Post Substance Dependence Stress Syndrome: a complex post-traumatic stress disorder (PTSD) conceptualisation of residual psychopathology during abstinence after substance dependence

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Section 1: Academic
Should clinical psychologists use the term "schizophrenia"? Justify your answer with reference to the relevant literature.

The above question is not a ‘fair’ question to put to a first year psychology trainee. It forces an opinion about an issue beyond this author’s current range of experience or expertise; having only met about four individuals who have been diagnosed as "schizophrenic". None the less, on being encouraged to become opinionated about an issue that one knows very little about, there is ample literature to generate some good theoretically based debate on the subject. However, in the light of future clinical experience with psychotic individuals, this author reserves the right to withdraw or totally disagree with the views expressed in this essay.

There are two major issues raised by the above title. The first issue pertains to the absolute utility of the concept of schizophrenia, i.e., should anyone use the term "schizophrenia"; the main body of the essay will be addressing this question. The second more specific issue pertains to the relative utility of the term, i.e., should clinical psychologists use the term "schizophrenia". Or is there something about the discipline of clinical psychology that renders its followers too ignorant, or too wise, to speak the same language as other mental health workers, e.g., psychiatrists. This essay will first describe what is commonly understood by the term "schizophrenia", it will then explore the currently perceived limitations of the concept, and it will also address broader semantic issues associated with vested professional interests.

The concept of schizophrenia originated with Kraepelin (1896) who differentiated two major groups of endogenous psychoses, "dementia praecox" and "manic depressive illness". Dementia praecox included several diagnostic concepts already regarded as distinct entities by clinicians in the previous few decades: "dementia paranoïdes", "catatonia" and "hebeïphrenia". Kraepelin claimed that the fundamental features of this group were a
progressive intellectual deterioration (dementia) and an early onset (praecox). More detailed symptoms included delusions, thought broadcasting or influencing, hallucinations (often auditory), negativism, poor judgement, stereotyped behaviour and emotional dysfunction. Thus, Kraepelin focused on both course and symptoms in defining his construct. Although his emphasis was upon the course of the disorder, his later work included a detailed observation of symptoms, which he grouped into 36 major categories with hundreds of symptoms in each one. However, he made little effort to interrelate these separate symptoms, he stated only that they all reflected dementia and a loss of the usual unity between cognition, affect and behaviour.

Bleuler (1911/1950) referred to broadly the same set of disorders as Kraepelin and changed their name to the "schizophrenias". He dropped Kraepelin's label because he believed that the disorders in question did not necessarily have an early onset and that they did not inevitably progress to dementia. Basically, he had just created another construct that had broader inclusion criteria; thus, everyone with "dementia praecox" was a "schizophrenic", but not all "schizophrenics" had "dementia praecox". Bleuler's schizophrenia included patients with good prognosis, and "many atypical melancholias and manias of other schools, especially hysterical melancholias and manias, most hallucinatory confusions, some 'nervous' people and compulsive and impulsive patients, and many prison psychoses" (Bleuler, 1923, p 436). This definition sounds as if it would also have included Kraepelin's other major psychotic category, "manic depressive illness". Bleuler went much further than Kraepelin in trying to specify an essential property that would link the various schizophrenias together: "the fundamental symptoms consist of disturbances of association and affectivity, and the inclination to divorce oneself from reality" (Bleuler, 1950, p 14). The name "schizophrenia" was chosen to reflect the primary symptoms caused by the underlying organic disease that he presumed was their cause. These primary symptoms were the splitting or breaking of associative links between both words and thoughts, secondary symptoms arose from normal psychological attempts to derive meaning from the effects of the primary symptoms. Symptoms like delusions and hallucinations were seen as accessory symptoms, they were not a prerequisite for membership of Bleuler's construct.

The broadening of the general schizophrenia construct increased to ridiculous extremes in America where, in 1952, 80% of patients attending the New York State Psychiatric Institute were diagnosed as "schizophrenic"; by contrast, the Maudsley's proportion of
"schizophrenic" patients remained constant at 20% over a forty year period (Kuriansky, Deming & Gurland, 1974). The broadening of the American "schizophrenia" concept was largely due to the abandonment of definitive criteria and the argument that diagnostic categories were often arbitrary and artificial (Meyer, 1917). A cynical individual may possibly construe the expansion of a mysterious (i.e., badly defined) psychiatric label as an abusive quest for increased power by psychiatrists, and the inevitable backlash took the form of the anti-psychiatry movement. E.g., Szasz (1961) suggested that schizophrenics could not be described as ill because there was no identifiable organic cause for their behaviour; Scheff (1966) argued that schizophrenics are social deviants for whom the label 'ill' is inappropriate; Laing (1967) described schizophrenic symptoms as reactions to family persecution or as beneficial psychedelic experiences. However, these views concentrated on contemporary constructions of the words "illness" or "disease". The question of whether or not schizophrenia is a disease cannot be answered until it is decided that there is a recognizable entity that corresponds to the concept of schizophrenia. The fact remained that people still existed who were displaying a range of quite abnormal behaviours, and it would still be useful if they could be described in some structured way.

In an effort to become more specific, successive editions of the Diagnostic and Statistical Manual (DSM) adopted increasingly narrow definitions of schizophrenia. Davison and Neale (1986) observed that a DSM II diagnosis of schizophrenia would have subsumed many individuals with what the DSM III would call an affective disorder. What the DSM II would have regarded as mild forms of schizophrenia are seen by the DSM III as being personality disorders. Also, unlike the DSM II, the DSM III required that the person have continuous signs of schizophrenia for at least six months before being diagnosed as a schizophrenic. The DSM IV (American Psychiatric Association, 1994) now has many categories of psychosis which are not referred to as schizophrenia; e.g., schizophreniform disorder (symptoms last less than one month); schizoaffective disorder (psychotic symptoms associated with depression or mania); delusional disorder (nombizarre delusions in the absence of overt psychotic symptoms); brief psychotic disorder (lasting less than one month); shared psychotic disorder (delusion caused by close relationship with a deluded other); psychotic disorder due to a medical condition; substance induced psychotic disorder; psychotic disorder not otherwise specified (e.g., persistent auditory hallucinations in the absence of any other psychotic features). This impressive and comprehensive list might appear to have clearly delineated the boundaries of the concept of schizophrenia, however the DSM IV still has no essential
characteristic symptom to define the disorder. An individual need only demonstrate two (or more) of any of the following: delusions, hallucinations, disorganised speech, grossly disorganised or catatonic behaviour, or negative symptoms (i.e., affective flattening, alogia, or avolition).

The continuing ambiguity around the operational definitions of this construct led to its absolute validity being challenged by Bentall, Jackson and Pilgrim (1988). Their review argued that the construct of schizophrenia was not a valid object of scientific research. They criticised the reliability of a schizophrenia diagnosis by pointing out, as mentioned earlier, that different researchers (e.g., Kraepelin and Bleuler) used different criteria for diagnosing the condition; and that even when using updated criteria, no two schizophrenic patients need have any symptoms in common. Although they acknowledged that within individual structured psychiatric interview schedules (e.g., Wing, Cooper & Sartorius, 1974), inter-rater reliability was high, they pointed out that reliability between different interviews was not so good. They illustrated this point by citing Brockington, Kendell and Leff (1978) who, using 10 different sets of criteria for schizophrenia on 322 patients, only managed to achieve a mean kappa coefficient of .29 (i.e., very poor rates of agreement).

The construct validity of schizophrenia was also challenged, due to the poor relationship between symptoms and diagnoses. Bentall et al. (1988) pointed out that delusions, thought disorder and hallucinations frequently occurred within diagnostic categories other that schizophrenia. They also explored cluster analyses of symptoms and came to the conclusion that there were no clear criteria for evaluating the meaningfulness of any clusters revealed. Although they acknowledged that factor analytic studies could identify groups of symptoms that appeared to correspond to schizophrenia; they suggested that this was an artefact because subjects were hospitalised and would therefore display a wider range of symptoms than 'schizophrenics' in the community. Thus, the inter-symptom correlations observed among inpatients were bound to appear inflated.

Bentall et al. (1988) also reviewed outcome literature and observed that the course and outcome of schizophrenia is highly variable. They found that, while symptomatology on admission appeared to be a poor predictor of outcome, social variables appeared to be relatively good predictors. This point was later indirectly supported by Birchwood & Tarrier
(1992) who provided a brief review of cross-cultural studies to indicate that the outcome for people with schizophrenia in Western industrialised countries is markedly inferior to those in the third world. They hypothesised that this may have been due to differing attitudes to mental illness, employment opportunities, family structures and social support. In any case, Bentall et al. argued that a useful diagnosis should be able to give a clinician some idea of what outcome to expect, and that the predictive validity of a schizophrenia diagnosis was very poor.

Finally, Bentall et al. (1988) criticised the schizophrenia concept on the grounds of its lack of etiological specificity, they claimed that specific diseases should ideally be related to specific causes. They explored all the suspected etiological factors (genetic, family structure, stressful life events, biochemical, and neurological) and claimed that none of them were proved to be the definite cause of psychosis. They suggested that a dimensional model of psychosis would make more sense than a traditional categorical model. Also, that the subdivision of schizophrenic subjects by drug response or biochemical abnormality may have some pragmatic value, although it may be misleading at a theoretical level.

After having indicated that schizophrenia was not a scientifically valid concept, Bentall et al. (1988) embarked on a 'political' explanation of the continued use of the term. They suggested that the kind of diagnostic system advocated by Kraepelin legitimised the role of medical practitioners in the management of the psychoses. The diagnostic system's biological underpinnings led to a division of labour between the psychologists working with the 'neuroses' and psychiatrists working with the 'psychoses'. It was also suggested that, rather than studying syndromes, psychologists could take the radical step of studying particular symptoms and designing psychological treatments for their management. Psychology has of course taken up the lead of Bentall et al. (e.g., see Birchwood & Tarrier, 1992) and there is no doubt that their paper has illustrated a major recent turning point in the attitudes of psychologists to schizophrenia. The British Journal of Clinical Psychology felt that it merited 20 pages in their journal, an honour they rarely bestow on anyone. However, it is difficult to see why the development of psychological treatments for individual psychotic symptoms should depend on the abandonment of the concept of schizophrenia, regardless of its limited validity as a research construct.
In the same journal edition, the issues raised by Bentall et al. (1988) were answered (Wing, 1988) by a creator of one of the better known structured interviews for schizophrenia (the Present State Examination, Wing et al., 1974). Wing agreed that differential diagnoses made without using standard methods of assessment would not be reliable, and thus the comparability of research based on such diagnoses would be very limited. He also agreed that there was insufficient agreement on etiological factors to establish as a "disease entity" any subcategory drawn from the "broad range of disorders that have at some time been given the name 'schizophrenia'" (p 326). However, Wing did not agree that this meant the concept of schizophrenia should be abandoned. He discussed the progress made towards reliability and comparability of diagnostic instruments such as his own. Although he acknowledged that they did not all attempt to identify the same entity, he pointed out that this did not hinder clinical efficacy. Much work had been done to "demonstrate how risk factors could be modified to help people with a disorder that would be called schizophrenia by all those working in the field" (p 327). Cape et al. (1994) found that although clinicians demonstrated a diversity of thinking about the diagnosis, aetiology and prognosis of schizophrenia, there was a relative consensus about its management.

Although the construct validity issue raised by Bentall et al. (1988) is a valid point, some of its impact was lost into the debate concerning definitions of 'disease'. Johnstone (1993) stated that the principle model of disease in psychiatry is still the 'syndrome model'. Thus a psychiatric 'disease' is a cluster of symptoms and signs which are associated with a characteristic course over time. She maintained that it was not necessary for psychiatrists to adopt the view that the demonstration of an identifiable lesion should be a defining characteristic of 'disease'. This is just as well for them because she also states that no physical basis has been defined for most of the major psychiatric syndromes. The issue had become 'is schizophrenia a disease' not 'do the concepts of disease or schizophrenia have any validity in the first place'. Much of Johnstone's argument for the validity of the schizophrenia concept stemmed from the view that schizophrenia can be described as a disease (i.e., if we can call it a disease, therefore it must exist). This reverse logic is not necessarily that convincing, and Bentall (1993) continued to assert that there was no convincing evidence of a schizophrenia syndrome. It is quite interesting to observe that supposedly objective 'scientists' (i.e., psychiatrists and psychologists) tend to polarise over the issue of 'disease / disorder', and their readiness to do so detracts from the sensible discussion of more
fundamental issues such as clinical utility (Christo & Franey, 1995).

Farmer et al. (1993) did not fall into the 'is it a disease' argument. They pointed out that the use of operational criteria to define the syndrome of schizophrenia has dramatically improved the reliability of diagnosis. They acknowledged that none of the many different operational definitions for schizophrenia had proven superior validity, but maintained that a valid definition would be identified as soon as the aetiology of schizophrenia was properly determined. In the meantime, they suggested that the best course of action would be to adopt a 'polydiagnostic' approach in which several sets of diagnostic criteria are applied to the same subject. They also observed that most operational definitions do not include any quantitative measure of individual items, thus severity and duration should also be taken into account.

In a summary of many of the issues above, Claridge (1993) pointed out that the variability of the condition called schizophrenia is well known, even Bleuler did not refer to "the schizophrenias" as a singular entity. However, a collective noun would still be necessary for the purposes of communication. To this end, Claridge suggested that the labels 'psychosis' and 'psychotic' were relatively understandable descriptors, as well as being sufficiently broad enough to discourage sweeping theories about aetiology. Claridge also stated that most workers in the field recognized a certain dimensionality in psychosis, although psychologists were more confident in extending the dimensional view to include continuity between normal and abnormal functions. He suggested that workers with different viewpoints should seek integration of information rather than confrontation, "the problem to be solved is difficult enough without such time-wasting" (p 253). It is ironic that, in the psychological treatment of delusions, direct confrontation of a delusion is discouraged, yet Bentall et al. (1988) appear to have done precisely that.

