 2006 and November 2006;
2. I will be asked questions about my psychoactive substance use and other behaviours during the last 90 days;
3. In the event of not being able to be contacted at the telephone number or address given below, the following people may be contacted to determine my new contact information on condition that it is not revealed why I am being sought;

Name of contact person	Tel. No.	Relation
1. _____	_____	_____
2. _____	_____	_____

4. The information given at follow-up will be treated confidentially. It will not be shared with any staff member at the treatment centre or any other agencies;
5. I will not be identified in any documents and all published reports based on this study will only refer to group data;
6. I reserve the right to decline the follow-up interview or to refuse to answer specific questions or to terminate the interview at any time;
7. I understand that participating in this study does not promise any therapeutic benefit. If I decline to participate or withdraw at a later stage, this will not affect in any way the services I may receive from the staff of the programme in the future.

I hereby consent to take part in the follow-up study as outlined above.

\_\_\_\_\_ (Signed) \_\_\_\_\_ (Date)

\_\_\_\_\_ (Print Name)

\_\_\_\_\_ (Address & Tel. No.)

**If you decide to participate in this research study, please sign and return the enclosed consent form, within one week, in the self addressed envelope to: Frank Buabeng, Principle Researcher, \_\_\_\_\_**

## APPENDIX VI

Copy of SPSS Raw Data used for  
Descriptive and Inferential Statistical Analyses

Baseline + Follow-up Data

	Status	DoB	DateofLastDrinking	FeelingsAA	MentalHealthProbs	SuicideAttempts
1	1	31.7.1965	28.9.2005	3	1	1
2	1	14.9.1942	24.9.2005	3	1	0
3	1	19.9.1941	12.9.2005	3	2	1
4	2	27.1.1978	15.7.2005	3	2	0
5	1	11.5.1939	25.8.2005	4	2	1
6	1	17.6.1973	28.9.2005	3	1	1
7	1	14.9.1942	24.9.2005	3	1	0
8	1	19.9.1941	12.9.2005	3	2	1
9	1	9.7.1956	17.7.2005	3	2	0
10	2	21.1.1952	7.7.2005	1	1	0
11	1	15.12.1966	18.7.2005	4	1	1
12	1	25.3.1956	5.6.2005	3	1	0
13	1	12.10.1976	30.6.2005	3	1	1
14	1	25.5.1976	10.7.2005	3	1	1
15	1	6.9.1961	1.6.2005	3	1	1
16	1	31.3.1973	1.7.05	1	1	1
17	1	19.6.1971	13.6.2005	1	2	0
18	2	25.7.1952	30.5.2005	3	1	0
19	1	10.1.1975	6.6.2005	1	2	1
20	1	8.2.1969	3.5.2005	1	1	1
21	1	24.8.1969	18.4.2005	1	1	1
22	1	2.11.1976	13.4.2005	3	1	1
23	2	5.10.1960	26.4.2005	3	2	0
24	1	20.4.1954	28.2.2005	1	1	0
25	1	23.12.1954	24.4.2005	3	1	1
26	2	26.3.1964	28.3.2005	1	1	1
27	1	10.11.1965	17.3.2005	1	1	1
28	1	29.12.1969	31.3.2005	1	2	0
29	2	25.3.1956	29.3.2005	4	2	0
30	2	25.10.1964	31.3.2005	3	2	0
31	2	2.10.1975	22.3.2005	1	2	0
32	2	22.5.1954	15.3.2005	1	1	1
33	2	2.1.1961	7.2.2005	1	1	0
34	2	7.11.1960	16.12.2004	1	1	0
35	1	10.1.1939	15.1.2005	1	1	1
36	1	7.11.1964	17.1.2005	3	.	0
37	1	29.3.1965	15.5.2004	1	1	1
38	1	31.10.1975	3.1.2005	3	1	1
39	2	14.2.1962	10.12.2004	1	2	0
40	1	30.9.1957	25.10.2004	1	2	0
41	1	26.6.1979	8.12.2004	3	2	1

Baseline + Follow-up Data

	Gender	Ethnicity	group	com	Age	AgeCat	TIME
1	2	4	1.00	2.00	40.00	5.00	1.00
2	1	4	1.00	1.00	63.00	9.00	1.00
3	1	4	3.00	3.00	64.00	9.00	
4	1	4	1.00	1.00	27.00	2.00	1.00
5	1	4	1.00	2.00	66.00	10.00	1.00
6	2	4	1.00	2.00	32.00	3.00	1.00
7	1	4	1.00	1.00	45.00	6.00	1.00
8	1	4	3.00	3.00	43.00	5.00	
9	1	5	1.00	1.00	49.00	6.00	
10	1	4	1.00	2.00	53.00	7.00	1.00
11	2	4	1.00	2.00	38.00	4.00	1.00
12	1	4	1.00	1.00	49.00	6.00	1.00
13	2	4	3.00	3.00	28.00	2.00	1.00
14	1	4	1.00	1.00	29.00	2.00	1.00
15	2	5	3.00	3.00	43.00	5.00	1.00
16	2	5	1.00	2.00	32.00	3.00	
17	1	4	3.00	3.00	34.00	3.00	1.00
18	1	4	1.00	1.00	54.00	7.00	1.00
19	2	4	3.00	3.00	30.00	3.00	1.00
20	1	4	1.00	2.00	36.00	4.00	
21	2	5	3.00	3.00	35.00	4.00	
22	2	4	1.00	1.00	28.00	2.00	
23	2	4	1.00	1.00	44.00	5.00	1.00
24	1	5	1.00	1.00	51.00	7.00	1.00
25	2	4	3.00	3.00	50.00	7.00	1.00
26	2	4	1.00	1.00	41.00	5.00	1.00
27	1	4	3.00	3.00	39.00	4.00	
28	2	4	3.00	3.00	35.00	4.00	1.00
29	2	5	1.00	2.00	49.00	6.00	1.00
30	2	4	1.00	2.00	40.00	5.00	1.00
31	1	4	3.00	3.00	29.00	2.00	1.00
32	2	5	1.00	1.00	50.00	7.00	1.00
33	2	4	1.00	2.00	44.00	5.00	1.00
34	2	4	3.00	3.00	44.00	5.00	1.00
35	2	5	1.00	1.00	66.00	10.00	
36	1	4	3.00	3.00	40.00	5.00	1.00
37	2	4	3.00	3.00	39.00	4.00	1.00
38	2	4	1.00	2.00	29.00	2.00	
39	2	4	1.00	1.00	42.00	5.00	1.00
40	2	4	3.00	3.00	47.00	6.00	
41	2	4	1.00	1.00	25.00	2.00	1.00

Baseline + Follow-up Data

	LastDrink	DaysofAbstinence	FollowUpDate	ThirtyDayAlcConsumption	DaysUsedinThirty	UnitsUsedThirty	NinetyDayAlcConsumption
1	1.00	1.00	19.10.2006	2.00	.00	.00	2.00
2	2.00	3.00	18.10.2006	1.00	30.00	16.60	1.00
3	2.00	10.00					
4	2.00	24.00	18.10.2006	2.00	.00	.00	2.00
5	2.00	8.00	27.10.2006	1.00	30.00	18.75	1.00
6	1.00	1.00	19.10.2006	2.00	.00	.00	2.00
7	3.00	181.00	18.10.2006	1.00	30.00	16.60	1.00
8	2.00	16.00					
9	2.00	17.00					
10	2.00	25.00	18.10.2006	2.00	.00	.00	2.00
11	1.00	1.00	18.10.2006	1.00	21.00	37.50	1.00
12	3.00	43.00	28.10.2006	2.00	.00	.00	2.00
13	2.00	15.00	6.11.2006	1.00	17.00	37.20	1.00
14	1.00	1.00	18.10.2006	1.00	30.00	24.70	1.00
15	3.00	36.00	18.10.2006	2.00	.00	.00	2.00
16	2.00	5.00					
17	2.00	18.00	18.10.2006	2.00	.00	.00	2.00
18	2.00	25.00	2.11.2006	1.00	30.00	27.75	1.00
19	2.00	16.00	27.10.2006	2.00	.00	.00	2.00
20	2.00	24.00					
21	3.00	39.00					
22	2.00	28.00					
23	2.00	13.00	18.10.2006	2.00	.00	.00	2.00
24	3.00	59.00	18.10.2006	2.00	.00	.00	2.00
25	1.00	1.00	18.10.2006	2.00	.00	.00	2.00
26	2.00	21.00	28.10.2006	2.00	.00	.00	1.00
27	2.00	28.00					
28	2.00	8.00	18.10.2006	2.00	.00	.00	2.00
29	2.00	9.00	19.10.2006	1.00	30.00	7.60	1.00
30	1.00	1.00	20.10.2006	1.00	30.00	45.00	1.00
31	1.00	1.00	20.10.2006	2.00	.00	.00	2.00
32	1.00	1.00	6.11.2006	2.00	.00	.00	2.00
33	2.00	28.00	26.10.2006	1.00	7.00	14.00	1.00
34	3.00	54.00	18.10.2006	1.00	1.00	29.02	1.00
35	2.00	6.00					
36	2.00	3.00	20.10.2006	2.00	.00	.00	2.00
37	3.00	236.00	26.10.2006	2.00	.00	.00	2.00
38	1.00	1.00					
39	2.00	11.00	6.11.2006	2.00	.00	.00	2.00
40	3.00	56.00					
41	2.00	7.00	27.10.2006	1.00	30.00	15.00	1.00

Baseline + Follow-up Data

	DaysUsed nNinety	UnitsUsed nNinety	UseofDrugs	DrugsUsed	Continuous Abstinence	SpiritualAw akening	AAmeeting sAttended
1	.00	.00	2.00	N/A	2.00	2.00	.00
2	90.00	16.60	2.00	N/A	2.00	2.00	.00
3	.	.	.	.	.	.	.
4	.00	.00	2.00	N/A	2.00	2.00	.00
5	90.00	18.75	2.00	N/A	2.00	2.00	.00
6	.00	.00	2.00	N/A	2.00	2.00	1.00
7	90.00	16.60	2.00	N/A	2.00	2.00	2.00
8	.	.	.	.	.	.	2.00
9	.	.	.	.	.	.	.
10	.00	.00	2.00	N/A	2.00	2.00	.00
11	35.00	37.50	2.00	N/A	2.00	2.00	.00
12	.00	.00	2.00	N/A	1.00	2.00	.00
13	48.00	12.60	1.00	Cannabis	2.00	1.00	.00
14	90.00	24.70	2.00	N/A	2.00	2.00	.00
15	.00	.00	2.00	N/A	1.00	1.00	2.00
16	.	.	.	.	.	.	.
17	.00	.00	2.00	N/A	1.00	1.00	2.00
18	90.00	27.75	2.00	N/A	2.00	2.00	.00
19	.00	.00	2.00	N/A	1.00	2.00	2.00
20	.	.	.	.	.	.	.
21	.	.	.	.	.	.	.
22	.	.	.	.	.	.	.
23	.00	.00	2.00	N/A	2.00	2.00	.00
24	.00	.00	2.00	N/A	2.00	2.00	1.00
25	.00	.00	2.00	N/A	1.00	1.00	2.00
26	3.00	4.20	2.00	N/A	2.00	2.00	1.00
27	.	.	.	.	.	.	.
28	.00	.00	2.00	N/A	1.00	1.00	2.00
29	90.00	7.60	2.00	N/A	2.00	2.00	.00
30	90.00	45.00	1.00	Cannabis	2.00	2.00	1.00
31	.00	.00	2.00	N/A	2.00	1.00	.00
32	.00	.00	2.00	N/A	2.00	1.00	2.00
33	67.00	21.00	2.00	N/A	2.00	2.00	2.00
34	1.00	20.02	2.00	N/A	2.00	3.00	1.00
35	.	.	.	.	.	.	.
36	.00	.00	2.00	N/A	1.00	1.00	2.00
37	.00	.00	2.00	N/A	1.00	2.00	2.00
38	.	.	.	.	.	.	.
39	.00	.00	2.00	N/A	2.00	3.00	1.00
40	.	.	.	.	.	.	.
41	90.00	22.50	1.00	Cannabis	2.00	2.00	.00

## Baseline + Follow-up Data

	Status	DoB	DateofLastDrinking	FeelingsAA	MentalHealthProbs	SuicideAttempts
42	2	19.5.1963	21.10.2004	3	2	0
43	2	6.5.1968	8.11.2004	3	1	0
44	1	25.4.1967	11.10.2004	1	1	1
45	2	27.6.1959	21.10.2004	3	1	1
46	1	6.4.1977	18.10.2004	3	1	1
47	2	23.2.1971	22.9.2004	3	2	0
48	1	14.7.1963	14.9.2004	3	1	0
49	1	11.10.1965	3.10.2004	1	1	0
50	1	23.5.1951	22.9.2004	1	1	0
51	2	2.6.1969	27.8.2004	1	2	0
52	1	12.4.1953	1.7.2004	1	2	0
53	2	28.11.1959	5.7.2004	1	1	1
54	1	10.4.1955	31.7.2004	3	2	0
55	1	7.3.1957	15.6.2004	4	2	0
56	1	21.11.1975	21.7.2004	1	1	0
57	1	11.7.1980	12.7.2004	1	1	1
58	1	20.3.1949	22.6.2004	1	1	0
59	2	23.1.1960	11.5.2004	1	2	0
60	2	17.12.1941	7.6.2004	1	1	1
61	1	1.6.1947	28.5.2004	1	2	0
62	1	15.10.1968	1.6.2004	1	1	0
63	1	4.4.1947	23.5.2004	1	1	0
64	1	3.5.1973	26.4.2004	1	1	0
65	1	8.6.1951	26.1.2004	1	2	0
66	1	22.10.1956	18.3.2004	3	1	0
67	2	15.7.1953	14.3.2004	1	2	0
68	1	5.8.1985	25.3.2004	4	1	1
69	1	12.2.1955	16.3.2004	1	1	1
70	1	10.2.1969	2.3.2004	3	1	0
71	1	27.1.1970	25.2.2004	4	1	1
72	2	26.7.1957	10.1.2004	1	1	0
73	1	23.5.1964	15.2.2004	1	1	0
74	1	20.3.1973	19.7.2003	1	2	0
75	1	22.8.1957	29.1.2004	1	2	0
76	2	1.10.1970	15.1.2004	4	2	0
77	1	3.10.1955	15.1.2004	3	1	1
78	1	26.12.1961	18.1.2004	1	2	0
79	1	1.6.1969	24.11.2003	1	1	1
80	1	31.8.1969	7.12.2003	1	1	0
81	1	8.6.1947	3.12.2003	3	1	0
82	1	12.12.1976	1.12.2003	4	1	1

Baseline + Follow-up Data

	Gender	Ethnicity	group	com	Age	AgeCat	TIME
42	1	5	3.00	3.00	41.00	5.00	1.00
43	2	5	1.00	2.00	36.00	4.00	1.00
44	2	5	1.00	1.00	37.00	4.00	1.00
45	2	4	3.00	3.00	45.00	6.00	
46	2	4	1.00	1.00	27.00	2.00	
47	2	4	3.00	3.00	33.00	3.00	1.00
48	1	4	3.00	3.00	41.00	5.00	1.00
49	2	4	1.00	2.00	38.00	4.00	
50	1	4	1.00	2.00	53.00	7.00	
51	2	4	3.00	3.00	35.00	4.00	1.00
52	1	4	3.00	3.00	51.00	7.00	1.00
53	2	5	3.00	3.00	44.00	5.00	1.00
54	2	4	1.00	1.00	49.00	6.00	2.00
55	1	4	3.00	3.00	48.00	6.00	1.00
56	1	4	3.00	3.00	28.00	2.00	
57	1	4	3.00	3.00	24.00	1.00	
58	2	4	1.00	2.00	55.00	8.00	2.00
59	1	4	1.00	1.00	44.00	5.00	2.00
60	2	4	3.00	3.00	62.00	9.00	
61	2	4	1.00	1.00	57.00	8.00	2.00
62	1	4	3.00	3.00	35.00	4.00	2.00
63	2	4	1.00	2.00	57.00	8.00	2.00
64	1	4	3.00	3.00	30.00	3.00	2.00
65	1	4	1.00	1.00	52.00	7.00	2.00
66	1	4	1.00	1.00	47.00	6.00	2.00
67	1	5	3.00	3.00	50.00	7.00	2.00
68	2	4	3.00	3.00	18.00	1.00	2.00
69	2	4	1.00	2.00	49.00	6.00	
70	1	4	3.00	3.00	35.00	4.00	
71	1	4	1.00	2.00	34.00	3.00	2.00
72	1	4	3.00	3.00	46.00	6.00	
73	2	4	3.00	3.00	39.00	4.00	
74	2	5	1.00	1.00	30.00	3.00	
75	1	5	1.00	1.00	46.00	6.00	2.00
76	1	5	1.00	2.00	33.00	3.00	2.00
77	2	4	3.00	3.00	48.00	6.00	2.00
78	1	4	1.00	2.00	42.00	5.00	2.00
79	1	4	3.00	3.00	34.00	3.00	2.00
80	1	4	1.00	2.00	34.00	3.00	2.00
81	2	4	1.00	2.00	56.00	8.00	
82	2	4	1.00	2.00	26.00	2.00	2.00

Baseline + Follow-up Data

	LastDrink	DaysofAbstinence	FollowUpDate	ThirtyDayAlcConsumption	DaysUsedinThirty	UnitsUsedThirty	NinetyDayAlcConsumption
42	3.00	49.00	27.10.2006	2.00	.00	.00	2.00
43	2.00	3.00	26.10.2006	2.00	.00	.00	2.00
44	2.00	2.00	20.10.2006	2.00	.00	.00	2.00
45	2.00	7.00					
46	1.00	.00					
47	2.00	23.00	20.10.2006	2.00	.00	.00	2.00
48	2.00	27.00	27.10.2006	2.00	.00	.00	2.00
49	1.00	1.00					
50	1.00	1.00					
51	2.00	7.00	26.10.2006	2.00	.00	.00	2.00
52	3.00	61.00	20.10.2006	2.00	.00	.00	2.00
53	3.00	31.00	20.10.2006	2.00	.00	.00	2.00
54	2.00	3.00	19.10.2006	2.00	.00	.00	2.00
55	3.00	48.00	20.10.2006	2.00	.00	.00	2.00
56	2.00	8.00					
57	1.00	1.00					
58	2.00	2.00	26.10.2006	1.00	2.00	13.15	1.00
59	3.00	38.00	6.11.2006	2.00	.00	.00	2.00
60	2.00	10.00					
61	2.00	14.00	2.11.2006	2.00	.00	.00	1.00
62	2.00	2.00	26.10.2006	2.00	.00	.00	2.00
63	1.00	1.00	19.10.2006	2.00	.00	.00	2.00
64	1.00	1.00	26.10.2006	2.00	.00	.00	2.00
65	3.00	91.00	18.10.2006	1.00	30.00	6.00	1.00
66	2.00	21.00	26.10.2006	2.00	.00	.00	2.00
67	2.00	17.00	6.11.2006	2.00	.00	.00	2.00
68	1.00	1.00	20.10.2006	2.00	.00	.00	2.00
69	2.00	7.00					
70	2.00	3.00					
71	1.00	1.00	20.10.2006	1.00	30.00	18.75	1.00
72	3.00	38.00					
73	2.00	2.00					
74	3.00	206.00					
75	1.00	1.00	20.10.2006	2.00	.00	.00	2.00
76	2.00	14.00	20.10.2006	2.00	.00	.00	2.00
77	2.00	11.00	20.10.2006	2.00	.00	.00	2.00
78	1.00	1.00	26.10.2006	2.00	.00	.00	2.00
79	2.00	24.00	28.10.2006	1.00	30.00	7.20	1.00
80	2.00	2.00	28.10.2006	2.00	.00	.00	1.00
81	1.00	1.00					
82	2.00	2.00	20.10.2006	2.00	.00	.00	2.00