Let us now get back to the original issue of whether individuals should be using the term 'schizophrenia'. It would appear that the unitary disease / single cause mentality, often associated with use of the word schizophrenia, is certainly counterproductive in terms of research. Thus researchers (medical or psychological) should call it "the schizophrenias" or just plain "psychosis". This will clarify the limitations of existing research in terms of comparability and generalisability, and force researchers to more clearly define the phenomena they are studying. However, any total deconstruction into component parts may also be misleading because psychotic symptoms rarely occur in isolation. For example, any
research into delusions must allow for the possible confounding effects of concurrent hallucinations, disorganised speech, grossly disorganised or catatonic behaviour, or negative symptoms. Although many psychological treatments for schizophrenia do target specific psychotic symptoms, there is no reason why clinicians (clinical psychologists or psychiatrists) should not use the word schizophrenia if they feel it would be useful to do so. Practitioners are not bound by the same need for conceptual precision required from researchers. There may be times when it is useful to externally attribute disturbing behaviour to a disease entity called schizophrenia. This would serve to alleviate personal guilt on behalf of the sufferer and frustration on behalf of significant others. Some psychologists believe that this may lead to disempowerment of the individual. However, research in the field of substance misuse indicates that believing one’s condition is due to a ‘disease’, does not remove the responsibility for doing something about recovering (Christo & Franey, 1995). There may also be times when it is useful to speak the same language as everyone else in a multidisciplinary mental health team. Thus, if the psychiatrist in charge wants to call it schizophrenia, then who would disagree? Since the preferential use of words like psychosis over schizophrenia does not appear to have any major effects on symptom management, it is sufficient to understand the limitations of the concepts and use them in an instrumental fashion as appropriate to the situation.


of Mental Health, 2, 251-253.


Discuss the use of a gentle teaching approach with people with learning disabilities who show challenging behaviour. Are any of the techniques used in gentle teaching common to those used in applied behavioural analysis?

This essay will first identify what is generally understood by challenging behaviour while also providing a case for the efficacy of gentle teaching. A description of the development, philosophy and practical application of gentle teaching will then be followed by a critique of some of its assumptions. A brief look at applied behavioural analysis, functional analysis, and non-aversive behavioural techniques will then illuminate the methods and limitations of gentle teaching. The similarities and differences between gentle teaching and applied behavioural analysis will then be outlined.

McGee et al. (1987) validated the gentle teaching approach by presenting data based on their experiences of using gentle teaching on 73 persons with severe forms of self-injurious behaviours (SIB). Although Emerson et al. (1988) stated that SIB accounted for only 26% of all challenging behaviours (81% being serious violence toward others and 52% being serious violence toward the material environment), it may still be worth looking at McGee et al.'s sample population in order to gain an idea of the type of individual this approach may be used for. Their sample consisted largely of people who have severe or profound learning disabilities (62%), however it also consisted of people with moderate (23%) and mild (15%) learning disabilities. Allied psychiatric disorders of their client population included pervasive developmental disorder (33%), schizophrenia (19%), adjustment disorders (16%), autism (14%), organic brain disorder (8%), personality disorder (5%), reactive depression (3%), and pre-menstrual syndrome (1%). The sample consisted of few children under 13 years of age and the majority of the sample (94%) were between 13 to 55 years old. The types of SIB treated included 31 cases of slapping and hitting face, eyes, ears or nose; 29 cases of banging head onto hard surfaces; 16 cases of scratching face, arms and hands; 13 cases of self-biting; 8 cases of gouging eyes or ears; and 6 cases of pinching arms, hands, lips, legs or nipples.
Other SIBs included slashing body parts by smashing through windows; digging rectum, penis or vagina; pica and faeces eating; hair pulling; attempted suicide; cutting off body parts; slamming face onto knees; and throwing oneself face first onto cement surfaces. Most had SIB since early childhood. The average length of treatment was 28 days and all subjects were placed in community-based programmes upon discharge. Although 86% entered the treatment with high intensity SIB, McGee et al. (1987) claimed that none displayed this level upon discharge or up to 5 years later. While this outcome appears impressive, it should be borne in mind that McGee’s methods of measuring outcomes have been criticised, and reviews of the literature show that other attempts to empirically evaluate gentle teaching have generated mixed results (Jones & McCaughey, 1992; Jones & Connell, 1993).

Gentle teaching was first introduced by McGee in 1985, it focuses on alternatives to punishment as a means of reducing challenging behaviours, and one of its key elements is the emphasis on the development of a bonding relationship between the care giver and the client. Thus, gentle teaching relies on the development of a range of affectionate and respectful techniques that can help the care giver and client develop meaningful human engagement. The assumption being that if this is achieved, the client will no longer find it necessary to express their needs through harmful behaviours. McGee et al. (1987) criticised the use of punishment procedures for reducing the frequency of unwanted behaviours. They stated that although punishment may reduce inappropriate behaviours for short periods, "it produces submissive, oppressed, cowering, and fearful persons rather than persons engaged in joyful human interactions" (p 23). Even "mild" aversive methods like 'over correction' and 'time out' were thought to be unacceptable on the basis that they impeded the formation of "bonding" between care giver and client. This view was very compatible with the mid 80s trends in the US against the use of aversive procedures in behaviour management (e.g., see Jones, 1991, p. 48).

McGee et al. (1987) suggested that much of the technology used in programs for people with learning disabilities was based on "authoritarian values". They stated that these values were generated by the need to dominate and based on an unequal distribution of power; the goals of this implied need to control would be to produce obedience, conformity and submission. Such values would generate a vertical and hierarchical relationship characterised by the care giver’s desire to overpower and vanquish the client. This would be achieved by
using repression to produce discipline and submission, the ultimate effect being to cause dependence and marginalization. McGee et al. claimed that their gentle teaching approach sought to create a transformation towards "anti-authoritarian values". They stated that these values were generated by the need to assume a posture of solidarity and based on shared power and mutuality; the goals of this mutuality would be to teach bonding and interdependence. Such values would generate an equality based relationship which would be organized, coherent, cohesive, and oriented to action; it would be expressed by human warmth, affection and friendship between the care giver and client. This would be achieved by using bonding to produce a humanizing and liberating pedagogy, the ultimate effect being to create interdependence and mutual liberation.

Thus, according to McGee et al. (1987), the basic goal of gentle teaching is to create bonding by teaching clients the following three interactional processes: 1) that the carer’s presence signals safety and security; 2) that the carer’s words and contacts (e.g., touch, embraces, looks, smiles) are inherently rewarding; and 3) that participation yields reward. These processes were later expanded (Hobbs, 1992; Harbridge, 1992) to suggest that human presence was characterised by safety, security, predictability, equity and the onset of value; human valuing was characterised by acceptance, seeking out, giving and sharing; and participation and interaction was characterised by change and empowerment, fairness and equity, and value sharing. As these are taught, the client is supposed to learn that human presence and participation are rewarding. The distancing that initially characterises the client - care giver relationship should disappear and bonding should begin to emerge.

McGee and Menolascino (1991) have since sought to enlarge the target population of the gentle teaching approach by suggesting it can also be applied to children and people with lesser degrees of learning disability. The authors begin to move away from the behavioural roots of the McGee et al. (1987) book and they emphasise more on the interpersonal approach. Their message of congruence, empathy and non-conditional positive regard is very reminiscent of the humanistic client-centred approach to developing counselling relationships (e.g. Rogers, 1951).

The overall practical approach to gentle teaching is characterised by the "ignore-redirect-reward" paradigm (McGee et al., 1987). In this context, "ignoring" means that care givers
should withhold the punishment-based or startle responses that they typically give when confronted with a maladaptive behaviour. Verbal, eye contact, physical contact, or any other communications related to the behaviour are avoided and, if possible, the physical proximity between the care giver and client should remain constant. The purpose of ignoring is to "defuse" undesirable responses and to take away their power (e.g., task avoidance or attention seeking). Ignoring implies that the care giver will not give value to these behaviours, but unlike "time out" interaction does not stop, instead the care giver will redirect the person to participatory interactions so that reward can be given. In cases where harm to self or others is likely, then "interruption" can be included as a component of ignoring and redirecting; however, future efforts should then focus on prevention. Most violence occurs after clear indications (antecedents), thus the care giver should be alert and sensitive to these indicators so that they may redirect the client before violent behaviour is expressed. Even after being hit, the care giver is supposed to calmly move to the other side of a work table and continue to redirect the client to a task so that reward can be given. The process of redirection should provide sufficient information to the client, without making the process itself rewarding and thus detracting from the power of human reward given once the task has been achieved. Redirection should thus be conducted while saying nothing and pointing to the materials while gently touching the client's arm or hand to indicate the movement required (teaching quietly). The primary purpose of redirection is to reinstate participation, so its effectiveness is measured by assessing whether it results in participation and reward. Redirection should have a clear beginning, middle and end (reward envelope) with specific and consistent cues to help the client learn how to make the reward happen.

Having looked at some of the techniques involved in the practical application of gentle teaching, it may be useful to explore the assumptions behind its philosophy. The most basic assumption is that human contact is inherently rewarding, is this a safe assumption to make? McGee et al. (1987) state that the clients should learn that the carer’s presence signals safety and security; however, it also signals that demands are about to be made, as the carer will generally demand some type of interaction. Clients should also learn that the carer’s words and contacts (e.g., touch, embraces, looks, smiles) are inherently rewarding. However, this may not apply to a client with a fundamentally different central nervous system. It is a bit like saying "I like ice cream, therefore everybody must like ice cream and if they don’t, they must inhabit a lower plane of existence because my values system is better than theirs". There are times when all people like to be left alone, supposing this preference were
exaggerated due to a characteristic of an individuals differently developed central nervous system, it would certainly be abnormal, but is it wrong? This author does not claim to understand what matters in the subjective universe of an individual with profound learning disabilities. However, it may be useful to maintain a sufficiently broad mind as to be able to entertain the possibility that imposition of ones own values on another person may be at least disrespectful if not potentially damaging. McGee et al. (1987) acknowledge that many persons with behavioural challenges do not know how to accept human reward and see no value in it. However, they do not consider this to be a valid way to exist, "Our words and touch have little or no meaning. We have to give reward in abundance so that the person can learn its value" (p 65). They are not prepared to consider that their "words and touch" may actually be aversive for some individuals.

Clients are also required to learn that participation yields reward, however the exercises themselves have no inherent value, they are merely vehicles for a shared activity whose sole purpose / reward is to develop "bonding". No other reward (e.g., food) seems to be on offer. This author has observed a video (Hobbs, 1992) of gentle teaching in action. The care giver required the client (who died shortly after the video was completed) to throw a ball or put bricks into a bucket. There was a theme of perseverance and insistence in the interaction, the care giver would not be discouraged from the task on hand. Punches were deflected and turned into handshakes, and kicks were turned into foot rubs, other maladaptive behaviour was ignored. Although the application of technique was very impressive, one was left with the impression that, had the client genuinely wished to be left alone, her wishes would not have been respected. Partly because of the above assumptions, Jones and McCaughey (1992) have emphasised the need for functional analysis to ascertain the purpose of the challenging behaviour before deciding whether gentle teaching would be a suitable option. Emerson (1990) has also argued that gentle teaching may be an aversive intervention for some clients, depending on the function of their behaviour.

Another assumption of the gentle teaching approach concerns the motivation of care givers. Barrera and Teodoro (1990) stated that care givers were taught by gentle teaching to make attitudinal changes and lifelong commitments. Harbridge (1992) suggests that the qualities like love, tolerance and forgiveness are often masked with the veneer of professionalism and objectivity. She quotes Hobbs (a gentle teaching workshop leader) as saying: "I've been told, 'don't take your work home Dan. You have to be objective'. But
if I don’t think about what I am and who I am, how can I work out what I should be doing? I have to take it home because it’s an essential part of my life." While this view of work may possibly be commendable, not all care workers see their job as a vocation which defines their identity. For many of them, care giving is just a job which they do (usually for a few years) to earn money. Thus it is possible that many care givers may not have the personal resources and motivation to continue to absorb and redirect challenging behaviour while attempting to create "bonding"; Golding (1995) aptly termed this effect, "teaching gently... through gritted teeth". McGee et al. (1987) acknowledge that many care givers may find it difficult to teach human reward while these types of behaviours and feelings are present. They suggest that a spirit of union and support from others will motivate care givers to make interactions lead to reward, even in the midst of severe turmoil. However Golding (1995) pointed out that, in a service where staff do not feel valued by the management or secure in their jobs, these conditions are often lacking. She suggested that it may be unreasonable to expect staff to respond to challenging behaviours in a positive, unconditionally valuing way if they do not feel valued themselves.

Let us now take a brief look at the discipline of applied behavioural analysis. Remington (1991) defined it as work focusing on behaviours which are immediately important, that can illustrate a demonstrable change in the target behaviour, and that can show that demonstrated improvements result from the methods used rather than uncontrolled factors. The essence of behavioural analysis is the use of careful observation to generate hypotheses about the functional relationships between behaviour and its environmental context. Remington drew attention to the difference between "form" (description of the behaviour itself) and "function" (observable consequences or deduced purpose) of behaviour. He suggested that recent trends in detailed descriptions of "form" or behavioural topography have risked losing sight of the central Skinnerian concept of the operant as being a functional unit of behaviour. It would appear that much behavioural work has concentrated on the application of behaviour modification techniques and systematic measurement without much emphasis on analysing the function of the behaviour. Remington thus argued for the continuing need for "analysis" in "applied behaviour analysis". Oliver (1991) supported Remington’s views that the links between behaviour modification and applied behaviour analytic principles had become increasingly weak. Oliver suggested that "functional analysis" had two meanings; it could either refer to a description of the functional relationship that exists between a behaviour and events, or it could refer to an assessment that the behaviour may have for an individual in
terms of its purpose. The most common way to examine the function of a behaviour is to use the operant three term contingency A, B, C (antecedents, behaviour, consequences), and there are many other structured methods for performing functional analysis (E.g., see Durand & Crimmins, 1991). Challenging behaviour can be categorized as potentially achieving either negative reinforcement functions (e.g., by contingent escape from, or avoidance of, aversive stimuli such as teaching settings or social interaction), or positive reinforcement functions (e.g., by contingent procurement of appetitive stimuli such as attention, stimulation, or tangible items). Self-stimulation is subsumed by the latter because the maintenance of such behaviour could also be described as being positively reinforced.