Baseline + Follow-up Data

	DaysUsed nNinety	UnitsUsed inety	UseofDrugs	DrugsUsed	Continuous Abstinence	SpiritualAw akening	AAmeeting sAttended
42	.00	.00	2.00	N/A	1.00	1.00	2.00
43	.00	.00	2.00	N/A	2.00	2.00	1.00
44	.00	.00	2.00	N/A	1.00	1.00	2.00
45	.	.	.	.	.	.	.
46	.	.	.	.	.	.	.
47	.00	.00	2.00	N/A	1.00	1.00	2.00
48	.00	.00	2.00	N/A	1.00	2.00	.00
49	.	.	.	.	.	.	.
50	.	.	.	.	.	.	.
51	.00	.00	2.00	N/A	2.00	2.00	2.00
52	.00	.00	2.00	N/A	1.00	1.00	2.00
53	.00	.00	2.00	N/A	1.00	1.00	2.00
54	.00	.00	2.00	N/A	2.00	3.00	.00
55	.00	.00	2.00	N/A	1.00	1.00	2.00
56	.	.	.	.	.	.	.
57	.	.	.	.	.	.	.
58	4.00	13.15	2.00	N/A	2.00	2.00	2.00
59	.00	.00	2.00	N/A	2.00	1.00	2.00
60	.	.	.	.	.	.	.
61	5.00	37.50	2.00	N/A	2.00	1.00	1.00
62	.00	.00	2.00	N/A	1.00	1.00	2.00
63	.00	.00	2.00	N/A	1.00	1.00	2.00
64	.00	.00	2.00	N/A	1.00	1.00	2.00
65	90.00	6.00	2.00	N/A	2.00	2.00	.00
66	.00	.00	2.00	N/A	1.00	3.00	2.00
67	.00	.00	2.00	N/A	2.00	1.00	.00
68	.00	.00	2.00	N/A	1.00	1.00	1.00
69	.	.	.	.	.	.	.
70	.	.	.	.	.	.	.
71	90.00	18.75	1.00	Cannabis	2.00	1.00	.00
72	.	.	.	.	.	.	.
73	.	.	.	.	.	.	.
74	.	.	.	.	.	.	.
75	.00	.00	2.00	N/A	2.00	3.00	1.00
76	.00	.00	1.00	Cannabis	2.00	1.00	2.00
77	.00	.00	2.00	N/A	2.00	2.00	.00
78	.00	.00	2.00	N/A	2.00	2.00	.00
79	30.00	7.20	1.00	Cocaine	2.00	1.00	.00
80	20.00	75.00	1.00	Crack co	2.00	1.00	2.00
81	.	.	.	.	.	.	.
82	.00	.00	2.00	N/A	1.00	2.00	.00

## Baseline + Follow-up Data

	Status	DoB	DateofLastDrink	FeelingsAA	MentalHealthProbs	SuicideAttempts
83	1	24.5.1963	27.10.2003	3	2	0
84	1	12.4.1958	3.11.2003	1	2	0
85	2	28.10.1959	7.11.2003	1	2	0
86	1	11.6.1969	27.10.2003	1	1	0
87	2	2.5.1971	14.10.2003	3	2	0
88	1	2.6.1961	29.9.2003	1	2	0
89	2	16.8.1963	21.7.2003	1	2	1
90	1	4.8.1970	9.10.2003	1	1	1
91	1	16.9.1961	7.10.2003	1	1	1
92	2	13.4.1953	14.9.2003	3	1	0
93	2	15.9.1969	18.8.2003	1	1	0
94	2	13.3.1975	25.8.2003	1	1	0
95	2	20.4.1941	15.6.2003	1	1	1
96	1	21.2.1965	29.7.2003	1	2	0
97	2	14.11.1966	26.5.2003	1	1	1
98	2	14.11.1951	2.7.2003	1	2	0
99	2	27.3.1953	14.7.2003	1	1	0
100	2	24.9.1957	23.6.2003	3	1	1
101	2	1.4.1965	10.5.2003	1	1	0
102	1	23.9.1972	19.6.2003	1	2	0
103	1	29.12.1953	10.6.2003	4	1	1
104	1	18.7.1955	7.4.2003	1	2	0
105	1	25.3.1962	1.5.2003	1	1	1
106	2	11.3.1972	15.12.2002	1	1	1
107	1	12.9.1966	8.3.2003	1	1	1
108	1	10.1.1960	18.3.2003	3	1	1
109	1	31.12.1974	2.4.2003	1	1	0
110	1	15.8.1968	20.2.2003	1	1	1
111	1	7.5.1948	11.3.2003	1	1	0
112	1	18.3.1969	12.2.2003	4	1	1
113	1	12.4.1968	27.1.2003	1	1	0
114	1	13.4.1951	20.1.2003	3	1	1
115	2	5.4.1958	19.1.2003	4	1	0
116	1	9.6.1954	16.12.2002	3	1	1
117	1	6.4.1959	17.11.2002	1	2	0
118	2	24.5.1960	22.10.2002	1	2	0
119	1	8.4.1960	16.9.2002	1	1	1
120	1	21.11.1960	7.10.2002	4	2	0
121	1	8.7.1950	13.10.2002	1	1	1
122	1	20.4.1967	6.10.2002	3	2	1
123	1	27.8.1975	24.2.2002	1	1	0

## Baseline + Follow-up Data

	Gender	Ethnicity	group	com	Age	AgeCat	TIME
83	1	5	3.00	3.00	40.00	5.00	2.00
84	2	4	3.00	3.00	45.00	6.00	2.00
85	1	5	3.00	3.00	44.00	5.00	2.00
86	2	5	3.00	3.00	34.00	3.00	2.00
87	1	4	1.00	2.00	32.00	3.00	
88	1	4	3.00	3.00	42.00	5.00	2.00
89	1	5	1.00	2.00	40.00	5.00	2.00
90	1	4	3.00	3.00	33.00	3.00	2.00
91	2	5	1.00	1.00	42.00	5.00	
92	2	4	3.00	3.00	50.00	7.00	2.00
93	1	4	3.00	3.00	33.00	3.00	2.00
94	2	5	1.00	2.00	28.00	2.00	2.00
95	1	4	1.00	2.00	62.00	9.00	2.00
96	2	4	3.00	3.00	38.00	4.00	2.00
97	2	4	1.00	2.00	36.00	4.00	2.00
98	1	4	1.00	2.00	51.00	7.00	3.00
99	1	4	1.00	2.00	50.00	7.00	3.00
100	2	5	1.00	2.00	45.00	6.00	
101	2	5	3.00	3.00	38.00	4.00	2.00
102	1	5	1.00	2.00	30.00	3.00	
103	2	4	3.00	3.00	49.00	6.00	
104	1	5	3.00	3.00	47.00	6.00	2.00
105	2	4	1.00	2.00	41.00	5.00	2.00
106	2	4	3.00	3.00	31.00	3.00	3.00
107	2	4	3.00	3.00	36.00	4.00	3.00
108	2	5	3.00	3.00	43.00	5.00	3.00
109	1	5	3.00	3.00	28.00	2.00	3.00
110	2	4	3.00	3.00	34.00	3.00	
111	2	4	3.00	3.00	54.00	7.00	3.00
112	1	4	1.00	2.00	33.00	3.00	3.00
113	2	4	3.00	3.00	34.00	3.00	3.00
114	2	4	3.00	3.00	51.00	7.00	3.00
115	2	4	3.00	3.00	44.00	5.00	3.00
116	1	5	1.00	2.00	48.00	6.00	3.00
117	2	4	1.00	2.00	43.00	5.00	3.00
118	1	5	1.00	2.00	42.00	5.00	
119	2	4	1.00	2.00	42.00	5.00	3.00
120	1	5	3.00	3.00	41.00	5.00	3.00
121	1	4	3.00	3.00	52.00	7.00	3.00
122	2	4	3.00	3.00	35.00	4.00	3.00
123	1	4	3.00	3.00	27.00	2.00	3.00

Baseline + Follow-up Data

	LastDrink	DaysofAbstinence	FollowUpDate	ThirtyDayAlcConsumption	DaysUsedinThirty	UnitsUsedThirty	NinetyDayAlcConsumption
83	2.00	22.00	26.10.2006	2.00	.00	.00	2.00
84	2.00	11.00	19.10.2006	1.00	21.00	9.00	1.00
85	2.00	7.00	27.10.2006	2.00	.00	.00	2.00
86	2.00	15.00	20.10.2006	2.00	.00	.00	2.00
87	2.00	22.00					
88	3.00	32.00	26.10.2006	2.00	.00	.00	2.00
89	3.00	100.00	20.10.2006	1.00	30.00	12.00	1.00
90	2.00	4.00	26.10.2006	2.00	.00	.00	2.00
91	1.00	1.00					
92	2.00	4.00	27.10.2006	2.00	.00	.00	2.00
93	2.00	22.00	26.10.2006	2.00	.00	.00	2.00
94	2.00	3.00	26.10.2006	2.00	.00	.00	1.00
95	3.00	54.00	27.10.2006	2.00	.00	.00	2.00
96	1.00	1.00	26.10.2006	2.00	.00	.00	2.00
97	3.00	63.00	30.10.2006	1.00	21.00	40.00	1.00
98	2.00	21.00	26.10.2006	2.00	.00	.00	2.00
99	2.00	2.00	26.10.2006	1.00	5.00	21.20	1.00
100	2.00	17.00					
101	3.00	46.00	26.10.2006	2.00	.00	.00	1.00
102	1.00	1.00					
103	2.00	3.00					
104	3.00	37.00	26.10.2006	2.00	.00	.00	2.00
105	2.00	6.00	26.10.2006	2.00	.00	.00	2.00
106	3.00	130.00	26.10.2006	2.00	.00	.00	2.00
107	3.00	40.00	20.10.2006	2.00	.00	.00	2.00
108	2.00	21.00	20.10.2006	2.00	.00	.00	2.00
109	1.00	1.00	27.10.2006	2.00	.00	.00	2.00
110	3.00	39.00					
111	2.00	10.00	19.10.2006	2.00	.00	.00	2.00
112	2.00	2.00	26.10.2006	1.00	15.00	22.80	1.00
113	2.00	7.00	19.10.2006	1.00	2.00	6.30	1.00
114	1.00	1.00	6.11.2006	1.00	3.00	4.20	1.00
115	1.00	1.00	19.10.2006	1.00	2.00	6.30	1.00
116	2.00	21.00	20.10.2006	2.00	.00	.00	2.00
117	2.00	3.00	28.10.2006	2.00	.00	.00	2.00
118	1.00	1.00					
119	3.00	32.00	27.10.2006	2.00	.00	.00	1.00
120	2.00	8.00	20.10.2006	1.00	25.00	27.00	1.00
121	1.00	1.00	19.10.2006	2.00	.00	.00	2.00
122	2.00	4.00	26.10.2006	2.00	.00	.00	2.00
123	3.00	201.00	20.10.2006	2.00	.00	.00	2.00

Baseline + Follow-up Data

	DaysUsed nNinety	UnitsUsedN inety	UseofDrugs	DrugsUsed	Continuous Abstinence	SpiritualAw akening	AAmeeting sAttended
83	.00	.00	2.00	N/A	1.00	1.00	1.00
84	64.00	9.00	2.00	N/A	2.00	2.00	1.00
85	.00	.00	2.00	N/A	2.00	1.00	.00
86	.00	.00	2.00	N/A	1.00	1.00	2.00
87	.	.	.	.	.	.	.
88	.00	.00	1.00	Cannabis	2.00	1.00	1.00
89	60.00	12.00	1.00	Cannabis	2.00	2.00	1.00
90	.00	.00	2.00	N/A	1.00	1.00	2.00
91	.	.	.	.	.	.	.
92	.00	.00	2.00	N/A	1.00	1.00	1.00
93	.00	.00	2.00	N/A	1.00	1.00	1.00
94	2.00	8.40	2.00	N/A	2.00	1.00	2.00
95	.00	.00	2.00	N/A	2.00	2.00	2.00
96	.00	.00	2.00	N/A	2.00	1.00	2.00
97	51.00	40.00	2.00	N/A	2.00	1.00	2.00
98	.00	.00	2.00	N/A	1.00	1.00	.00
99	49.00	21.20	1.00	Cannabis	2.00	2.00	.00
100	.	.	.	.	.	.	.
101	6.00	23.25	2.00	N/A	2.00	2.00	2.00
102	.	.	.	.	.	.	.
103	.	.	.	.	.	.	.
104	.00	.00	2.00	N/A	1.00	1.00	.00
105	.00	.00	2.00	N/A	2.00	2.00	.00
106	.00	.00	2.00	N/A	1.00	1.00	2.00
107	.00	.00	2.00	N/A	2.00	2.00	.00
108	.00	.00	2.00	N/A	1.00	1.00	1.00
109	.00	.00	1.00	Cannabis	2.00	3.00	.00
110	.	.	.	.	.	.	.
111	.00	.00	2.00	N/A	2.00	1.00	2.00
112	49.00	19.00	2.00	N/A	2.00	2.00	1.00
113	6.00	6.30	2.00	N/A	2.00	2.00	.00
114	3.00	4.00	2.00	N/A	2.00	3.00	2.00
115	6.00	6.30	2.00	N/A	2.00	2.00	.00
116	.00	.00	2.00	N/A	1.00	2.00	.00
117	.00	.00	2.00	N/A	1.00	1.00	2.00
118	.	.	.	.	.	.	.
119	1.00	16.60	2.00	N/A	2.00	1.00	2.00
120	45.00	27.00	2.00	N/A	2.00	1.00	.00
121	.00	.00	2.00	N/A	1.00	2.00	.00
122	.00	.00	2.00	N/A	1.00	1.00	1.00
123	.00	.00	2.00	N/A	1.00	1.00	2.00

## Baseline + Follow-up Data

	Status	DoB	DateofLastDrinking	FeelingsAA	MentalHealthProbs	SuicideAttempts
124	2	8.4.1963	11.6.2002	1	2	0
125	1	12.10.1956	2.7.2002	3	1	0
126	1	21.7.1962	8.7.2002	1	2	0
127	1	27.10.1929	13.5.2002	3	2	0
128	2	31.5.1962	20.6.2002	3	1	1
129	1	25.8.1973	28.1.2002	1	1	1
130	1	1.8.1959	22.5.2002	1	1	0
131	2	25.6.1955	5.4.2002	1	2	0
132	2	15.12.1950	13.1.2002	3	1	1
133	1	10.12.1963	13.2.2002	1	1	0
134	1	16.12.1968	3.12.2001	3	2	0
135	1	29.1.1964	3.10.2004	1	2	0
136	1	10.9.1976	6.1.2004	1	1	1
137	1	20.2.1963	25.11.2004	3	1	0

Baseline + Follow-up Data

	Gender	Ethnicity	group	com	Age	AgeCat	TIME
124	1	5	3.00	3.00	39.00	4.00	3.00
125	2	4	3.00	3.00	45.00	6.00	3.00
126	1	5	1.00	2.00	39.00	4.00	3.00
127	2	4	3.00	3.00	72.00	11.00	3.00
128	2	5	3.00	3.00	40.00	5.00	
129	2	4	3.00	3.00	28.00	2.00	
130	1	5	3.00	3.00	42.00	5.00	
131	2	4	3.00	3.00	46.00	6.00	3.00
132	2	4	3.00	3.00	51.00	7.00	3.00
133	1	4	3.00	3.00	38.00	4.00	3.00
134	1	4	3.00	3.00	33.00	3.00	3.00
135	2	5	1.00	2.00	41.00	5.00	1.00
136	2	4	3.00	3.00	27.00	2.00	2.00
137	1	4	1.00	2.00	41.00	5.00	1.00

Baseline + Follow-up Data

	LastDrink	DaysofAbst nence	FollowUpD ate	ThirtyDayAl cConsumpti on	DaysUsedi nThirty	UnitsUsedT hirty	NinetyDayA lcConsumpt ion
124	3.00	38.00	26.10.2006	2.00	.00	.00	2.00
125	2.00	8.00	28.10.2006	2.00	.00	.00	2.00
126	1.00	1.00	19.10.2006	2.00	.00	.00	2.00
127	3.00	42.00	26.10.2006	2.00	.00	.00	2.00
128	1.00	1.00					
129	3.00	142.00					
130	2.00	6.00					
131	2.00	21.00	27.10.2006	2.00	.00	.00	2.00
132	3.00	85.00	27.10.2006	2.00	.00	.00	2.00
133	1.00	1.00	26.10.2006	1.00	30.00	9.00	1.00
134	3.00	43.00	26.10.2006	1.00	14.00	47.60	1.00
135	3.00	201.00	20.10.2006	2.00	.00	.00	2.00
136	2.00	6.00	6.11.2006	2.00	.00	.00	2.00
137	1.00	1.00	6.11.2006	1.00	30.00	15.20	1.00

Baseline + Follow-up Data

	DaysUsed inNinety	UnitsUsed inety	UseofDrugs	DrugsUsed	Continuous Abstinence	SpiritualAw akening	AAmeeting sAttended
124	.00	.00	2.00	N/A	1.00	2.00	.00
125	.00	.00	2.00	N/A	1.00	1.00	1.00
126	.00	.00	2.00	N/A	2.00	2.00	.00
127	.00	.00	2.00	N/A	1.00	1.00	.00
128	-	-	-	-	-	-	-
129	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-
131	.00	.00	2.00	N/A	1.00	2.00	.00
132	.00	.00	2.00	N/A	1.00	2.00	2.00
133	90.00	9.00	2.00	N/A	2.00	1.00	.00
134	14.00	47.60	1.00	Cannabis	2.00	2.00	1.00
135	.00	.00	2.00	N/A	1.00	2.00	2.00
136	.00	.00	2.00	N/A	2.00	1.00	2.00
137	90.00	30.40	2.00	N/A	2.00	2.00	.00

## APPENDIX VII

Copy of *The Eating Disorder Examination* (12.0D)  
Interview Schedule

- Striegel-Moore, K. H., Sils, J., & Tancig, J. (1995). Prevalence of eating disorder symptoms in preadolescent and adolescent girls with IDDM. *Diabetes Care*, 18, 1361-1368.
- Taylor, A. V., Peveler, R. C., Hibbert, G. A., & Fairburn, C. G. (in press). Eating disorders among women receiving treatment for an alcohol problem. *International Journal of Eating Disorders*.
- Wilson, G. T., Eldredge, K. L., Smith, D., & Niles, B. (1991). Cognitive-behavioural treatment with and without response prevention for bulimia. *Behaviour Research and Therapy*, 29, 575-583.
- Wilson, G. T., & Smith, D. (1989). Assessment of bulimia nervosa: An evaluation of the Eating Disorder Examination. *International Journal of Eating Disorders*, 8, 173-179.