Jones (1991) has reviewed the non-aversive behavioural methods in use for the reduction of inappropriate behaviour. The four most popular schedules are: the differential reinforcement of other behaviour (DRO), where reinforcement is contingent on the absence of the target behaviour for a specified time period; the differential reinforcement of alternative behaviour (DRA), reinforcement is contingent on the occurrence of an appropriate behaviour selected as an alternative to the target behaviour; the differential reinforcement of incompatible behaviour (DRI), reinforcement is contingent on the performance of an appropriate behaviour which is physically incompatible with the target behaviour; and the differential reinforcement of low rates of responding (DRL), reinforcement is contingent on the occurrence of an inappropriate behaviour if the behaviour occurs at a sufficiently low rate. Jones stated that these techniques were though to provide an alternative to the use of any aversive interventions, but the initial optimism surrounding their use has not been justified by the literature. He pointed out that the variable findings were most likely due to the use of reinforcers whose potency had not been properly assessed; the same stimulus could function as a reinforcer or a punisher depending on individual circumstances. He concluded that although ethical or moral issues may preclude the use of aversive interventions for some people, demonstrated therapeutic efficacy should be the most important consideration in choosing an intervention. In his view, not enough efficacy had been demonstrated to justify the use of differential reinforcement as the treatment of first choice.

Thus it can be seen that gentle teaching uses the same behavioural techniques as those commonly used in applied behavioural analytic interventions. For example, gentle teaching's "redirect-reward" paradigm appears to be remarkably similar to the behavioural schedule of DRA; and its element of "ignoring" appears compatible with the behavioural concept of
"extinction". The prevention of violence by the care giver’s sensitivity to precursors of inappropriate behaviour, would appear to be the equivalent of identifying "antecedents" (as in A,B,C). "Teaching quietly" would appear to have elements of "manual guidance" and "prompting". Linscheid, Meinhold and Mulick (1990) have even suggested that gentle teaching "is essentially no more than a set of behavioural principles packaged with a heavy dose of old-time patent-medicine showmanship" (p 32). McGee (1992) agreed that gentle teaching is congruent with applied behaviour analysis in that it uses several behaviour change techniques in its intervention procedure. However, he stated that it is different "in its unconditional valuing, its focus on mutual change, its analysis and measurement of dyadic variables, and its underlying assumptions" (p 871). It is nice to see a more humanistic vocabulary being used by gentle teaching as it gives the impression of greater respect for the client. However, as described earlier, the imposition of the value of social reinforcement may in some cases be disrespectful. It might be more conducive to both the dignity of the care giver and client if the client’s behaviour were first properly assessed by an analogue procedure of functional analysis. Negatively reinforced challenging behaviour driven by avoidance of teaching settings or social interaction may not respond well to gentle teaching’s assumed values.
References


Critically evaluate at least two theoretical models which have attempted to explain the long-term impact of child sexual abuse

Introduction and overview

In order to evaluate models attempting to explain the long-term impact of "child sexual abuse", it will first be necessary to identify the range and limits of current definitions of the term. This essay will then attempt to produce a realistic context for the models by briefly exploring the prevalence, and then the effects, of child sexual abuse. Several theoretical perspectives will then be explored, post traumatic stress disorder, traumagenic dynamics, developmental models, and a transactional framework. Much of the literature used will originate from the USA and may thus be open to cultural differences. Reference has thus been made to British work where possible, in order to facilitate generalisability of the discussion to UK populations.

Definitions of child sexual abuse

Although it is recognised that sexual abuse may take place within the context of other violent forms of abuse or neglect, they are not necessary components for a definition of sexual abuse to be made. A study by Oliver (1988) of 560 Wiltshire children born in families where child maltreatment had occurred over two or more generations, found that physical assault with neglect, but involving no sexual abuse, was the most prevalent form of maltreatment for children of both sexes. Thus, this essay may pertain only to a minority of all instances of child abuse. However, the general trend over the last two decades, is that a greater number of child sexual abuse cases are being reported. It would seem unlikely that this steady increase in reported cases is due to an increase in the prevalence of child sexual abuse. It may simply be an indication of a greater awareness within society, and among professionals working in the child care field. These factors make it more likely that signs of
abuse will be identified by the professionals and a sympathetic non-judgemental hearing may make it easier for child survivors to relate their experiences or seek help (Smith & Bentovim, 1994).

Many researchers acknowledge that there is no absolute definition for the term "child sexual abuse" (e.g., Haugaard & Reppucci, 1988; Briere, 1992). Therefore, when conducting studies to test or elaborate the theoretical models used to explain the long-term impact of child sexual abuse, researchers may be using different definitions of the term. It should thus be borne in mind that this conceptual limitation may create difficulties when evaluating, comparing, or generalising the findings of some research studies.

Definitions of child sexual abuse vary according to the emphasis placed upon, or the inclusion of, the following factors: Whether the abuse involved contact or non contact; the age difference between the perpetrator and the victim; the type of contact; whether it involved close family members or others outside the family; and whether physical force or other coercion was used.

In order to operationalise the term "child sexual abuse" for the purposes of this essay, it may be helpful to get an idea of the range of experiences which are often subsumed by common definitions. Schechter and Roberge (1976) defined child sexual abuse as "the involvement of dependent developmentally immature children and adolescents in sexual activities they do not truly comprehend, to which they are unable to give informed consent, or that violate the social taboos of family roles". However, Schechter and Roberge's issues of developmental immaturity, dependency, or informed consent were not addressed in the following definition by Baker and Duncan (1985); "A child (anyone under 16 years) is sexually abused when another person, who is sexually mature, involves the child in any activity which the other person expects to lead to their sexual arousal. This might involve intercourse, touching, exposure of the genital organs, showing pornographic material or talking about sexual things in an erotic way". This definition placed emphasis on the motivations and expectancies of the perpetrator. While Baker and Duncan (1985) defined the perpetrator as being anyone who was sexually mature, Finkelhor and Hotaling (1984) suggested an addition to cover exploitation in a relationship regardless of age; "sexual contact that occurs as a result of force, threat, deceit, while unconscious or through an authority relationship, no matter what the age of the partner". Generally, for teenagers, a five year age
gap between the perpetrator and the victim, is used as a guide to defining the abusive or exploitative nature of an interaction. Subsequently, Finkelhor and Korbin (1988) wrote one of the most comprehensive definitions; "...any sexual contact between an adult and a sexually immature (sexual maturity is socially as well as physiologically defined) child for the purposes of the adult's sexual gratification; or any sexual contact to a child made by the use of force, threat, or deceit to secure the child's participation; or sexual contact to which a child is incapable of consenting by virtue of age or power differentials and the nature of the relationship with the adult." Smith and Bentovim's (1994) review suggested that exhibitionism and inappropriate fondling or touching are the most common forms of abuse, usually followed by masturbation, and then penetrative acts.

Prevalence of child sexual abuse

The documented research figures for child sexual abuse are variable, and differing research methodology, and problems with specific definitions may account for this. In Britain, it has been estimated that as many as 12% of women, and 8% of men have experienced abuse (Baker & Duncan, 1985). Russell (1986) produced even higher figures for women who had experienced contact abuse (38%); and for non-contact abuse (54%). Jehu (1988) estimated that 23% of all women have been abused. Citing a variety of research findings from the late 1970s and the 1980s, Briere (1992) suggested that by the mid teens, sexual contact with a "substantially older" person, has been experienced by as many as a third of women, and a sixth of men. Wyatt, Guthrie and Notgrass (1992) claimed that 25% of women may have been sexually abused, before they are eighteen. Regardless of their variance, all the above estimates would indicate that incidents of child sexual abuse are relatively common.

Effects of child sexual abuse

Survivors of child sexual abuse are found in disproportionately large numbers among populations receiving psychiatric treatment. Cole and Putnam (1991) have indicated that there are great similarities between childhood and adult sequelae of child sexual abuse. For example, childhood distortions in body image may equate to eating disorders in the adult
survivor, and childhood inappropriate sexual behaviours may later develop into prostitution
or sexual dysfunction. Wyatt, Guthrie and Notgrass (1992) have presented evidence to
suggest that adult women survivors of child sexual abuse, may be "revictimised" in adulthood
and suffer further incidents of sexual abuse, rape, or unwanted pregnancies. The authors
hypothesised that survivors may feel they lack control of their sexuality; as a consequence
they will change partners frequently, and their relationships will be brief.

Smith and Bentovim's (1994) review used six categories to help describe the possible
sequelae of sexual abuse: (1) Sexualizing effects; e.g., heightened sexual activity during
childhood and adult life, a sexually abusive orientation, deviant fantasies masturbation and
sexual activities, inhibition of sexual activity, confusion and anxiety over their sexual identity
(boys), and an increased likelihood of homosexual preference in later life. (2) Emotional
effects; e.g., guilt and responsibility for the abuse, a sense of powerlessness, loss, and / or
isolation, concerns related to the opposite sex, or clinging to partners who may be unsuitable.
(3) Depressed mood; e.g., helplessness and hopelessness with pervasive anger directed
towards the perpetrator or other family members or the social services, sleep and appetite
disturbances, fatigue and general health worries, suicidal feelings, lower self-esteem, strong
worries about the future and the fear that bad things will happen. (4) Anxiety effects; e.g.,
flashbacks, dreams, startle reactions and hypervigilance, intrusive thoughts and abuse specific
fears, adult affective and phobic disorders, poor mood regulation and marital satisfaction,
anxiety disorders and relationship problems. (5) Behavioural effects; e.g., conduct disorders,
aggression, self-harm, eating disorders. (6) Specific effects of sex rings and ritual abuse;
e.g., feelings of responsibility for being involved, therapeutic delays due to criminal
proceedings, knowledge that there may be permanent records of sexual activities which may
be discoverable in the future, long lasting distortion of attitudes and beliefs.

In a recent UK study (Ussher & Dewberry, 1995) of 775 women survivors who
responded to a survey in a women's magazine, respondents endorsed the following closed
categories: Abuse has made them feel angry (68%), ashamed (66%), guilty (60%), anxious
(51%), afraid of sex (31%), afraid of men (24%), had no effect (2%). A further open-ended
category yielded the following themes: bad sex life, cannot trust men, psychological
problems, relationship difficulties, feel dirty, low self-esteem, frightened for own children,
bitterness / hatred, hate self or body, feel insecure, feel suicidal, being promiscuous, feel
recovered, embarrassed, drug / alcohol abuse.

The above conditions indicate important risks, especially from the more severe types of sexual abuse. However, the earlier mentioned high incidence of abuse in the general population might imply that many survivors of abuse must escape seriously handicapping sequelae. None the less, Briere (1992) suggested that abuse related symptomatology may wax and wane across the survivor's life span. As such, cross-sectional point prevalence studies of individuals presenting for psychological problems may only capture a fraction of the survivors who have suffered sequelae at any time subsequent to sexual abuse. Briere also pointed out that the generalization, from correlates of reported sexual abuse to conclusions about the long-term impacts of abuse, is most vulnerable to inferential error. Cross-sectional research (e.g., Ussher & Dewberry, 1995) cannot discriminate between abuse-specific and abuse-concurrent or abuse-antecedent events. Also, retrospective research is open to report biases, as current distress or symptomatology may impact on respondents' retrospective reports of abuse which may have taken place long ago. There have been almost no prospective studies with baseline comparison measures of symptomatology before the abuse took place. Briere (1992) stated that researchers have yet to determine the pre-molestation functioning of sexually abused children, the exact role of coexisting familial dysfunction and other forms of maltreatment, and the impacts of social and demographic factors as they moderate or exacerbate simple abuse effects.

Post-traumatic stress disorder

The appropriate perspective has now been achieved in order to explore some of the theoretical models which have attempted to explain how the range of activities defined as "child sexual abuse" give rise to some of the long-term sequelae mentioned above. One of the simplest approaches uses post-traumatic stress disorder (PTSD), this is a clinical syndrome (e.g., see DSM-IV, American Psychiatric Association, 1994) with a recognised collection of symptoms displayed following a severe stress event. These may include recollection of the event (recurring and intrusive thoughts or reliving of the event); avoidance of stimuli which are associated with the traumatic event; persistent arousal, sleeplessness and hypervigilance (Ramsey, 1990). As can be seen, this syndrome matches closely with the "anxiety effects" listed in Smith and Bentovim's (1994) review of child sexual abuse sequelae.
PTSD can be used to inform a psychoanalytic / schema or cognitive behavioural perspective of child sexual abuse. The psychoanalytic view (Horowitz, 1975, 1979) focuses on intrusive experiences of affect, such as painful re-experiencing and rumination, these can be explained in terms of repression and an unconscious completion tendency. Horowitz (1986, 1992) later took on a more schema based approach, he hypothesised that memories of serious life events have an automatic tendency toward repeated representation in consciousness until existing schemata are changed in an attempt to assimilate the event. He also suggested that coping and defensive processes may influence how schemata would be used to organize the meaning of stressful encounters. These views are compatible with the therapeutic approach of Young (1987) which posits the formation of "early maladaptive schemata" which then influence future behaviour as subsequent events are interpreted via deeply entrenched dysfunctional beliefs.

In an attempt to explore the role of schemata in the formation of post-abuse psychopathology, Waller and Smith (1994) compared two groups of women who reported a history of sexual abuse. They found that women survivors who also had psychological disorders had greater levels of self-denigratory beliefs (e.g., "anyone who knows what happened to me sexually will not want anything to do with me") and abuse related information-processing bias (demonstrated by Stroop task) than women survivors with no psychological disorder. This information-processing bias may cause hypervigilance to abuse related cues, thus generating intrusive thoughts as commonly found in PTSD. The authors also posited that their results were indicative of a specific schema which involved beliefs about the individual having been "contaminated" by the abusive experience. Interestingly, there were no differences between groups on items reflecting self-blame, general self-worth, and perceptions of the perpetrator's motivations for the abuse.