## The Eating Disorder Examination (12.0D)

### Interview Schedule

#### INTRODUCTION

[Having oriented the subject to the specific time period being assessed, it is best to open the interview by asking a number of introductory questions designed to obtain a general picture of the subject's eating habits. Suitable questions are suggested below.]

To begin with I should like to get a general picture of your eating habits over the last 4 weeks.

Have your eating habits varied much from day to day?

Have weekdays differed from weekends?

Have there been any days when you haven't eaten anything?

---

What about the previous 2 months?

---

## PATTERN OF EATING

\* I would like to ask about your pattern of eating. Over the past 4 weeks which of these meals or snacks have you eaten on a regular basis?

- breakfast (meal eaten shortly after waking) [ ]
- mid-morning snack [ ]
- lunch (mid-day meal) [ ]
- mid-afternoon snack [ ]
- evening meal [ ]
- evening snack [ ]
- nocturnal snack (i.e., a snack eaten after the subject has been to sleep) [ ]

[Rate each meal and snack separately, usually accepting the subject's classification (within the guidelines above). Ask about weekdays and weekends separately. Meals or snacks should be rated even if they lead on to a "binge." "Brunch" should generally be classed as lunch. With this item, rate up (i.e., give a higher rating) if it is difficult to choose between two ratings. Rate 8 if meals or snacks are difficult to classify (e.g., due to shift work).]

- 0 - Meal or snack not eaten
- 1 -
- 2 - Meal or snack eaten on less than half the days
- 3 -
- 4 - Meal or snack eaten on more than half the days
- 5 -
- 6 - Meal or snack eaten every day

## RESTRAINT CONTROL (EATING)

(Restriction subscale)

\* Over the past 4 weeks have you been consciously trying to restrict what you eat, whether or not you have succeeded?

Has this been to influence your shape or weight?

[Rate the number of days on which the subject has *consciously attempted* to restrict his or her food intake, whether or not he or she has succeeded. The restraint should have been intended to influence shape, weight, or body composition, although this may not have been the sole or main reason. It should have consisted of planned attempts at restriction, rather than spur-of-the-moment attempts such as the decision to resist a second helping.]

- 0 - No attempt at restraint
- 1 -
- 2 - Attempted to exercise restraint on less than half the days
- 3 -
- 4 - Attempted to exercise restraint on more than half the days
- 5 -
- 6 - Attempted to exercise restraint every day [ ]

## AVOIDANCE OF EATING

(Restriction subscale)

\* Over the past 4 weeks have you gone for periods of 8 or more waking hours without eating anything?

Has this been to influence your shape or weight?

[Rate the number of days on which there has been at least 8 hours abstinence from eating food (soup and milkshakes count as food, whereas drinks in general do not) during waking hours. It may be helpful to illustrate the length of time (e.g., 9 A.M. to 5 P.M.). The abstinence must have been at least partly *self-imposed* rather than being due to force of circumstances. It should have been intended to influence shape, weight, or body composition, although this may not have been the sole or main reason.]

- 0 - No such days
- 1 -
- 2 - Avoidance on less than half the days
- 3 -
- 4 - Avoidance on more than half the days
- 5 -
- 6 - Avoidance every day [ ]

**EMPTY STOMACH****(Restraint subscale)**

\* Over the past 4 weeks have you wanted your stomach to be empty?

Has this been to influence your shape or weight?

[Rate the number of days on which the subject has had a definite desire to have a completely empty stomach for reasons to do with dieting, shape, or weight. This should not be confused with a desire for the stomach to feel empty or be flat.]

0 - No definite desire to have an empty stomach

1 -

2 - Definite desire to have an empty stomach on less than half the days

3 -

4 - Definite desire to have an empty stomach on more than half the days

5 -

6 - Definite desire to have an empty stomach every day

[ ]

**FOOD AVOIDANCE****(Restraint subscale)**

\* Over the past 4 weeks have you tried to avoid eating any foods that you like, whether or not you have succeeded?

Has this been to influence your shape or weight?

[Rate the number of days on which the subject has actively attempted to avoid eating specific foods (which he or she likes) whether or not he or she succeeded. The goal should have been to avoid the foods altogether and not merely to restrict their consumption. Drinks do not count as food. The avoidance should have been intended to influence shape, weight, or body composition, although this may not have been the sole or main reason.]

0 - No attempts to avoid food

1 -

2 - Attempted to avoid food on less than half the days

3 -

4 - Attempted to avoid food on more than half the days

5 -

6 - Attempted to avoid food every day

[ ]

**DIETARY RULES****(Restraint subscale)**

\* Over the past 4 weeks have you tried to follow certain definite rules regarding your eating, for example, a calorie limit, preset quantities of food, or rules about what you should eat or when you should eat?

\* Have there been occasions when you have been aware that you have broken a dietary rule that you have set for yourself?

How have you felt about breaking them? How would you have felt if you had broken one of your dietary rules?

What are these rules? Why have you tried to follow them? Have they been designed to influence your shape or weight?

Have they been definite rules or general principles? Examples of definite rules would be "I must not eat eggs" or "I must not eat cake," whereas you could have the general principle "I should try to eat healthy food."

[Dietary rules should be rated as present if the subject has been attempting to follow "definite" (i.e., specific) dietary rules regarding his or her food intake. The rules should have been self-imposed, although originally they may have been prescribed. They should have concerned what the subject should have eaten or when eating should have taken place. They might consist of a calorie limit (e.g., below 1,200 kcals), not eating before a certain time of day, not eating certain types of food, or not eating at all. They should have been specific rules and not general guidelines, and there may have been distress should they have been broken. If the subject is aware that he or she has occasionally broken a personal dietary rule, this suggests that one or more specific rules has been present. In such cases the interviewer should ask in detail about the transgression in an attempt to identify the underlying rule. The rules should have been intended to influence shape, weight, or body composition, although this may not have been the sole or main reason. It should be noted that "dietary rules" are regarded as having been present if there have been clear attempts to obey specific dietary rules.

Rate 0 if no dietary rule can be identified. If there has been more than one rule straddling different time periods within the 4 weeks, these periods should be summated to make the rating.]

0 - Has not attempted to obey such rules

1 -

2 - Attempted to obey such rules on less than half the days

3 -

4 - Attempted to obey such rules on more than half the days

5 -

6 - Attempted to obey such rules every day

[ ]

### PREOCCUPATION WITH FOOD, EATING, OR CALORIES (Eating Concern subscale)

\* Over the past 4 weeks have you spent much time between meals thinking about food, eating, or calories?

\* Has thinking about food, eating, or calories interfered with your ability to concentrate? How about concentrating on things that you are interested in, for example, reading, watching television, or following a conversation?

[Concentration is regarded as impaired if there have been *intrusive thoughts about food, eating, or calories that have interfered with activities*. Rate the number of days on which this has happened, whether or not bulimic episodes occurred.]

- 0 - No concentration impairment
- 1 -
- 2 - Concentration impairment on less than half the days
- 3 -
- 4 - Concentration impairment on more than half the days
- 5 -
- 6 - Concentration impairment every day

[ ]

### FEAR OF LOSING CONTROL OVER EATING (Eating Concern subscale)

\* Over the past 4 weeks have you been afraid of losing control over eating?

[Rate the number of days on which *definite fear* has been present, irrespective of whether the subject feels he or she has been in control. "Loss of control" involves a sense that one will not be able to resist or stop eating. If the subject feels unable to answer this question because he or she has already lost control, rate 9.]

- 0 - No fear of losing control
- 1 -
- 2 - Fear of losing control present on less than half the days
- 3 -
- 4 - Fear of losing control present on more than half the days
- 5 -
- 6 - Fear of losing control every day

[ ]

### BULIMIC EPISODES AND OTHER EPISODES OF OVEREATING (Diagnostic item)

#### GUIDELINES FOR INTERVIEWERS

[Four forms of episodic "overeating" are distinguished. The distinction is based upon the presence or absence of two characteristics:

- (i) Loss of control (required for both types of "bulimic episode")
- (ii) The consumption of what would generally be regarded as a "large" amount of food (required for "objective bulimic episodes" and "objective overeating")

The classificatory scheme is summarized in Figure 15.1 and key terms are defined below.

The interviewer should ask about each form of overeating. It is important to note that *the forms of overeating are not mutually exclusive*. It is possible for subjects to have had several different forms over the preceding month. With some subjects it is helpful to explain the classificatory scheme. Then, using the probe questions given below, the number of each type of episode may be determined and checked back with the subject.

#### Definition of Key Terms

"Loss of control." The interviewer should ask the subject whether he or she experienced a sense of loss of control over eating at the time that the episode

	Amount eaten	
	"Large" (EDE definition)	Not "large," but viewed by subject as excessive
"Loss of control"	Objective bulimic episodes	Subjective bulimic episodes
No "loss of control"	Objective overeating	Subjective overeating

occurred. If this is clearly described, loss of control should be rated as **present**. Loss of control may be rated positively even if the episode had been **planned**. If the subject uses terms such as "driven to eat" or "compelled to eat," **loss** of control should be rated as present.

For chronic cases only: If the subject reports no sense of loss of control **yet** describes having not been able to stop eating once eating had started or **having** not been able to prevent the episode from occurring, loss of control should be rated as present. If subjects report that they are no longer trying to **control** their eating because overeating is inevitable, loss of control should be rated as present.

If the interviewer is in doubt, loss of control should be rated as absent

"**Large amount of food.**" The decision whether or not the amount **eaten** was large should be made by the interviewer and does not require the **agree-**ment of the subject. Large may be used to refer to the amount of any particular type of food or the overall quantity of food consumed. *The interviewer should take into account what would be the usual amount eaten under the circumstances.* This requires some knowledge of the eating habits of the subject's general (but not necessarily immediate) social group. What else was eaten during the day is not of relevance to this rating. The speed of eating and whether or not the subject subsequently spits out or vomits the food are not of relevance.