The cognitive-behavioural perspective (Foa et al., 1989) focuses on phobic avoidance as the major element of PTSD (as opposed to intrusive thoughts), and it posits that pathology is caused when avoidant responses are classically conditioned to environmental cues that had previously signalled safety. When an event is so paradoxical that it disturbs and challenges fundamental schemata / beliefs / expectations, distortions of affective and cognitive functioning are inevitable. These distortions may result in symptoms with content related to the traumatic event itself; i.e., re-experiencing by rumination, dreams or flashbacks, and avoidance or numbing in the face of stimuli reminiscent of the event.
PTSD assumes that precipitating stressors are, threatening, relatively uncommon or unusual, cause high levels of arousal, and tend to exceed the individual's immediate coping abilities. These assumptions, when combined with the model of Foa et al., would suggest that post abuse symptomatology will vary as a function of the danger inherent in the abuse. Thus, the likelihood of PTSD symptoms should increase as the abuse becomes more invasive, coercive, frightening, and/or repeated. These predictions have been supported by the literature in general, and most recently by Ussher and Dewberry's (1995) UK study. They found that the major predictor of long-term sequelae (mentioned earlier) was childhood sexual abuse which occurred in the context of actual or potential violence, or where there was verbal coercion or blaming of the child; the second main predictor of sequelae was the duration or frequency of the abuse. These issues of frequency and duration do however illustrate one limitation of the PTSD models in that child sexual abuse is generally a process, not an isolated event. PTSD definitions do not fully address the pervasive, sustained stress caused by extended periods of apprehension, guilt and fear between sexual contacts. This argument has partially been addressed by Terr's (1991) notion of a type II post-traumatic state to account for the effects (e.g., a sense of futility, lack of hope in the future and anger) of repeated traumatic experiences.

Finkelhor (1988) has argued that much sexual abuse does not occur under conditions of danger, threat and violence, he suggested that the trauma of abuse often results from the meaning of the act as much as from objective physical danger. This argument would appear to hinge on the definition of "a traumatic event", should it be defined by objective 'reality', or subjective personal construction? If (as person-centred therapists) we adopt the latter definition, then the PTSD model should still withstand Finkelhor's criticism. None the less, the full variance of the level of trauma associated with sexual abuse can not be explained by the act of sexual abuse in isolation. Spaccarelli (1994) suggested that the overall context of the abuse and the individual's own coping/cognitive attributes, should be taken into account. Although PTSD may have some useful application in the understanding of the formation of post abuse psychopathology, it does not explain all symptoms which may be characteristic of child sexual abuse e.g., the sexualizing effects, emotional effects, depressed mood, behavioural effects, and specific effects of sex rings and ritual abuse.
Traumagenic dynamics

The model of Traumagenic Dynamics given by Finkelhor (1988), suggests that there are four experiential areas of child sexual abuse which can affect schema development; each of these areas are posited to consist of 'dynamics' which can lead to certain 'psychological' and 'behavioural' outcomes as follows:

(1) **Traumatic sexualisation**: The dynamics are that the perpetrator exchanges attention and affection for sex, they fetishize sexual parts of the child, they transmit misconceptions about sexual behaviour and sexual morality, the child is rewarded for sexual behaviour inappropriate to their developmental level, and sexual activity is associated with negative emotions and memories. The psychological impacts consist of aversion to sex or intimacy, negative associations to arousal sensations and sexual activity, confusion of sex with love and care-getting or care-giving, increased salience of sexual issues, confusion about sexual identity, and confusion about sexual norms. Behavioural manifestations include sexual preoccupations and compulsive sexual behaviours, precocious sexual activity, promiscuity, prostitution, aggressive sexual behaviours, sexual dysfunctions (flashbacks, difficulty in arousal or orgasm), avoidance of or phobic reactions to sexual intimacy, and inappropriate sexualisation of parenting.

(2) **Stigmatization**: The dynamics are that the perpetrator blames or denigrates the victim, the perpetrator and others pressure the child for secrecy, others react badly to disclosure, others blame the child for events, the child infers attitudes of shame about the activities, the survivor is stereotyped as 'damaged goods'. The psychological impacts consist of guilt, shame, lowered self-esteem, and a sense of differentness from others. Behavioural manifestations include isolation, drug / alcohol abuse, criminal involvement, self-harm, and suicide.

(3) **Powerlessness**: The dynamics are that the child feels unable to protect themselves, body territory is invaded against their wishes, their vulnerability to invasion continues over time, they are unable to make others believe their disclosures, they repeatedly experience fear, the perpetrator uses force or trickery to involve the child. The psychological impacts consist of anxiety, fear, a lowered sense of efficacy, the need to control, identification with
the aggressor, and perception of the self as a victim. Behavioural manifestations include phobias, nightmares, depression, somatic complaints (eating and sleeping disorders) dissociation, running away, becoming a perpetrator, delinquency, aggressive behaviour, bullying, school problems, truancy, employment problems, vulnerability to subsequent victimization.

(4) Betrayal: The dynamics are that the perpetrator violates the child's expectation that others will provide care and protection, the child's well-being is disregarded, trust and vulnerability are manipulated, and there is a lack of support and protection from parents. The psychological impacts consist of anger, hostility, grief, depression, extreme dependency, impaired ability to judge the trustworthiness of others, and mistrust (particularly of men). Behavioural manifestations include isolation, discomfort in intimate relationships, clinging, aggressive behaviour, delinquency, marital problems, vulnerability to subsequent abuse and exploitation, and allowing one's own children to be victimised.

This is a flexible model in that the variety of dynamics presented can be linked in different ways to individual cases, any combination of the four may be present. Although it has a kind of face validity, the construct validity of its categories and the discriminant validity among its elements is questionable. For example, the categories of "stigmatisation" and "betrayal" can be seen to share many common elements. Unfortunately, such a model would be very difficult to test because its categories are unlikely ever to be found as isolated entities. Also a single category may contain quite opposite behaviours (e.g., promiscuity / sexual avoidance); while this makes some sense if interpreted as a type of classic psychoanalytic "reaction formation", it would still have the effect of making empirical evaluation very hard to do. Unlike PTSD, Traumagenic Dynamics identifies individual stressors within child sexual abuse and explains symptomatology in relation to these threats. Like PTSD the threats can either be considered objectively 'real', or they could be subjective personal constructions. For the latter case in particular, the traumagenic dynamics model may be too rigid in that it assumes that responses in the survivor are directly determined by the abuse dynamics. Spaccarelli (1994) questioned whether this assumption is correct, he pointed out that it would appear unlikely that responses to given experiences are going to generalise across all survivors. Also, it is unclear, whether presenting symptomatology is an indicator of the nature of the abuse, the survivor's perception of it, their coping response, or an interaction
of the three. The model also fails to describe the forces that would tend to support or mitigate against the development of each dynamic. In cases where there is a lengthy gap between abuse and the time symptoms are presented (e.g., in adulthood), the Traumagenic Dynamics model does not fully explain how the sequelae of the abuse come about. For example, coping strategies can be expected to change with time, an effective and acceptable childhood coping strategy (e.g., dissociation) may not necessarily remain so in adulthood.

Developmental models

Developmental models give a wider framework of reference for the understanding of child sexual abuse and its long-term impact. The abuse is placed in the context of family, (e.g., Alexander, 1992), and psychological disturbance is traced in relation to the developmental stages of the survivor at the time of the abuse, (e.g., Cole & Putnam, 1992).

Cole and Putnam (1992) focused on father-daughter incest, the duration of this type of abuse is generally longer than other types of child sexual abuse. As such, incest survivors, apart from dealing with the abuse events themselves, must also assimilate the loss of a trusted relationship with an emotionally significant person, and contend with periods of apprehension, guilt and fear between the events. The authors suggested that these stressors caused the following three disruptions in self-development: (1) **Self-integrity**; disturbances of the physical and phenomenological sense of self, such as identity confusion and dissociation of aspects of self. (2) **Self-regulation**; poorly modulated affect and impulse control, including a variety of self-critical and self-destructive symptoms. (3) **Social problem**; insecurity in relationships, distrust, suspiciousness, lack of intimacy, and isolation. Cole and Putnam then described sexual abuse sequelae (defined as the major psychiatric disorders of borderline personality, multiple personality, somatization disorder, eating disorder and substance use) in terms of the above disruptions in self-development. For example, borderline personality was described in terms of **(self-integrity)** unstable sense of self, marked identity problems, "splitting"; **(self-regulation)** affective instability, impulsiveness, self-mutilating behaviour, suicide attempts; **(social-problem)** unstable relationships and frantic fear of abandonment. As such, Cole and Putnam's (1992) model is similar to the list of related entities found in Finkelhor's (1988) Traumagenic Dynamics. It also shares some of the problems of similar
elements being common to more than one category.

Cole and Putnam (1992) have, however, attempted to explain how their list of related entities has come about. They assume that self and social development are inextricably bound together and dysfunction in the self-domain would inevitably have its counterpart in the social domain. Disruptions in self-development are explored in relation to the role of different coping strategies adopted during different developmental stages.

In infancy and toddlerhood, denial and dissociation may be the primary coping strategies, avoidant coping (e.g., refusal to participate) is overridden by the physical proximity and social authority of the abusive father. Sexual abuse at this age is thought to compromise the ongoing self-organisation and self-regulation that are major tasks of the period. It is also thought to sabotage the earlier accomplishments of infancy and toddlerhood.

In childhood, the use of denial and dissociation appears to decrease as children begin to use blaming others, rationalisation, and other cognitive defenses. Abuse at this age is thought to challenge the child’s sense of self-competence in the social world. Intense guilt, shame, and confusion diminish the likelihood of feeling secure enough to build friendships and to receive social support outside the home.

In adolescence, the deviant experience of sexual abuse may cause difficulties in assimilation of the physical changes associated with sexual maturity, it may also impede the normal exploration of opposite-sex peer relationships. Reliance on relatively immature coping strategies, which preempt reflection, reasoning and planning, increases the likelihood of acting impulsively (displaying poor self-regulation) when frustrated, depressed or anxious. The integration of multiple and changing aspects of self into a coalesced, coherent whole is thought to be significantly jeopardised.

Cole and Putnam (1992) have thus attempted to incorporate the roles of coping strategies and developmental levels into an explanation of the formation of post-abuse psychological sequelae. However, their emphasis on father-daughter incest may limit the generalisability of the model to other child sexual abuse situations. Also, they did not attend to the possible contributory role of pre-abuse familial / social dysfunction. A more complex model was proposed by Alexander (1992), she used attachment theory (e.g., Bowlby, 1988) as a
conceptual framework with which to understand the familial antecedents and long-term consequences of child sexual abuse. Attachment is posited to be a biologically based bond with a caregiver which provides a secure base from which the child is able to effectively explore their environment.

Alexander (1992) suggested that it is important to understand the family context of abuse, because family characteristics are significant predictors for risk of child sexual abuse, they are also related to long-term outcome variables in the survivor. For example, absence of a biological parent, the presence of a step father, marital conflict or violence, poor child / parent relationships, and maternal unavailability, have been identified as significant predictors that a child is at greater risk of sexual abuse (Finkelhor & Baron, 1986; Paveza, 1988). Also, maternal warmth was shown to be a stronger factor than the abuse variables of duration and number of incidents, when predicting long-term adjustment outcomes in adult survivors of child sexual abuse (Peters, 1988). Alexander (1992) cited a range of studies to suggest that the severity of long-term effects of sexual abuse appears to be mediated by support received from the non-abusive parent. She pointed out that, although insecure attachment (avoidance, resistance, and disorganisation) has been noted among cases of child physical abuse and neglect, there had been no studies looking at attachment in a sexually abused population.

Haft & Slade (1989) illustrated that insecure attachment traits in a parent precede the development of insecure attachment in their child, and Alexander (1992) took this further by suggesting that insecure attachment in the parent, preceded the onset of abuse of the child. The other fundamental assumption of her paper is that, regardless of the incidence of intergenerational abuse, sexual abuse is frequently associated with the intergenerational transmission of insecure attachment. She suggested that the categories of insecure attachment identified in children, can be linked with similarly identified categories in adults, thus facilitating the intergenerational transmission. Therefore in avoidant attachment, the child shows little preference for the mother over a stranger, displays episodes of aggression towards her, the mother is unemotive and avoids physical contact. The adult equivalent may be illustrated by hostility or loneliness, a lack of confidence, avoidance of intimacy, and an idealised view of one’s childhood. In resistant attachment, the child alternates between seeking contact and displaying temper tantrums, mothers are characterised by role reversal and inconsistency in their responses. The adult equivalent suggests a preoccupied adult who may display confusion, anxiety, jealousy and dependency. In disorganised / disorientated
attachment, the child displays contradictory behaviour patterns like seeking proximity and then avoidance, while the parent may have unresolved trauma. The adult equivalent suggests a fearful or unresolved adult who may be socially inhibited and unassertive while showing a combination of avoidant and preoccupied traits.

Alexander (1992) went on to describe different themes of insecure attachment (observed in abusive families by Zeanah & Zeanah, 1989) that may help explain the wide array of family dynamics associated with the onset of sexual abuse. Insecure attachment is thought to precede the abuse and either precludes impulse control in the perpetrator, interferes with protectiveness of the non-abusive parent, or increases the vulnerability of the child to abuse. As such, rejection is associated with avoidant attachment in the child who would feel unloved and unwanted. The avoidant (dismissing) parent actively turns away from the child and is generally unavailable, both physically and psychologically. This pattern is thought to describe the authoritarian, incestuous father who is emotionally distant but views his spouse and children as his property and subject to his needs. The pattern also characterises the mother who is unavailable due to excessive work, illness or depression. Role reversal / parentification, is the expectation that the child will fulfil the parental role in the family system, it is thought to be associated with resistant attachment. Growing up as a parentified child can lead to a sense of entitlement in a perpetrator, who would expect their own children to meet their emotional and sexual needs. The sense of entitlement in a non-abusive parent may lead to expectations to be nurtured, rather than nurturing their child. Fear / unresolved trauma, is associated with the disorganised attachment pattern. This would be expected in a chaotic, multiproblem incest family characterised by substance abuse, physical abuse and indiscriminate sexual behaviour. A perpetrator with a history of disorganized attachment may attempt to suppress or repress his own unpleasant childhood experiences through substance abuse or dissociation, thus reducing impulse control and making intergenerational abuse more likely.