If the interviewer is in doubt, the amount should not be classified as large.

**The number of episodes of overeating.** When calculating the number of episodes of overeating, the subject's definition of separate episodes should be accepted unless (within a period of eating) there was an hour or more when the subject was not eating. In this case the initial episode should be regarded as having been completed. When estimating the length of any gap, do not count the time spent vomiting. *Note that purging (self-induced vomiting or laxative misuse) is not used to define the end of individual episodes of overeating.*

#### Guidelines for Rating the Overeating Section

First, ask the asterisked questions to identify episodes of perceived or true overeating that have occurred over the previous 28 days. Note down all the forms of overeating on the blank section of the coding sheet.

Second, obtain detailed information about each form of overeating to decide whether it involved eating large amounts of food and whether or not there was loss of control (as defined above). Then establish for each form of overeating the number of days on which it occurred and the total number of occasions. It is advisable to make comprehensive notes.

Finally, check with the subject to ensure that no misunderstandings have

#### QUESTIONS FOR RATING ITEMS

[The asterisked questions must be asked in every case.]

##### Main Probe Questions

\* I would like to ask you about any episodes of overeating that you may have had over the past 4 weeks.

\* Different people mean different things by overeating. I would like you to describe any times when you have felt that you have eaten too much in one go.

\* Have there been any times when you have felt that you have eaten too much, but others might not agree?

[If there have been no such times, skip to "social eating."]

[n.b. For subjective bulimic episodes to be eligible, they must have been viewed as having involved eating an excessive amount of food.]

##### Subsidiary Probe Questions

To assess the amount of food eaten:

Typically what have you eaten at these times?

What were others eating at the time?

To assess loss of control:

Did you have a sense of loss of control at the time?

For chronic cases only:

Could you have stopped eating once you had started?

Could you have prevented the episode from occurring?

[For objective bulimic episodes, subjective bulimic episodes, and episodes of objective overeating make the following two ratings:

(i) Number of days (rate 00 if none) [ II ]

(ii) Number of episodes (rate 000 if none) [ II II ]

In general, it is best to calculate the number of days first and then the number of episodes. Rate 777 if the number of episodes is so great that their frequency

[Ask about the preceding 2 months.]

For objective bulimic episodes, rate the number of episodes over the preceding 2 months and the number of days on which they occurred. (Rate 0 if none and 9 if not asked.)

Days - Month 2	[ ] [ ] [ ]
Month 3	[ ] [ ] [ ]
Episodes - Month 2	[ ] [ ] [ ] [ ] [ ]
Month 3	[ ] [ ] [ ] [ ] [ ]

Also rate the longest continuous period in weeks free (not due to force of circumstances) from objective bulimic episodes over the past 3 months. (Rate 99 if not asked.)

[ ] [ ] [ ]

#### DIETARY RESTRICTION OUTSIDE BULIMIC EPISODES

(Diagnostic item)

[Only rate this item if there have been objective bulimic episodes over the past 3 months.]

Outside the times when you have lost control over eating (refer to objective and subjective bulimic episodes), how much have you been restricting the amount that you eat?

Typically, what have you eaten?

Has this been to influence your shape or weight?

[Ask about actual food intake outside the objective and subjective bulimic episodes. Rate the average degree of dietary restriction. This should have been intended to influence shape, weight, or body composition, although this may not have been the sole or main reason. Rate each of the past 3 months separately whether or not it included a bulimic episode. Rate 9 if not asked.]

- 0 - No extreme restriction outside objective bulimic episodes
- 1 - Extreme restriction outside objective bulimic episodes (i.e., low energy intake (< 1,200 kcal) due to infrequent eating and/or consumption of low-calorie foods)
- 2 - No eating outside objective bulimic episodes (i.e., fasting)

Month 1	[ ] [ ]
Month 2	[ ] [ ]
Month 3	[ ] [ ]

#### SOCIAL EATING

(Eating Concern subscale)

\* Over the past 4 weeks have you been concerned about other people seeing you eat?

Have you avoided such occasions?

[Rate the degree of concern about eating normal or less than normal amounts of food in front of others (e.g., family) and whether this has led to avoidance. This should represent the average for the entire month. If the possibility of eating with others has not arisen, rate 9. Do not consider objective bulimic episodes or episodes of objective overeating.]

- 0 - No concern about being seen eating by others and no avoidance of such occasions
- 1 -
- 2 - Has felt slight concern at being seen eating but no avoidance
- 3 -
- 4 - Has felt definite concern and has avoided some such occasions
- 5 -
- 6 - Has felt definite concern and has avoided all such occasions [ ]

#### EATING IN SECRET

(Eating Concern subscale)

\* Over the past 4 weeks have you eaten in secret?

[Rate the number of days on which there has been at least one episode of secret eating. Secret eating refers to eating that is furtive and which the subject wishes to conceal. Avoidance of eating in front of others should be rated under "Social eating." If the possibility of eating with others has not arisen, rate 9. Do not consider objective bulimic episodes.]

- 0 - Has not eaten in secret
- 1 -
- 2 - Has eaten in secret on less than half the days
- 3 -
- 4 - Has eaten in secret on more than half the days
- 5 -
- 6 - Has eaten in secret every day [ ]

**GUILT ABOUT EATING****(Eating Concern subscale)**

\* Over the past 4 weeks have you felt guilty after eating?

Have you felt that you have done something wrong? Why?

On what proportion of the times that you have eaten have you felt guilty?

[Rate the *proportion of times* on which feelings of guilt have followed eating. These feelings of guilt should relate to the effects of eating on shape, weight, or body composition. Do not consider objective bulimic episodes, but do consider other episodes of overeating. Distinguish guilt from regret: Guilt refers to a feeling that one has done wrong. N.B. This rating is based on occasions.]

0 - No guilt after eating

1 -

2 - Has felt guilty after eating on less than half the occasions

3 -

4 - Has felt guilty after eating on more than half the occasions

5 -

6 - Has felt guilty after eating on every occasion

[ ]

**SELF-INDUCED VOMITING****(Diagnostic item)**

\* Over the past 4 weeks have you made yourself sick as a means of controlling your shape or weight?

[Rate the number of days on which there has been one or more episodes of self-induced vomiting as a means of controlling shape, weight, or body composition. Rate 00 if no vomiting.]

[ ]

[Rate the number of discrete episodes of self-induced vomiting. Accept the subject's definition of an episode. Rate 777 if the number is so great that it cannot be calculated. Rate 000 if no vomiting.]

[ ]

[Ask about the preceding 2 months if practicing self-induced vomiting to influence shape, weight, or body composition.]

[Rate the number of discrete episodes of self-induced vomiting over each of the 2 preceding months. Rate 999 if not asked.]

Month 2 [ ]

Month 3 [ ]

**LAXATIVE MISUSE****(Diagnostic item)**

\* Over the past 4 weeks have you taken laxatives as a means of controlling your shape or weight?

[Rate the number of days on which laxatives have been taken as a means of controlling shape, weight, or body composition. This should have been the main reason, although it may not have been the sole reason. Rate 00 if there was no laxative use or there is doubt whether the laxative taking was primarily to influence shape, weight, or body composition.]

[ ]

[Rate the number of individual episodes of laxative misuse (as defined above). Rate 777 if the number is so great that it cannot be calculated. Rate 000 if no such laxative misuse.]

[ ]

[Rate the average number of laxatives taken on each occasion. Rate 999 if not applicable. Rate 777 if not quantifiable, e.g., use of bran.]

[ ]

[Note the type of laxative taken.]

[Ask about the preceding 2 months if taking laxatives to influence shape, weight, or body composition.]

[Rate the number of discrete episodes of laxative misuse over each of the two preceding months. Rate 000 if no such laxative misuse. Rate 999 if not asked.]

Month 2 [ ]

Month 3 [ ]

**DIURETIC MISUSE****(Diagnostic item)**

\* Over the past 4 weeks have you taken diuretics as a means of controlling your shape or weight?

[Rate the number of days on which diuretics have been taken as a means of controlling shape, weight, or body composition. This should have been the *main* reason, although it may not have been the sole reason. Rate 00 if there was no diuretic use or there is no doubt whether the diuretic taking was primarily to influence shape, weight, or body composition.]

[ I I ]

[Rate the number of individual episodes of diuretic misuse (as defined above). Rate 777 if the number is so great that it cannot be calculated. Rate 000 if no such diuretic misuse.]

[ I I I ]

[Rate the average number of diuretics taken on each occasion. Rate 999 if not applicable. Rate 777 if not quantifiable.]

[ I I I ]

[Note the type of diuretic taken.]

[Ask about the preceding 2 months if taking diuretics to influence shape, weight or body composition.]

[Rate the number of discrete episodes of diuretic misuse over each of the 2 preceding months. Rate 000 if no such diuretic misuse. Rate 999 if not asked.]

Month 2 [ I I I ]

Month 3 [ I I I ]

**INTENSE EXERCISING TO CONTROL  
SHAPE OR WEIGHT****(Diagnostic item)**

\* Over the past 4 weeks have you exercised as a means of controlling your weight, altering your shape or amount of fat, or burning off calories?

Typically, what form of exercise have you taken?

[Rate the number of days on which the subject has engaged in *intense* exercise that was *predominantly* intended to use calories or change shape, weight, or body composition. The decision whether the exercising was "intense" should be made by the interviewer. If in doubt, the exercising should not be classed as intense. Rate 00 if no such exercising.]

[ I I ]

[Rate the *average* amount of time (in minutes) per day spent exercising in this way. Only consider days on which the subject exercised. Rate 999 if no such exercising.]

[ I I I ]

[Ask about the preceding 2 months if there has been exercising of this type.]

[Rate the number of days on which the subject has exercised in this manner over each of the 2 preceding months. If not asked, rate 99.]