Alexander (1992) then explored insecure attachments in the survivor as mediators in the long-term effects of child sexual abuse:

The preoccupied survivor (the resistant child grown up) may be characterized by a negative self-concept associated with an idealization of partners; this "desperate or manic love
style" would lead to subsequent disappointment or even revictimisation. Another manifestation would be the compulsive caregiver who may be seen by others as manipulative and controlling. Preoccupied survivors would tend to potentiate negative affect by giving excessive attention to the attachment figure. Their strategy for dealing with confused affects and memories stemming from childhood attachment conflicts, is to focus attention on them. Thus, they are more likely to be plagued by depression and anxiety, these affects would then be quelled by sensation-seeking and the use of alcohol.

The *avoidant* survivor would be more likely to experience social isolation and estrangement. They may experience conflicts caused by simultaneous dependency and lack of trust. A strategy of compulsive sexuality may help avoid the anxiety associated with close emotional relationships, yet still allow social contact to be retained. Avoidant adults are characterised by an absence of memories and an idealisation of parents and the past. They are likely to deny or have difficulty expressing emotions, fears and subjective distress, any residual covert manifestations of which are likely to be quelled with alcohol.

The *fearful* survivor (the *disorganised* child grown up) would be expected to exhibit the most severe disorders of affect regulation, including PTSD and dissociation (e.g., multiple personality disorder). This is supposedly due to the tendency to both approach and avoid stressful events in the absence of effective coping strategies, thus producing irresolvable conflict.

It could be argued that Alexander's (1992) paper lacks the clarity or simplicity to be called "a model", it does however produce many interesting predictions. Again its discriminant abilities are limited, it is likely that if a survivor or perpetrator were to read the paper, they would probably identify with elements / products of all three insecure attachment styles (e.g., the use of alcohol). The mechanism of intergenerational transmission of attachment is also unclear because attachment style is usually developed in relation to the mother, who is not generally the perpetrator of sexual abuse. The way that the parent's two possibly different adult attachment styles may interact to produce attachment in the child, leaves Alexander's "model" too complex for concise empirical evaluation.

Another problem with Alexander's "model" is that it is not clear how it relates to situations where the perpetrator is not a parent, and there is evidence to suggest that most
survivors of child sexual abuse, were not abused by a parental figure (Haugaard & Reppucci, 1988). Alexander (1992) attempted to address this problem by suggesting that there may be a reversal in the causality between insecure attachment and sexual abuse, where a previously securely attached child is abused by someone who is not a family member. Events surrounding the child sexual abuse (the act itself and parental response to disclosure) may cause a sudden erosion of trust in a previously securely attached child. Alexander acknowledged that, in cases of extrafamilial abuse when insecure attachment precedes the abuse, it is unclear what impact the abuse has on long-term mental health outcomes. How much of the long term damage can be attributed to insecure attachment, and how much is attributable to the abuse events themselves? None the less, attachment theory is an interesting perspective based on observable constellations of behaviour patterns. As such, it complements well the, earlier discussed, cognitive perspective associated with the survivor’s formation of early maladaptive schemata.

A transactional framework

Transactional theory (Sameroff & Fiese, 1990) emphasises that development proceeds through a series of person-environment transactions. From this perspective, sexual abuse should be viewed in terms of the entire impact of the abuse on the child’s family and community environment. Spaccarelli (1994) has used the transactional approach to develop a general theoretical framework for researching the effects of child sexual abuse. The model predicts that a survivor’s risk of poor mental health outcomes increases as a function of the total stress generated by three categories of stressful events: Abuse, e.g., sexual exposure, coercion, denigration, and trust violation. Abuse related, e.g., family dysfunction, marital separation, and loss of social contacts. Disclosure related, e.g., nonsupportive responses to disclosure, child removal from the home, family relocation, therapeutic and investigative interventions.

The effects of the above events are mediated by the formation of negative cognitive appraisals (e.g., self-blame) and the use of dysfunctional coping strategies (e.g., cognitive avoidance). The transactional model does not assume causality between abuse stressors, coping strategies, cognitive appraisals, and psychological sequelae; instead it allows for
reciprocal paths to exist between these elements. This comprehensive framework can encompass multiple models in which specific types of symptomatology are mediated by different sets of negative appraisals and coping strategies that, in turn, are related to the presence of particular subtypes of stressful events.

Conclusion

In the past, many research and theoretical models used to explain the effects of child sexual abuse, have focused on variants associated with the actual abuse (e.g., severity / duration of abuse etc.). The wider context in which the abuse takes place, and the complex interaction between the inner and outer worlds of the survivor is only recently being addressed. The personal attributes of the survivor, the family context, reactions when abuse is discovered or disclosed, external support systems, will all play a part in determining the psychological outcome for the survivor. By widening the scope of factor accountability in research, the development of more parsimonious models of child sexual abuse may seem less likely as the models become increasingly complex. The standardisation of research variables may also seem less likely, thus meta analyses comparing studies may become increasingly difficult. None the less, it would be inappropriate to ignore relevant factors for the sake of the generation of simple research oriented models. The trend towards broader and more thorough perspectives has important clinical implications, for if a set of predictors or definite causal factors can be linked to long term outcomes, more successful and appropriately matched treatments could result.
References


Appendix

Essay published as a peer reviewed article:

MATERIAL REDACTED AT REQUEST OF UNIVERSITY
Relapse Prevention: theory and practice

Background

The risk of relapse has been demonstrated as being a consistent problem for abstinent drug users of all kinds (e.g., opiates, alcohol and tobacco, Hunt et al., 1971), and much research has been devoted to the issue. Sobell & Sobell's (1973) treatment programme for alcoholics included the identification of discriminative stimuli for drinking and the generation of appropriate alternative (coping) behaviours. Sanchez-Craig (1975) developed a conceptualisation of relapse that focused primarily on cognitive appraisals of drinking episodes during aversive social events. The suggested intervention was "reappraisal therapy" to cognitively restructure the individual's interpretation of drinking situations. Gorski & Miller (1979; also Gorski, 1990) described a collection of predictable symptoms preceding relapse. Their model of relapse encompassed physical, psychological, behavioral, and social components. Gorski recommended identification of (and coping with) risky processes that would occur long before the first drink. Gorski's "post acute withdrawal syndrome" made him the only relapse model to allow for cognitive impairment from chronic alcohol use. Litman et al., (1979) found that individuals with a wider repertoire of coping styles were more likely to remain abstinent. In her subsequent "Conceptual Framework for Alcoholism Survival", Litman (1980) hypothesised that good outcome was related to the development of coping strategies; from simple avoidance in early recovery, to the development of more complex cognitive coping strategies for the later stages of recovery.

Marlatt (1973) began examining lapse episodes as part of a study evaluating the effectiveness of aversive conditioning procedures with chronic alcoholics. The findings highlighted the salience of social factors as causes of relapse, as opposed to the role of internal, physiological determinants such as craving. Chaney et al. (1978) provided a
categorisation of four types of relapse situations in order to help abstinent alcoholics develop situational coping skills. Marlatt & Gordon (1980) then formally outlined the "Relapse Prevention" (RP) approach where "the client can be trained to be his or her own therapist, and will be able to implement procedures to maintain changes in behaviour long after the initial treatment program has ended". Of the many RP approaches, this summary focuses on Marlatt and Gordon's (1980, 1985) RP model as this appears to be the most popular approach to RP among N.H.S. substance misuse services at present.

The popularity of Marlatt and Gordon's RP model stems from its conceptual clarity because it has a theoretical base in cognitive-behavioral principles (Beck, 1976) and social learning theory (Bandura, 1977), it can also accommodate goals other than total abstinence.

What is Marlatt and Gordon's RP model?

Marlatt and Gordon's model describes a positive relationship between high risk situations, effective coping responses, increased self-efficacy and decreased probability of future lapse. Conversely, absent coping is positively related to high positive outcome expectancies for drug use and low self-efficacy. Initial substance use is posited to cause an abstinence violation effect followed by an increased probability of relapse. The above means that if someone successfully avoids lapsing, they will be more confident about future success and less likely to lapse. If they do not avoid lapsing (because they expect the lapse to be rewarding in some way) they will then be upset, lose confidence and thus be more likely to lapse again. Generally, RP therapists help individuals anticipate what situations, moods, or thoughts may cause them to relapse, therapists then demonstrate relevant coping techniques. Marlatt & Gordon (1980, 1985) suggest that these should include recognition of warning signals, self-monitoring, desensitisation of anxiety, skill training, lifestyle intervention, education about substance effects, training in controlled substance use, cognitive restructuring of lapses, and programmed relapse.
The practice of RP

Below are a series of steps describing some fundamental aspects required for the practice of RP.

1) Mastering the jargon (as used by Marlatt & Gordon, 1980, 1985)

Social Learning Theory: The idea that people can learn a new behaviour by observing, and then imitating, someone else who is demonstrating (modelling) that behaviour.

Habit: Addictive behaviours are viewed as overlearned habits that can be analyzed and modified in the same manner as other habits.

Lapse: A single occurrence of the behaviour in question after a period of abstinence (e.g., the first use of drug), beliefs and emotions about the first lapse will determine whether or not it may escalate to a relapse.

Relapse: A return to repeated episodes of the habit.

Abstinence Violation Effect (AVE): A thinking-feeling (cognitive-affective) reaction to an initial lapse. The greater the AVE, the greater the probability of subsequent relapse. There are two components to the AVE: a belief (cognitive attribution) about the cause of the lapse coupled with an emotional (affective) reaction to this belief. E.g., the greater the beliefs of self-blame for lapsing, the greater the emotional reactions of increased guilt, frustration and anxiety, the greater the likelihood of further relapse.

High Risk Situation: Any situation that poses a threat to the individual’s sense of control (over their habit) and increases the risk of potential relapse.

Self-Efficacy: (a social learning theory term) The conviction that one can successfully execute the behaviour required to produce certain outcomes. E.g., in RP this equates to the individual’s sense of control over their habit.

Seemingly Irrelevant Decisions (SIDs): Despite not admitting to a conscious decision to lapse, an individual may embark upon a series of individually innocuous choices or behaviours which cumulatively lead to a very high risk situation where lapse is apparently unavoidable. This is not a novel concept, it used to be called "setting oneself up".

Positive Outcome Expectancies: Anticipation of pleasure (or relief) from expected indulgence in a given act.
Urge: A relatively sudden impulse to engage in a given act.

Craving: The desire to experience the effects or consequences of a given act.

Cue: Any reminder of some aspect of an individual's addictive behaviour, the cue may often trigger urges or cravings.

Coping Response: A way of dealing with a high risk situation. Responses are often categorized as "cognitive" e.g., remembering negative consequences of prior drug using; or "behavioural" e.g., physically leaving a risky situation.

Skill acquisition: Learning coping responses (e.g., by observing and then imitating demonstrations).

Thinking Errors: (a cognitive behaviour therapy concept) Habitual ways of thinking or beliefs which are often extreme and not supported by available evidence; they are believed to contribute to relapse. E.g., "polarised thinking": one must be perfect or one is a failure, there is no middle ground.

Cognitive Reframing / Restructuring: Getting people with "thinking errors" to think differently. Usually done in a non-confrontational, collaborative way, E.g., "let us look at what evidence you have to support this belief".

Self-Monitoring: Observing oneself and being vigilant of high risk situations, bad feelings, urges, cravings, thinking errors, seemingly irrelevant decisions, or lifestyle imbalance.

Lifestyle Balance: The balance in one's daily life between those activities seen as external hassles or demands (the "shoulds") and those perceived as self-fulfilment (the "wants"). This is a longer term relapse prevention goal.

Lifestyle Intervention: Facilitating change in a person's behaviour / lifestyle in order to achieve a "lifestyle balance".

The above terms can then be combined in the following way: Within this cognitive behavioural framework, social learning theory is used to facilitate the process of skill acquisition, thus enhancing self-efficacy by providing a repertoire of coping responses for the successful negotiation of positive outcome expectancies of substance use in high risk situations. An abstinence violation effect is therefore avoided and self-efficacy is further enhanced. The client is encouraged to self-monitor for seemingly irrelevant decisions, negative emotional states, cues, urges, cravings, lifestyle imbalance, or thinking errors. The latter are generally addressed by the process of cognitive restructuring within a collaborative therapeutic relationship.
2) Learning some categories of high risk situations, e.g.,

Litman et al. (1977): Negative mood states; settings associated with drinking; interpersonal anxiety; decreased cognitive vigilance (i.e., getting complacent).

Marlatt and Gordon (1980): Intrapersonal determinants (to do with self): Negative emotional states (anger & frustration / other bad feelings); negative physical states (withdrawal symptoms / other illness or injury); positive emotional states (using to feel good); testing personal control (trying moderate drug use); urges and temptations (in the presence / absence of a cue). Interpersonal determinants (to do with others): Interpersonal conflict (anger and frustration / other bad feelings); social pressure (direct / indirect); positive emotional states (using to feel good with others).

Bradley et al. (1989): Cognitive factors, mood states, external influences, withdrawal symptoms, inter-personal influences, social pressure, loss of support after leaving a sheltered environment (prison, hospital or clinic), drug availability, drug related cues, craving, and priming. Most of these categories are similar to those of Marlatt with the exception of the following: priming (with a different drug) which was similar to Shiffman's (1982) observation that cigarette lapse was associated to alcohol use; removal of a sheltered environment; and cognitive factors which, although similar to Marlatt's "testing personal control", introduced the possibility of a premeditated lapse for other motives (e.g., boredom or curiosity to sample the effects again).

Powell et al. (1993): Negative mood states; positive mood states; physical discomfort; being in an area of prior drug use; interpersonal conflict; social pressure; use of other drugs (priming). Priming or the use of other drugs is a feature most common with illicit drug using populations who, unlike alcohol users, will habitually use more than one type of drug.

Generally, the most frequent lapse determinant has been found to be "negative emotional states" (for alcohol users). However, populations of drug users appear to be quite varied in terms of their most frequently cited lapse precipitant, e.g.: negative emotional states (Birke et al., 1990; Heather et al., 1991; Powell et al., 1993; Stephens et al., 1994a); negative
physical states (Chaney et al., 1982); social pressure (Cummings et al., 1980); craving (McAuliffe et al., 1986), and testing personal control or cognitive factors (Bradley et al., 1989). Variations in the above taxonomies illustrate how lapse category definitions are somewhat arbitrary (e.g., see Zywiak et al., 1996) and Marlatt's taxonomy has been found to be inconsistent for research purposes (Longabaugh et al., 1996).

3) Tools required to assess self-efficacy and identify high risk situations.

E.g., the "Inventory of Drinking Situations (IDS)" and "Situational Confidence Questionnaire (SCQ)" (see Annis & Davis, 1988). Homework assignments to practice coping in high risk situations identified by the first test should produce "mastery experiences" which would increase self-efficacy (as assessed by the second test), thereby decreasing the probability of a future relapse. The focus on self-efficacy, as opposed to motivation, stems from the assumption that individuals will have an internal, dispositional tendency toward achieving mastery or competence across all situations (Bandura, 1977).

4) Writing a protocol to inform purchasers and clients.

Colleagues and purchasers may be impressed with the paragraph in section 1, but plain english is preferable for prospective clients. A protocol should also outline the target population (e.g., entry criteria, assessment and intake procedures), objectives of the programme (e.g., education, practice, self-help, preventing relapse and minimising the impact of relapse should it occur), and how those objectives will be achieved (e.g., overview of the structure of the programme or general content of the groups).

5) Finding "appropriate" clients.

The RP approach assumes that clients begin as relatively abstinent with a wish to remain so. Clients' goals should thus be ascertained at the initial assessment, but this can be difficult with poly-drug users who may wish to abstain from (or control) some drugs but not others.
Marlatt and Gordon (1980, p.425) stated that an important condition of their theory "is that it applies only to those cases in which the individual has made a voluntary choice or decision to change a target behaviour". However, most "voluntary" decisions to seek treatment involve some type of external duress (Power et al., 1992; Murphy & Bentall, 1992). These decisions, once made, should not be assumed to be permanent because motivation to change may vary from day to day (Miller, 1985; Saunders & Wilkinson, 1990; Davidson, 1992; Prochaska et al., 1992).

6) Starting an RP group.

There is no reason why RP cannot be applied on an individual basis and its components are frequently used in one-to-one therapy. However, formal RP is most often heard of as a group format. A sense of group cohesion may help clients support each other outside of the group setting, thus developing a useful social support network. Groups are also useful theatres for role playing exercises to help develop modelled skills, feedback can be provided from both therapists and other clients. Clients are often more honest and direct with each other whereas a therapist may be more tentative in their feedback. Alcohol or drug users in treatment have generally tried ways of controlling their substance use and will already have developed a repertoire of coping skills. So if the therapist cannot advise about a particular client's problem, they can ask other group members to share their experiences of dealing with it.

Once the principles of RP have been assimilated by the prospective therapist, the content of RP sessions can be flexibly tailored to suit the constraints of clinic settings and target populations. Many treatment settings require the use of "rolling groups" where members successively enter, stay for a set period, and then leave. In this way, senior members can be used to demonstrate skills, attitudes, beliefs and behaviours to the newer members. Some therapists prefer to adhere to a more structured framework which requires that all group participants start and finish the group simultaneously. The following is one example of the latter which is currently being used by the Riverside Mental Health Trust Substance Misuse Service (Ryan, 1993):

The programme consists of 14 sessions happening twice weekly over 7 weeks. Each
session lasts three hours including a twenty minute break. There are a maximum of 10 clients per group plus two facilitators. One facilitator runs the session and keeps to the protocol while the other focuses on group processes and may encourage the more reticent members. Sessions generally aim to review homework assignments (e.g., self-monitoring of craving or stress levels), introduce new coping strategies, and practice these in the course of the session.

The first two sessions focus on induction, education about target substances, and goal setting. Client expectations are explored, both realistic and not so realistic. Clients are motivated towards accepting the need for re-evaluation of current behaviour. The next session aims to introduce the basic concepts of RP. Clients are introduced to a framework for understanding their problems in terms of thoughts, feelings and actions. They then learn self-monitoring of high risk situations using forms provided. Having developed an individual profile of high risk situations, cognitive rehearsal is used to help anticipate coping in real life high risk situations. Participants are then introduced to a range of strategies for tension control so they can apply relaxation and stress management skills to everyday "real life" situations. Clients are then introduced to ways of positive coping with low mood and poor self-esteem. A structured approach to identifying and dealing with problems is followed by a review of progress and problems to date. Later sessions may introduce clients to basic communication skills including assertiveness (e.g., refusing drugs without being submissive or angry). Participants are also helped to achieve greater understanding of close and intimate relationships as well as identifying problems or barriers to effective partnership. Finally, clients are helped to develop and use supportive networks and to integrate the different skills and topics introduced throughout the programme. They will deal with topics such as lifestyle balance and the equilibrium between "wants" and "shoulds". Key aspects of the Programme are then reiterated. Concerns about coping without the support and structure offered by the Programme are explored along with clients' expectations for the future.

Limitations of RP

Brownell et al. (1986) conceded that abstinence should be the clear goal in RP for severe alcohol dependence, also that a fine line should be drawn between preparing a person for mistakes and giving permission for them to occur by inferring that they are inevitable. Saunders & Allsop (1987) suggested that relapsed research subjects would justify intentional
lapse episodes by contending that they were difficult to anticipate and overwhelming when encountered. The resulting emphasis on coping skills inherent in the Marlatt model was therefore overplayed. They stressed the need for a more balanced outlook, including the role of motivation, intention or "commitment" to abstinence, and encapsulated their argument with the question "do relapses happen to people - or do people decide to make a relapse happen?".

Saunders & Allsop (1989) restated their prior views of relapse being a process rather than an event. They stressed the need to take background motivational factors, like housing and employment, into account. They asked the following question: "Is the detailed investigation of 'relapse' and the subsequent development of individually tailored 'relapse' prevention and management strategies another exercise in teasing out 'puny effects', with the cost being that opportunities to examine the larger, more important factors of why people succeed or fail - those relating to everyday life - are ignored?"

One important criticism (Sutton, 1989; Hall & Havassy, 1986) levelled against the methodology of the situational approach concerns its lack of attention to prior history when assessing the relative contribution of lapse precipitants. Sutton (1989) redefined the "riskiness" of a situation as the "conditional probability of relapsing given exposure to that situation". This definition thus accommodates the influence of the base rate frequency of events. For example, the finding, that many lapses happen in the presence of negative emotional states, becomes less impressive when one considers that individuals in early recovery are frequently in negative emotional states (Christo & Sutton, 1994).

Another problem associated with most studies of lapse situations is that they focus on the act of drug ingestion. Where the substances are not always freely available, the decision to lapse may be temporally discrete from the act itself. This could mean that some studies may have elaborate descriptions of drug seeking behaviour, but will have missed the circumstances which initiated that behaviour (i.e., the cause of the lapse).

There has been much work to illustrate the clinical utility of raising self-efficacy among drinkers and smokers (e.g., references cited in Sutton, 1989). However, research on drug users has indicated that high self-efficacy need not be beneficial (Burling et al., 1989; Myres & Brown, 1990; Powell et al., 1993). Only Gossop et al. (1990) found that a single measure
of confidence about staying off drugs could predict six month drug use among opiate addicts. However, ambiguity of the term "confidence" made it difficult to ascertain whether it was self-efficacy or self-prediction which was actually being assessed. Sutton (1989) suggested that self-prediction (individual's expectancy that they will perform the behaviour in question), would provide a useful alternative to self-efficacy. This was because self-prediction integrated information about self-efficacy, motivation, and prior behaviour, to provide a better predictor of behaviour than any of those variables when taken on their own. In any case, it would appear that drug users might be prone to "false confidence"; thus causing them not to be able to predict which situations should be avoided (or approached with extreme caution).

Rist & Watzl (1983) gave social skills training to 145 female alcoholics in and then asked them to rate their relapse risk (similar to self-efficacy) for various hypothetical situations involving social pressure to drink. Low relapse risk ratings (or high self-efficacy) did predict better outcome. However, the authors also concluded "it is difficult to conceive of Relapse Risk ratings as valid predictions of later relapse situations. Neither do they reflect past experience with drinking situations". This finding did not agree with the view (Condiotte & Lichtenstein, 1981; Annis, 1990) that individuals could predict the exact type of situations likely to cause them to lapse. It has also been found that prior lapse reports are often different from situations causing subsequent lapses (Stout et al., 1996). These findings question the utility of tailoring coping skills to suit the expected risk situations reported by individual clients while in treatment.

The AVE hypothesis received initial empirical support from the smoking literature (Condiotte & Lichtenstein, 1981; O'Connell & Martin, 1987; Brandon et al., 1986; Curry et al., 1987). However, in a detailed review of these studies, Sutton (1989) outlined their methodological flaws and suggested that, as yet, there was little empirical evidence bearing directly on Marlatt's theory. There have since been many studies providing support for the AVE hypothesis (Collins & Lapp, 1991; Mooney et al., 1992; Schlundt et al., 1993; Stephens et al., 1994b; Grilo & Shiffman, 1994; Walton et al., 1994) and some not providing support (Birke et al., 1990; Bradley et al., 1992; Borland, 1992; Collins et al., 1994). However, many of these studies relied heavily on retrospective self-reports and may thus have been confounded by self-serving attributional biases. Relapse attributions of alcoholics have been shown to change over time (McKay et al., 1989), thus casting doubts on the validity of
retrospective lapse attributions. Only four AVE studies incorporated a prospective section using AVE reactions to an actual (not hypothetical) lapse as a predictor of subsequent addictive behaviour (Curry et al., 1987; Mooney et al., 1992; Stephens et al., 1994b; Grilo & Shiffman, 1994). Of these studies, only Mooney et al., (1992) appeared to provide strong support for the AVE as defined by Marlatt (1985). However, it is not certain that cognitive processes associated with eating behaviours (as in Mooney et al., 1992) may generalise to other addictive behaviours, e.g., the use of drugs. One difficulty in evaluation of the AVE is that the more an individual is committed to remaining abstinent, the more upset they are likely to be should they lapse. Thus any AVE effects promoting relapse are likely to be counterbalanced by heightened motivation to remain abstinent.

Conclusion

The RP model provides a useful and clear structure for therapists, and the acquisition of coping skills is likely to be beneficial for those in early recovery. Although RP is not a purely situational approach, this author is not aware of any evaluative research on "SIDs" or "lifestyle balance", and RP certainly does not have a monopoly on "setups" or guidelines for sensible living. It is possible that some practitioners may treat the RP model with a reverence it does not deserve. This may promote a rigid approach which takes continued client motivation for granted, at which point the difference between client "self-efficacy" and complacency may become blurred. In the hands of an experienced therapist, there is no doubt that RP provides a useful adjunct to other methods, but RP's situational approach should not be used in isolation.
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Appendix

Essay published in two non-peer reviewed articles:


MATERIAL REDACTED AT REQUEST OF UNIVERSITY
Discuss the contribution that clinical neuropsychology can make to the assessment of a neurological illness of your choice

The aim of any neuropsychological assessment is to facilitate an improvement in the condition of a client who has suffered some form of damage to the nervous system (Beaumont, 1996). Substance misuse can be construed either as an "illness" or a "learned behaviour" (e.g., Christo & Franey, 1995), in either case the condition generates "neurological" consequences which are reflected in cognitive functioning. Thus for the purposes of this essay, a "neurological illness" is seen as the neurological consequence(s) of the illness/behaviour of substance misuse. Although "discrete" neurological conditions like Wernicke-Korsakoff syndrome may superficially appear more specific and "valid", this subject is too broad for such constraints. In any case, the nosological distinction between Wernicke-Korsakoff syndrome and other types of alcohol related neurological damage or cognitive deficit, is not well supported by empirical findings (Bowden, 1990). Thus, the title for this essay is as follows:

Neurocognitive deficits in substance misuse: neuropsychological assessment and treatment implications

Introduction and overview

Brain scanning techniques, like computerized tomography (CT), positron emission tomography (PET), and magnetic resonance imaging (MRI), make neuropsychological assessment less necessary for the identification of brain lesions. So the emphasis of neuropsychology is moving away from charting the association between anatomical structures and behavioural functions (Beaumont, 1996). This essay will therefore concentrate on "functional" assessments, and their role in management, intervention, prognosis and
monitoring change of cognitive deficits among substance misusers. "Structural" findings will first be reviewed in order to illustrate that observed cognitive deficits are not simply due to residual psychoactive effects of drugs / alcohol.

Neurological effects of drugs

Grant’s (1987) summary of animal studies suggests that chronic administration of alcohol leads to learning deficits, loss of dendritic spines, reduction in dendritic branching, and cell death in certain vulnerable areas of the brain, including the hippocampus and thalamus; these deficits largely being a direct toxic effect of alcohol on brain cells as opposed to a secondary nutritional effect. In addition, it is suggested that chronic alcohol use in humans may raise the likelihood of brain injury by increasing capillary fragility, altering blood clotting mechanisms, reducing blood pressure and thus increasing the risk of brain hypoxia (Fals-Stewart et al., 1994). The sequelae of chronic, excessive alcohol use are regarded as diffuse cortical damage, particularly in the frontal and temporal sites (Goldman, 1990; Fals-Stewart et al., 1994). CAT scans indicate that the typical incidence of signs of neurological atrophy (e.g., diffuse cerebral and cerebellar atrophy, and ventricular enlargement) in unselected samples of alcoholics is around 50-60% (Wilkinson, 1982). The more specific Wernicke-Korsakoff complex (grey matter lesions around the third and fourth ventricles of the brain associated with thiamine deficiency) has been detected in 12.5% of alcoholics examined at postmortem (Torvic et al., 1982).