Month 2 [ I I ]

Month 3 [ I I ]

**ABSTINENCE FROM EXTREME  
WEIGHT-CONTROL BEHAVIOR****(Diagnostic item)**

[Only ask this question if at least one of the key forms of weight-control behavior has been rated positively at the specified severity level over the past 3 months (see the section on "eating disorder diagnoses").]

[The five forms of behavior are as follows:

- fasting
- self-induced vomiting
- laxative misuse
- diurectic misuse
- excessive exercise]

Over the past 3 months has there been a period of 2 or more weeks when you have not . . .

[Ask as for individual items.]

[Ascertain the number of consecutive weeks over the past 3 months "free" (i.e., not above threshold levels) from all five forms of extreme weight-control behavior. Do not rate abstinence due to force of circumstance. Rate 99 if not applicable.]

[ ] [ ]

**DISSATISFACTION WITH  
WEIGHT****(Weight Concern subscale)**

\* Over the past 4 weeks have you been dissatisfied with your weight?  
Have you been so dissatisfied that it has made you unhappy?

[Only rate dissatisfaction due to weight being regarded as too high. Assess the subject's attitude to his or her weight and rate accordingly. This should represent the *average* for the entire month. Only rate 4, 5, or 6, if there has been distress. Do not prompt with the terms "slight," "moderate," or "marked." Rate 9 if the subject is unaware of his or her weight.]

- 0 - No dissatisfaction
- 1 -
- 2 - Slight dissatisfaction (no associated distress)
- 3 -
- 4 - Moderate dissatisfaction (some associated distress)
- 5 -
- 6 - Marked dissatisfaction (extreme concern and distress, weight totally

**DESIRE TO LOSE WEIGHT****(Weight Concern subscale)**

\* Over the past 4 weeks have you wanted to lose weight?

Have you had a strong desire to lose weight?

[Rate the number of days on which there has been a *strong desire* to lose weight.]

- 0 - No strong desire to lose weight
- 1 -
- 2 - Strong desire present on less than half the days
- 3 -
- 4 - Strong desire present on more than half the days
- 5 -
- 6 - Strong desire present every day [ ]

**DESIRED WEIGHT**

\* What weight would you like to be?

[Rate weight in kilograms. Rate 888 if the subject is not interested in his or her weight. Rate 777 if no specific weight would be low enough. Rate 666 if the subject is primarily interested in his or her shape but has some concern about weight (but not a specific weight).]

[ ] [ ] [ ]

**REACTION TO PRESCRIBED  
WEIGHING****(Weight Concern subscale)**

\* How would you feel if you were asked to weigh yourself once each week for the next 4 weeks?

[Rate the strength of reaction. Positive reactions should be rated 9. Check whether other aspects of the subject's life would be influenced. Ask the subject to describe in detail how he or she would react and rate accordingly. Do not prompt with the terms "slight," "moderate," or "marked." If the subject would not comply with prescribed weighing because it would be extremely disturbing, rate 6.]

- 0 - No reaction
- 1 -
- 2 - Slight reaction
- 3 -
- 4 - Moderate reaction (definite reaction, but manageable)
- 5 -
- 6 - Marked reaction (pronounced reaction which would affect other aspects of

**DISSATISFACTION WITH SHAPE (Shape Concern subscale)**

\* Over the past 4 weeks have you been dissatisfied with your shape? Have you been so dissatisfied that it has made you unhappy?

[Only rate dissatisfaction with shape and not that concerning body tone. Assess the subject's attitude to his or her shape and rate accordingly. This should represent the *average* for the entire month. Only rate 4, 5, or 6, if there has been associated distress. Do not prompt with the terms "slight," "moderate," or "marked."]

- 0 - No dissatisfaction with shape
- 1 -
- 2 - Slight dissatisfaction with shape (no associated distress)
- 3 -
- 4 - Moderate dissatisfaction with shape (some associated distress)
- 5 -
- 6 - Marked dissatisfaction with shape (extreme concern and distress, shape totally unacceptable) [ ]

**PREOCCUPATION WITH SHAPE OR WEIGHT (Shape Concern and Weight Concern subscales)**

\* Over the past 4 weeks have you spent much time thinking about your shape or weight?

\* Has thinking about your shape or weight interfered with your ability to concentrate? How about concentrating on things you are interested in, for example, reading, watching television, or following a conversation?

[Concentration is regarded as impaired if there have been *intrusive thoughts about shape or weight that have interfered with activities*. Rate the number of days on which this happened.]

- 0 - No concentration impairment
- 1 -
- 2 - Concentration impairment on less than half the days
- 3 -
- 4 - Concentration impairment on more than half the days
- 5 -
- 6 - Concentration impairment every day [ ]

**IMPORTANCE OF SHAPE (Diagnostic item) (Shape Concern subscale)**

\* Over the past 4 weeks has your shape been important in influencing how you feel about (judge, think, evaluate) yourself as a person?

... \* If you imagine the things that influence how you feel about (judge, think, evaluate) yourself—such as (your performance at work, being a parent, your marriage, how you get on with other people)—and put these things in order of importance, where does your shape fit in?

If, over the past 4 weeks, your shape had changed in any way, would this have affected how you feel about yourself?

Is it important to you that your shape does not change?

[Rate the degree of importance the subject has placed on body shape and its position in his or her scheme for *self-evaluation*. To make this rating, comparisons may be made with other aspects of the subject's life that are of importance in his or her scheme for self-evaluation (e.g., quality of relationships, being a parent, performance at work, or leisure activities). The rating should represent the *average* for the entire month. Do not prompt with the terms "some," "moderate," or "supreme." If the subject has regarded both shape and weight as being of equivalent supreme importance, rate 6 on this item and on "Importance of weight."]

- 0 - No importance
- 1 -
- 2 - Some importance (definitely an aspect of self-evaluation)
- 3 -
- 4 - Moderate importance (definitely one of the main aspects of self-evaluation)
- 5 -
- 6 - Supreme importance (nothing is more important in the subject's scheme for self-evaluation) [ ]

[Ask about the preceding 2 months.]

[Rate preceding 2 months. Rate 9 if not asked.]

Month 2 [ ]  
Month 3 [ ]

**IMPORTANCE OF WEIGHT****(Diagnostic item)**  
**(Weight Concern subscale)**

\* Over the past 4 weeks has your weight been important in influencing how you feel about (judge, think, evaluate) yourself as a person?

... \* If you imagine the things that influence how you feel about (judge, think, evaluate) yourself—such as (your performance at work, being a parent, your marriage, how you get on with other people)—and put these things in order of importance, where does your weight fit in?

If, over the past 4 weeks, your weight had changed in any way, would this have affected how you feel about yourself?

Is it important to you that your weight does not change?

[Rate the degree of importance the subject has placed on weight (i.e., actual or presumed weight) and its position in his or her scheme for *self-evaluation*. To make this rating, comparisons may be made with other aspects of the subject's life that are of importance in his or her scheme for self-evaluation (e.g., quality of relationships, being a parent, performance at work, or leisure activities). The rating should represent the *average* for the entire month. Do not prompt with the terms "some," "moderate," or "supreme." If the subject has regarded both weight and shape as being of equivalent supreme importance, rate 6 on this item and on "Importance of shape:"]

- 0 - No importance
- 1 -
- 2 - Some importance (definitely an aspect of self-evaluation)
- 3 -
- 4 - Moderate importance (definitely one of the main aspects of self-evaluation)
- 5 -
- 6 - Supreme importance (nothing is more important in the subject's scheme for self-evaluation) [ ]

[Ask about the preceding 2 months.]

[Rate preceding 2 months. Rate 9 if not asked.]

Month 2 [ ]  
Month 3 [ ]

**FEAR OF WEIGHT GAIN****(Diagnostic item)**  
**(Shape Concern subscale)**

[Shorten the question if the subject is *obviously overweight*.]

\* Over the past 4 weeks have you been afraid that you might gain weight (or become fat)?

[Rate the number of days on which a *definite fear* has been present. Exclude reactions to actual weight gain.]

- 0 - No definite fear of fatness or weight gain
- 1 -
- 2 - Definite fear of fatness or weight gain present on less than half the days
- 3 -
- 4 - Definite fear of fatness or weight gain present on more than half the days
- 5 -
- 6 - Definite fear of fatness or weight gain present every day [ ]

[Ask about the past 2 months]

[Rate preceding 2 months. Rate 9 if not asked.]

Month 2 [ ]  
Month 3 [ ]

**DISCOMFORT SEEING BODY****(Shape Concern subscale)**

\* Over the past 4 weeks have you felt uncomfortable seeing your body, for example, in the mirror, in shop window reflections, while undressing, or while taking a bath or shower?

Have you avoided seeing your body? Why?

[The discomfort should be due to the subject's sensitivity about the overall appearance of his or her shape or figure. It should not stem from sensitivity about specific aspects of appearance (e.g., acne) or from modesty.]

- 0 - No discomfort about seeing body
- 1 -
- 2 - Some discomfort about seeing body
- 3 -
- 4 - Definite discomfort about seeing body
- 5 -
- 6 - Definite discomfort about seeing body, and has attempted to avoid all such occasions (i.e., the subject has attempted not to see his or her body at all even when washing) [ ]

**AVOIDANCE OF EXPOSURE (Shape Concern subscale)**

\* Over the past 4 weeks have you felt uncomfortable about others seeing your body, for example, in communal changing rooms, when swimming, or when wearing clothes that show your shape? What about your partner or friends seeing your body?

Have you avoided such situations? Why?

[The discomfort should be due to the subject's sensitivity about the overall appearance of his or her shape or figure. It should not stem from sensitivity about specific aspects of appearance (e.g., acne) or from modesty. If the possibility of "exposure" has not arisen, rate 9.]

- 0 - No discomfort about others seeing body
- 1 -
- 2 - Some discomfort about others seeing body
- 3 -
- 4 - Definite discomfort about others seeing body
- 5 -
- 6 - Definite discomfort about others seeing body, and has attempted to avoid all such occasions [ ]

**FEELINGS OF FATNESS (Diagnostic item) (Shape Concern subscale)**

[Omit this item if the subject is obviously overweight and rate 7.]

\* Over the past 4 weeks have you felt fat?

[Rate the number of days on which the subject has "felt fat" accepting his or her use of this expression. Distinguish feeling fat from feeling bloated premenstrually, unless this is experienced as feeling fat.]

- 0 - Has not felt fat
- 1 -
- 2 - Has felt fat on less than half the days
- 3 -
- 4 - Has felt fat on more than half the days
- 5 -
- 6 - Has felt fat every day [ ]

[Ask about the preceding 2 months.]

[Rate preceding 2 months. Rate 9 if not asked.]

Month 2 [ ]  
Month 3 [ ]

**FLAT STOMACH (Shape Concern subscale)**

[Omit this item if the subject is obviously overweight and rate 7.]

Over the past 4 weeks have you had a definite desire to have a flat stomach?

[Rate the number of days on which the subject has had a definite desire to have a flat or concave stomach. Do not rate simply the desire to have a flatter stomach.]

- 0 - No definite desire to have a flat stomach
- 1 -
- 2 - Definite desire to have a flat stomach on less than half the days
- 3 -
- 4 - Definite desire to have a flat stomach on more than half the days
- 5 -
- 6 - Definite desire to have a flat stomach every day [ ]

**WEIGHT AND HEIGHT**

[The subject's weight and height should be measured.]

Weight in kg [ ] [ ] [ ]  
Height in cm [ ] [ ] [ ]

**MAINTAINED LOW WEIGHT (Diagnostic item)**

[Rate for subjects who may be underweight.]

Over the past 3 months have you been trying to lose weight?

If no: Have you been trying to make sure that you do not gain weight?

[If weight is low, rate presence of attempts either to lose weight or to avoid weight gain. Rate 9 if not asked.]

- 0 - No attempts either to lose weight or to avoid weight gain over the past 3 months
- 1 - Attempts either to lose weight or to avoid weight gain over the past 3 months for reasons concerning shape or weight
- 2 - Attempts either to lose weight or to avoid weight gain over the past 3 months for other reasons [ ]

**MENSTRUATION****(Diagnostic item)**

Have you missed any menstrual periods over the past few months?

How many periods have you had?

Are you taking an oral contraceptive (the "pill")?

[With post-menarchal females, rate number of menstrual periods over the past three expected menstrual cycles. Rate 7 if the subject is pre-menarchal, if she has been taking an oral contraceptive, or if she has been pregnant or breast feeding.] [ ]

END OF SCHEDULE

## APPENDIX I

### Differences between EDE Versions 11.5D and 12.0D

The main changes to 11.5D are summarized below.

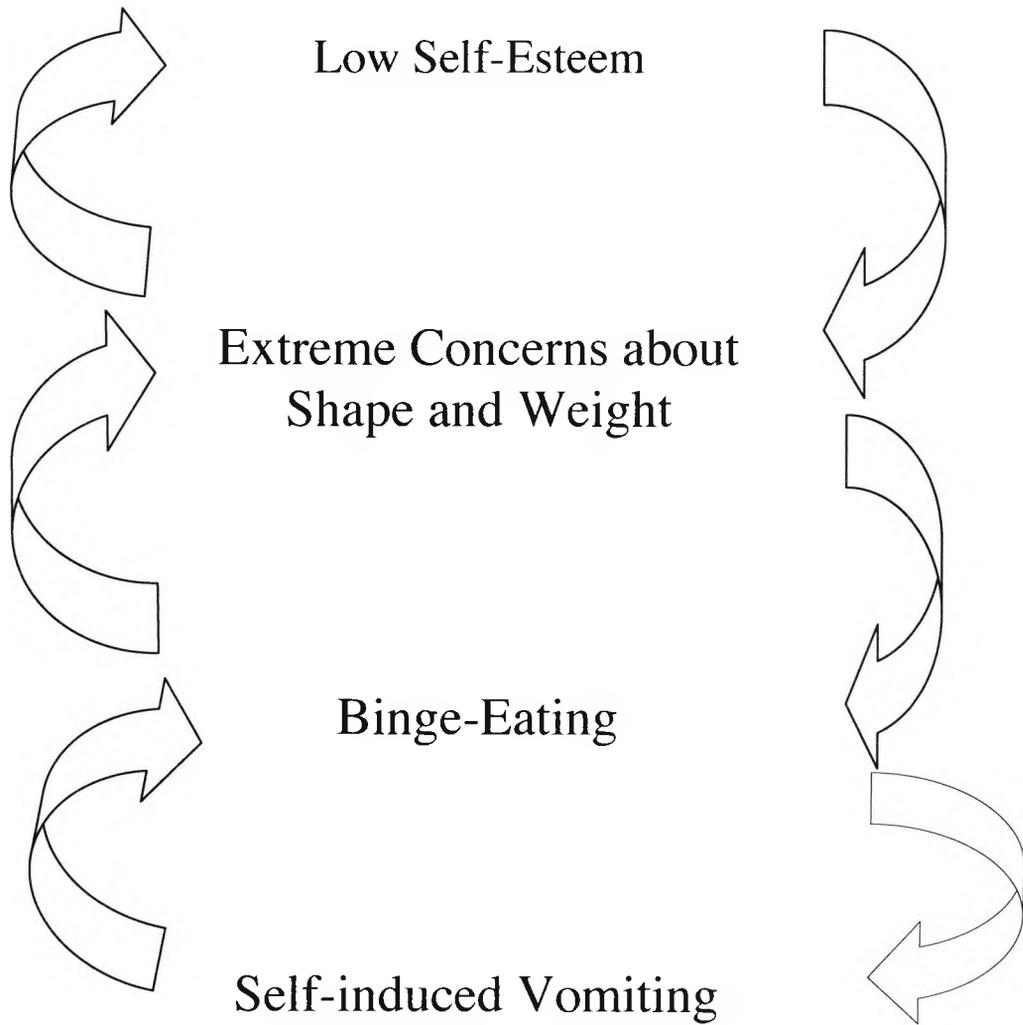
1. The following items have been omitted:
  - "Subjective loss of control over eating"
  - "Subjective overeating"
  - Ratings of "duration," "fullness," and "distress" in the overeating section
  - "Exercising to control shape or weight"
  - "Solitary exercising exclusively to control shape or weight"
  - "Other extreme methods for controlling shape or weight"
  - "Subjective weight"
  - "Weighing"
  - "Vigilance about shape"
  - "Regional fatness"
  - "Body composition"
2. The following item has been added:
  - "Intense exercising to control shape or weight"
3. The following items have been renamed:
  - "Dietary restraint outside bulimic episodes"—now "Dietary restriction outside bulimic episodes"
  - "Abstinence from weight-control behavior"—now "Abstinence from extreme weight-control behavior"
  - "Pursuit of weight loss"—now "Desire to lose weight"
  - "Fear of fatness"—now "Fear of weight gain"

In addition, version 12.0D incorporates minor changes both to the questions themselves, to the definitions of certain items, and to the operational DSM-III-R criteria. The revisions to the overeating section are of particular importance. The changes stem from accumulated experience using the instrument in a variety of clinical and community-based settings.

## APPENDIX VIII

Cognitive View of the maintenance of Sara's  
Bulimia Nervosa

## Cognitive view of the maintenance of Sara's BN



## APPENDIX IX

Copy of Sara's CBT Monitoring Sheets

Weight = 56kg (since 1/11/2014)

Monitoring Sheet

Day Friday

Date 12/11

Time	Food and Liquid Consumed	Place	BM	V/L	Feelings / Context
7.05	Tea	Bed			O.K at least I am not fatter!
7.20	Banana	Kitchen			—
7.25	Tea	,			—
8.15	Tea	Bed			Relax & Reading
9.30	cheese Sandwich	Kitchen			Not sure why I allowed it to stay in, but had to go to bed after so not to lose control.
12.30	1 Smoked Sausage (Large) Six slices Bread buttered + cheese 2 crisps Cup a soup 6 Almond Slices 6 Pieces choc 3 Doughnuts Tea	Front Room	B	V	Anxious + head not in right place - quite lonely  It had to go - was very full & lonely & bloated and unhappy  after Went 2 bed - felt awful
18.00	3 Toasted ham, cheese + Tomato Sandwiches 2 crisps 1 Mars bar 1 Cup of soup 6 pieces of choc 6 Almond Slices Tea	Front Room	B	V	Feel so lonely and restless - not what to do with myself  Was so stuffed but still felt unhappy as I still feel bloated - couldn't throw anything up & now feel real

# Monitoring Sheet

Day Friday

Date 12/11/11

Time	Food and Liquid Consumed	Place	BM	V/L	Feelings / Context
19.00	3 Sandwiches Crisps Cup a soup Tea 2 Almond slices	Front Room	B		Boredom !  V Just knew it had to go. Felt numb
22.00	3 Sandwiches 2 Fried Eggs 1 Mal 1 Twix 12 Pieces Choc. Tea	Front Room	B		lonely & insecure  V So fed up - end of my fucking teacher ! God knows how much weight I have put on today ! Gonna have to get myself to bed. This is getting too tiring & painful. Had enough
22.45	Tea	Bed			<u>Had enough</u>
23.30	Sweets Worthies	Bed			Mcho me feel better

## APPENDIX X

Compact Disc (CD) Recording of  
2<sup>nd</sup> CBT Therapy Session

**Note** – Informed consent was obtained to present client work and verified by the Department of Psychology, City University, London. CD is not available for public use.