Reviews of cocaine’s neurological effects generally agree that it damages brain cells by interfering with their blood supply; more specifically by causing vasculitis, cerebral haemorrhages and ischemic strokes (O'Malley & Gawin, 1990; Fals-Stewart et al., 1994; Rosselli & Ardila, 1996). These vascular consequences are probably related to the vasoconstrictor properties of cocaine, in which both cardiac output and peripheral resistance are increased, resulting in transient hypertension. Even among long-term cocaine abusers who had no signs of strokes or transient ischemic attacks, cerebral hypoperfusion (restricted blood flow) has been particularly noted in the frontal, periventricular and / or temporal-parietal areas (Strickland et al., 1993; Strickland & Stein, 1995). Neuropsychological impairment may also result from over stimulation of dopaminergic pathways and subsequent
hypoexcitability of these areas when cocaine administration is discontinued (e.g., see Gawin & Ellinwood, 1988). Reviews indicate that amphetamines are similar to cocaine in their deleterious effects on the brain (Fals-Stewart et al., 1994; Gawin & Ellinwood, 1988).

A review by Lolin (1989) cites considerable evidence that the abuse of volatile organic solvents leads to atrophy of the cerebellum and cerebral cortex due to the neurotoxicity of constituent compounds like toluene and acetone. In contrast, neurological reviews of heavy cannabis users have generally failed to demonstrate evidence of cerebral atrophy (Fals-Stewart et al., 1994) or long-term toxic effects on the central nervous system (Pope et al., 1995). This author could find no brain scan studies of neurological damage incurred by hallucinogen or opiate users, one main reason for this may be the difficulty in finding groups of individuals who use either of these substances to the exclusion of anything else.

Substance misuse can also exert indirect effects on neurocognitive functioning, for example Alderdice et al. (1994) suggested that four outcomes should be used to explain types of alcoholic cognitive impairment. As well as the direct neurotoxic effects of alcohol, their outcomes included hepatic cerebral degeneration due to liver dysfunction, Wernicke-Korsakoff syndrome due to vitamin B1 (thiamine) deficiency, and a functional mild memory impairment due to depression or stress. HIV infection and repeated head injury are also common risk factors associated with a substance misuse lifestyle, and both have been shown to adversely affect cognitive functioning among intravenous drug users (Stern et al., 1996; and Hstead et al., 1995; respectively).

It would appear that neurological damage is a frequent consequence of most patterns of chronic drug / alcohol misuse. However, the relationship between "structural" (e.g., brain scan) assessments and neuropsychological functioning has been disappointing; most of the accountable variance has been explained by the effects of age and intelligence (Grant, 1987). Even the accepted psychological test characteristics of Wernicke-Korsakoff lesions (below average memory but average intelligence) are likely to be an artefact of selection bias among past neuropsychological studies (Bowden, 1990).

Neuropsychological effects of drugs
Fals-Stewart et al. (1994) suggest that as many as 50% of presenting alcoholics and substance misusers have measurable neurocognitive impairment, depending on the clinical sample and type of tests used. They point out that standard clinical interviews are not sensitive enough to detect the subtle neuropsychological deficits associated with mild brain injuries typical of chronic drug/alcohol use. Fals-Stewart et al. recommend the use of the Digit Symbol (measuring psychomotor coordination) and Block Design (visuo-spatial ability) subtests of the Wechsler Adult Intelligence Scale (WAIS; Wechsler, 1981), the Wisconsin Card Sorting Test (measuring flexibility of thinking, Berg, 1948); also the Tactual Performance Test (perceptual motor skill), the Category Test (abstracting ability), and the Trail Making Test (ability to maintain set) from the Halstead-Reitan Battery (Reitan & Wolfson, 1985). The above are largely tests of speed and abilities associated with frontal lobe activity. Some tests of speed are confounded by the effects of peripheral neuropathy causing a lack of dexterity among alcohol users (Wilson & Wiedmann, 1992). Verbal abilities (e.g., Vocabulary, Digit Span and Similarities subtests of the WAIS) generally remain in the normal range (Wilson & Wiedmann, 1992). Grant (1987) states that although alcoholics process single, simple perceptual elements normally, they have difficulty organising such perceptual elements into a meaningful whole. Wilson and Wiedmann (1992) point out that memory impairment is poorly demonstrated by conventional tests like the Wechsler Memory Scale (WMS; Wechsler & Stone, 1973) because immediate memory span and memory for old over learned material are typically unaffected among alcoholics; unlike the WMS subtests emphasising acquisition of new material (e.g., Logical Memory and Visual Reproduction), which are affected. Subtle memory defects of alcoholics may represent the early end of a continuum that terminates in the amnesic confabulatory syndrome commonly associated with Wernicke-Korsakoff complex (Grant, 1987; Bowden, 1990). In summary, the neuropsychological pattern characterising chronic alcohol use includes deficits in problem-solving, abstraction, visuoperceptive and visuomotor skills, pattern recognition, and memory ability. These deficits are coupled with relatively preserved older memories, immediate verbal memory, verbal reasoning, and verbal learning skills.

Fals-Stewart et al. (1994) state that neuropsychological studies of solvent abusers have uncovered profound deficits in memory as well as verbal and performance measures of intelligence. Among abstinent cocaine users, Berry et al. (1993) noted impairments in memory, visuospatial abilities and concentration. Rosselli and Ardila (1996) noted the
expected WAIS Performance deficits on Block Design and Digit Symbol subtests, also poor Logical and Visual Memory on the WMS, and inflexibility on the Wisconsin Card Sorting Test. The verbal skills of verbal fluency and naming ability were unimpaired. However unlike alcohol users there were no deficits on the Trail Making Test; and deficits were present on WAIS Verbal subtests of Digit Span, Arithmetic, and Comprehension, thus indicating poorer concentration among the cocaine users. Rosselli and Ardila (1996) found that heavy cocaine use does not produce a pattern of neuropsychological deficits different from that of polydrug users (i.e. poor attention, impaired abstraction abilities, poor short term memory, normal verbal fluency and the absence of aphasic symptoms). Fals-Stewart et al. (1994) cite a series of studies by Grant et al. in the 70s on polydrug users, they found that individuals using sedative hypnotics and opiates in combination with other drugs were more likely to have measurable cognitive deficits, no significant impairment with other individual drugs was found. Fals-Stewart et al. suggest that the use of drugs which by themselves, might not produce cerebral dysfunction, may do so additively or synergistically when combined in a polysubstance abuse pattern. By affecting multiple areas of the brain, polydrug abuse may overwhelm the brain's capacity to compensate for losses. Fals-Stewart et al. summarised that long-term abuse of alcohol or solvents results in neuropsychological deficits, as may prolonged cocaine and sedative hypnotic use. However there is at present no clear evidence for the deleterious effects of other recreational drugs on neurocognitive functioning.

Grant (1987) cited considerable evidence to indicate a slow recovery of neuropsychological abilities among alcohol users beyond their first month of abstinence. Bowden (1990) cited a study (Victor et al., 1971) of 104 cases of Korsakoff's syndrome followed for periods of up to 10 years. Almost half were classified as showing either significant or complete recovery from the amnesic syndrome. Most of the "complete" recovery group were initially judged to have severe amnesia, so recovery was not simply due to having a mild disorder at the outset. More generally, Fals-Stewart et al. (1994) summarised that verbal learning, visuospatial, and motor skills significantly recovered during the first month of abstinence. Short-term memory, motor speed and problem solving will continue to improve over subsequent months and years. However, the recovery of skills like visuospatial processing, abstract reasoning, and problem solving, can take longer and may never return to normal levels among older alcoholics.
It is recognised that neurocognitive functioning in substance misusers is affected by abstinence, anxiety, depression, poor diet, organ failure (e.g., liver), head injury (e.g., traffic accidents), and infection (e.g., HIV). However, recent studies are generally conducted on individuals at least one month abstinent who have been screened for the above confounds, and the expected cognitive deficits are still evident.

Behavioural effects

It appears that frontal lobe dysfunction is one of the most common consequences of chronic substance misuse. Kretschmer (1956) developed three syndrome groups to describe problems associated with frontal impairment: In the disinhibited group, an impulsive, emotionally labile, euphoric and sometimes jocular disposition is combined with poor judgement and distractibility; the apathetic group may have occasional angry or aggressive eruptions, but psychomotor retardation and indifference are more usual; lastly, the akinetic group show serious impairment of any spontaneous behaviour. Apathy, disinhibition and disorganisation appear to be common themes among individuals with frontal impairment (Salloway, 1994).

Parker and Crawford (1992) suggest the following qualities are characteristic of patients with frontal damage. They may be generally apathetic, indifferent and lacking both initiative and spontaneity. They may show no evidence of anxiety and demonstrate an apparent lack of concern about the effects of their condition on their future lifestyle. Behaviour is largely determined by objects and events which immediately impinge on them. As a result, their attention is easily distracted by passing events which often lead to abandonment of the task at hand, which then may not be resumed without prompting. There may be failure to organise and schedule work, with behaviour becoming markedly self-centred and withdrawn along with lack of concern for others and irresponsibility in financial and personal commitments. They may periodically fail to grasp the structure and flow of conversational interaction and sometimes perseverate by repeating an answer to a prior question even thought the topic of conversation has moved on. Lack of sensitivity in social situations is extremely common, and may include displays of emotional lability, or inappropriate outbursts of anger, poor eating habits, caustic remarks about, or abuse of individuals within earshot, getting up
and leaving small social gatherings without a word, or switching on a radio or TV loudly during a conversation. Where patients show humour it tends to be juvenile, vulgar or inappropriate. Bilateral frontal damage has also been associated with the following intellectual changes: impaired integration of behaviour over a period of time, loss of capacity to think in abstract terms, inability to plan and follow through a course of action and to take into account the probable future consequence of one's actions. The origin of the hypothesis of a connection between delinquency (e.g., drug abuse) and criminality lies in the observation of poor inhibition and impulsiveness in frontal damage patients. However, while some of the trends are suggestive, Parker and Crawford (1992) stated that the connection remains unproven.

Profound memory problems are sometimes found among alcoholics and are attributed to Korsakoff's psychosis, the psychological manifestation of Wernicke's disease. Walsh (1985) describes the condition as causing difficulty in acquiring new material, thus leading to an increasing period of anterograde amnesia. Spontaneous recall is very poor but specific questions or reminders can facilitate recollection, however the available memories decrease as questions move closer in time to the present. The temporal context of remembered events may be lost so, although the individual may remember what happened, they may not remember when it happened. Despite the above deficits, immediate memory is preserved and the individual will have no difficulties with speech, language, gesture, and well practised skills. They may have no problems with the basic activities of daily living unless in an unfamiliar environment; in which case their difficulty assimilating new information will compromise their adaptation to the novel situation. Individuals are generally unaware of their condition and are more likely to deny having been given information rather than acknowledge the material was forgotten. Partial memories may be elaborated by fabricated / falsified details (confabulations), either consciously or as a type of unconscious defense against the reality of their condition. Unlike the popular view of Korsakoff's psychosis being a discrete entity, Bowden (1990) suggests that the above memory problems represent the far end of a continuum of memory deficit which may not be independent of other types of intellectual functioning. Subtler versions of the above memory defects have been found in alcoholics reporting no obvious problems with memory, thus supporting the "continuity hypothesis" (e.g., see Walsh, 1985). Walsh suggests that the subtle memory impairment is due to "frontal" deficits causing inappropriate encoding and retrieval strategies.
Walsh (1985) summarises that impaired individuals can maintain the "appearance of intactness" in many of the situations of everyday living. The lowering of adaptive abilities often remains concealed until a novel situation is encountered (e.g., in treatment or in recovery from drug / alcohol misuse). Then, subtle deficits in learning and cognitive flexibility may be misinterpreted as ambivalence or absence of motivation to change.

Treatment implications

Many studies have illustrated a negative relationship between cognitive impairment and treatment process and outcome (e.g., Fals-Stewart & Schafer, 1992; Chastain et al., 1986). Fals-Stewart et al. (1994) summarise that cognitive impairment is related to increased programme rule violations, poorer clinician's ratings, and increased involuntary removal from treatment; poorer outcome being caused by the consequently reduced length of treatment stay. Only a few treatment programmes are devised specifically to take into account the neurocognitive impairment and emotional augmentation present in early recovery (e.g., Johnson, 1992; Gorski, 1990). Gorski's "post acute withdrawal syndrome" made his the only "relapse prevention" model to allow for cognitive impairment from chronic alcohol use.

Fals-Stewart et al. (1994) describe the following difficulties encountered by cognitively impaired drug / alcohol users in treatment: Some clinicians have difficulty "breaking through the denial" that clients maintain about the effects of substance misuse on their lives. However, confrontation of denial can lead to massive resistance in brain injured clients lacking cognitive flexibility. Direct confrontation should be avoided in favour of gradual and repeated focusing on concrete problems, presenting more complex material as recovery proceeds. Many treatment programmes rapidly require clients to learn about house rules and drug effects; the greatest demand on complex information processing thus coming during the first two weeks of treatment when neuropsychological functioning is lowest. The presentation of detailed material should be delayed for two or three weeks until neurocognitive functioning has improved. Inefficient information processing and increased distractibility may cause the impaired client to only partially comprehend the subtle nuances of interaction with others. This may lead to a distorted impression that others are hypercritical, overdemanding, or plotting against them. The situation may be exacerbated if treatment staff are unaware of the
client's condition, thus interpreting the client's behaviour as ambivalence, rebelliousness, or absence of motivation.

Problems are also encountered on leaving the protective treatment environment as individuals must resist the urge to perseverate old dysfunctional behaviour patterns. Accurate assessment and appropriate handling of problem situations requires the recognition of many subtle cues in the environment, a skill related to frontal lobe functioning (Walsh, 1985). Fals-Stewart *et al.* (1994) suggest that long-term residential programmes and halfway houses may be more useful to impaired individuals. Short term programmes are urged to make use of self-help groups for long term support. Groups like Alcoholics Anonymous (AA) or Narcotics Anonymous (NA) present complex and abstract ideas in small units within a repetitive and well defined structure. Their "steps" provide an easy to follow recovery plan for those who may have difficulty with intensive, insight oriented approaches. Fals-Stewart *et al.* suggest that clients should be encouraged to engage regularly with a single AA/NA group (as opposed to many groups) in order to reduce confusion with different formats and agendas.

Sohlberg and Mateer (1989) review cognitive rehabilitation strategies such as memory training and problem solving, these may be relevant to impaired substance misusers. Memory training teaches strategies to improve attention, reduce complex tasks into manageable "chunks", use imagery and cue words. Problem solving includes the identification of goals, brainstorming to produce options, eliciting the specific information required to make decisions, and recognising when to stay with or shift one's approach depending on success or failure (the win-stay / lose-shift paradigm). Weinstein and Shaffer (1993) list many specific interventions, successfully used with head injured patients, that are applicable to the substance misuse population: Memory is sometimes improved by "verbal mediation" (ie. quietly talking to oneself), clearly organising the material to be learned, role playing, or using notes. Therapists can aid retrieval by using multiple choice options and cues, thus avoiding open ended questions. Abstraction and attention difficulties can be helped by avoiding noisy rooms or other distractions, using short, simple and concrete sentences, avoiding the use of metaphors or complex abstract ideas. Therapists may have to be more directive in their work, might have to repeat the same information in different ways, check to make sure clients understood what was said, and periodically refocus the client's attention. When describing emotional content, psychotherapists may need to overtly explain the feeling rather than
conveying it through facial expression or vocal intonation. Sessions can be shorter or have breaks. Towards the end of a session, clients may be encouraged to write down in their own words; two salient issues that were addressed, four ways to deal with the issues before the next session, and a list of appropriate alternatives if the plan does not work. Such approaches can also usefully be shown to significant others who will be forming the social support network of the client on leaving treatment. However, the above strategies are included only for example, they will not be suitable in all cases and it is the role of the neuropsychologist to identify strategies appropriate to the clients' individual needs.

Conclusion

At an individual level, quantitative neuropsychological assessment plays an important role in identifying and addressing subtle deficits which may otherwise covertly impede substance misuse treatment. Assessment also provides a baseline from which to monitor improvement, thus allowing continued matching of treatment intervention to client ability. Qualitative neuropsychological assessment allows psychologists to identify where, when, and why, there is a breakdown in performance. Specific strategies can then be recommended to cope with the identified cognitive-behavioural deficits which may otherwise have been wrongly identified as deliberate non compliance with treatment. However, research on more general trends requires much work. The links between brain lesion sites, cognitive impairment, and test specificity, are far from exact. Existing tests cannot exclusively target specific abilities as many different skills are required even to perceive a simple test. The current literature is based on many different cognitive models tested by many different test batteries applied to many different substance misuse populations with many different types of brain lesion. Thus, when reduced to their lowest common denominators, large scale meta analyses can only reveal a few basic trends.
References


### Appendix

This essay is to be published in a peer reviewed journal with a summary as a non-peer reviewed publication (both due out in January 1998):

Christo, G. (*in press*). The role of neuropsychology in substance misuse treatment. *Journal of Substance Misuse*.

Section 2: Clinical
Placement Outlines

General adult mental health placement (20.10.94 - 5.5.95)

This took place at Springfield hospital in Tooting, working within the psychology department and the East Merton community mental health team. Supervision was provided by Susan Mumford, and many other psychologists and other health care professionals were observed at work. Experience was gained in treating a full range of general adult mental health problems within a cognitive behavioural approach. Springfield hospital also provided a good opportunity for some experience in rehabilitation and long term care.

Services for people with learning disabilities placement (18.5.95 - 17.11.95)

This took place at the community learning disability service in North Kensington, working within the psychology department and the community learning disabilities team. Supervision was provided by Richard Millington. Two other psychologists and many learning disabilities professionals were observed at work. Experience was gained in the relocation process, consultation, and direct work with a range of learning disabilities within a behavioural approach. I devised, set up and ran a series of social skills groups while at this placement, assisted by a social worker and a speech therapist.

Services for older adults placement (22.11.95 - 19.4.96)

This took place at the Charing Cross Hospital in Hammersmith, Chiswick Lodge day hospital in Chiswick, and The Limes long term care home in Southall. A broad experience was gained working with acute in patient, residential, out patient and community services. Supervision was provided by Janis Flint and Lesley Parkinson. Medical professionals were observed at work. Experience was gained in neuropsychological testing, consultation, and direct work with a range of older adult problems within a cognitive behavioural approach.
Services for children, adolescents and families placement (25.4.96 - 2.11.96)

This mostly took place at the community service based at the Chelsea and Westminster Hospital in Fulham, as well as a range of other sites. Supervision was provided by Andrew Rapley. Experience was gained in a wide range of individual and family work, largely using a behavioural approach. I assisted in the department clinical audit and production of the yearly report.

Substance misuse service specialist placement (11.10.96 - 11.8.97)

This took place at the community alcohol team based at Wolverton Gardens in Hammersmith. Supervision was provided by Frank Ryan. I ran relapse prevention groups for the stimulant clinic in Earls Court and provided psychology input to the Drugs Dependency unit in Fulham. A wide range of alcohol and drug users were seen. Most of the work was conducted was within cognitive behavioural framework. However, I also attended a series of half day workshops on Brief Psychoanalytic Psychotherapy and practised some of the techniques in my work with clients.

Neuropsychology specialist placement (8.4.97 - 11.8.97)

This took place at the Charing Cross Hospital in Hammersmith, and supervision was provided by Janis Flint. A broad experience was gained in consultation and working with out patient and community services. A range of cognitive and neurological problems were assessed using a flexible approach depending on the needs of the client.
Appendix: Book reviewed during substance misuse placement

MATERIAL REDACTED AT REQUEST OF UNIVERSITY
Placement Contracts
General Adult Mental Health Core Placement Contract

Trainee: George Christo
First year PsychD in clinical psychology
University of Surrey
Guildford
Surrey GU2 5XH

Supervisor: Susan Mumford
Psychology Department
Springfield Hospital
61 Glenburnie Road
Tooting
London SW17 7DJ


Aim of Placement
The aim of the placement is to fulfil the requirements of a core placement in the area of General Adult Mental Health (as described in the attached document).

To achieve the above aim the trainee and supervisor agree the following general requirements:

Trainee requirements:
* To be reliable, presentable and punctual.
* To provide legible notes on activities and status of clients.
* To keep up to date files on all clients.
* To undertake communications with other health care professionals as necessary.
* To provide, were necessary and with the client's permission, tape recordings of therapeutic client work.
Supervisor requirements:

* To provide opportunities for the trainee to observe client work in progress.
* To provide access to appropriate clients.
* To instruct the trainee on how to manage all relevant aspects of patient files.
* To provide supervision of at least one hour per week.
* To provide ample warning should any of the trainee's work be substandard.
* To make the trainee aware of relevant facilities and services.
* To arrange, as necessary, contact with relevant facilities, services and individuals.

Planned Experiences and Contacts

An induction will be provided and meetings with the members of the E. Merton CMHT will be arranged:

Consultant Psychiatrist
Other medics
CPNs
OTs
Social workers

Other CMHT meetings will be attended (e.g., Morden, Wimbledon) to give a broader view of CMHT operations.

In addition, meetings with the individual members of the psychology department will be organised. Department of psychology members will explain their own specialist fields.

Elderly
HIV
Deaf
Long term care
Substance misuse
Primary care

Objectives of Placement

1. To provide opportunities which would lead to the development of skills in assessment, formulation and therapy in the main problem areas. Cognitive and behavioural approaches
will be mainly explored.

2. Psychometric assessment skills will be developed so that the trainee will be able to conduct such an assessment independently.

3. An understanding of organisational issues will be achieved. E.g., the use of the care programme approach, supervision register, trusts, GP fundholding, marketing of psychology, service agreements, contracts and the development of community teams.

4. Observation and direct work will be conducted in as wide a range of hospital and community settings as is possible. E.g., primary care settings, CMHTs, day hospitals, in patient wards, out patient settings, the voluntary sector, resource centres, home visits, acute, long stay and rehabilitation settings. The trainee will be able to present professionally, have an understanding of the roles of different professionals working in the various settings, will be able to liaise with the relevant network in an appropriate manner.

**In terms of general experience, the following specific goals will be achieved:**

An understanding of the role of clinical psychologist within HIV and GU clinic.
An understanding of the role of clinical psychologist within substance misuse services.
Participant observation of an occupational therapy group.
Experience of ward rounds within services for the elderly (Jubilee and Poplar wards).
Experience of community sexual abuse services (Penfold Family Centre).
Experience of presentation of research findings (Addictions Forum).
Experience of CBT supervision workshops.
Observation of treatment for those in long term care and understanding of psychologists' interests regarding continuing care clients.
Ward rounds and observation of treatment of acute obsessive compulsive disorder (willow ward).
An understanding of the role of psychologists within the regional deaf unit.
Observation of clinical psychology practised within a primary care setting.
An understanding of the roles of assistant psychologists within the psychology department.
An understanding of the role of social workers within the CMHT and the area.
Participation in domiciliary visits with CMHT members.
Experience of regional behavioural cognitive services.

Skills
Discussion with the trainee has identified the following strengths and weaknesses.

Considerable experience: Substance misuse treatment and evaluation.
Basic counselling skills (Rogerian).
Facilitating therapy groups.

Less experience: Psychological report-writing
Family therapy
Personality disorders
Neuropsychological assessment

No experience: Depression
Anxiety
Eating disorders
Sexual abuse
Obsessional compulsive disorders
Psychotic disorders and continuing care
Health
Cognitive behaviour therapy

The trainee will have the opportunity to observe the supervisor’s work in assessment and treatment and will gain experience in assessment, formulation and treatment of many of the problem areas highlighted above. An attempt will be made for the trainee to have independent experience in the above “less” and “no experience” areas. The trainee will have approximately six to eight cases at any one time, aiming for about ten in total for intervention.

The trainee will observe work within rehabilitation and long term care, he will conduct some limited clinical work in this area. Exposure to in-patient facilities and care for the long term
mentally ill will be provided.

The trainee, having already observed an intellectual assessment, will conduct a psychometric assessment using appropriate tests of which the WAIS-R is considered the minimum. A report of the trainee’s assessment will be provided. A neuropsychological assessment can then be undertaken with an appropriate test of specific cognitive functions.

The trainee will have direct or indirect exposure to assessment or therapy with a client from a different cultural background.

The trainee will observe a psychologist working within a primary health care setting.

The trainee will participate in teaching and making presentations. The trainee will provide information and expertise to the clinical psychology department and to other professions where appropriate.

The trainee will observe or participate in specific projects which are being undertaken in the department. Exposure to organisational issues will be provided e.g., quality assurance and audit procedures. Opportunity to discuss and understand organisational issues will be created. Exposure to the operation of the care programme approach and the supervision register will be provided. Attendance at CMHTs will address some of these issues.

**Sessional Breakdown of Placement and Supervision**

There will be six sessions weekly:

Two sessions will consist of out-patient clinics at St. George’s hospital.

One session will comprise of an average of one and a half hours supervision, plus an additional one to two hours contact weekly. E.g., joint sessions, observation, meetings and informal discussions.

Three sessions will be allocated to the following:

Clinical advancement.
Report writing.
Preparing new material.
Planning clinical sessions.
Attendance at meetings.
Reading.
Visiting other facilities (hospital or community).
Meeting other psychologists and health care professionals.

Susan Mumford  George Christo
Principal Clinical Psychologist  Clinical Psychologist in training
People With Learning Disabilities Core Placement Contract

Trainee: George Christo  
First year PsychD in clinical psychology 
University of Surrey 
Guildford 
Surrey GU2 5XH

Supervisor: Richard Millington  
Riverside Mental Health 
Learning Disability Service 
20 Kingsbridge Road 
North Kensington 
London W10 6PU


Mid Placement Review: To be arranged.

Aim of Placement: The aim of the placement is to fulfil the requirements of a core placement in the area of People with learning disabilities (as described in the attached draft placement guidelines).

To achieve the above aim the trainee and supervisor agree the following general requirements:

Trainee requirements:
* To be reliable, presentable and punctual.
* To provide legible notes on activities and status of clients.
* To keep up to date files on all clients.
* To undertake communications with other health care professionals as necessary.
Supervisor requirements:
* To provide opportunities for the trainee to observe client work in progress.
* To provide access to appropriate clients.
* To instruct the trainee on how to manage all relevant aspects of client files.
* To provide supervision of at least one hour per week.
* To provide ample warning should any of the trainee's work be substandard.
* To make the trainee aware of relevant facilities and services.

The trainee and supervisor agree the following, more specific, requirements:

**Essential Supervision**

**aims**

1) observation of others work

For the trainee to observe practice of Richard Millington interviewing a variety of clients and carers. The trainee to observe Francis Harvey in consultation with staff teams.

For the trainee to observe initial assessment of one person living in mental handicap hospital.

For the trainee to observe the work of team therapists in a programme at SCOPE.

For the trainee to make joint visits to at least one family with team members.

For the trainee to observe the processes required for the resettlement of people with learning disabilities.

2) frequency of supervision

Weekly, arranged in advance (one and a half hours); the supervisor to be available for phone consultation at other times.

3) guidelines on supervision

Both the trainee and supervisor are familiar with the BPS guidelines on supervision
Essential knowledge

aims

The supervisor to provide reading on normalisation, applied behaviour analysis, and goal planning and Individual programme planning and Shared Action Planning. To discuss impact and problems with normalisation as a guiding principle for services. The supervisor to provide further reading as relevant to clinical topics.

Essential client work

aims

1) assessment and investigation

The trainee to carry out direct observation of at least two clients; to carry out functional analysis based on own observations; to carry out functional analysis based on observations carried out by carers; to learn about strengths and weaknesses of behaviour assessment tools such as HALO, ABS, FPR, WAIS-R, Leiter and BPVS. To carry out assessment of cognitive abilities using standardised psychometric tests or individualised tests.

2) intervention methods

The trainee to use behavioural and cognitive methods. To use counselling methods for emotional problems such as adjusting to loss.

The trainee to work directly with at least one client on problems which they are able to define for themselves; to work with at least one carer on problems identified by them for their client.

3) individual care planning
The trainee to be involved in contributing ideas on strengths and needs for at least one client OR the trainee to observe the interactions between client, family, carers and professionals in an IPP meeting or case conference.

The trainee to work with the supervisor on helping a residential staff team to revise their care planning system.

4) client ability levels and age range

The trainee will have direct work with 10 clients, one of which will be resident in the community and have challenging behaviour. The trainee will work with some clients who can speak and share their problems with him directly, and some clients who either use alternatives to speech or have no symbolic communication abilities. The trainee to work with some elderly people and some young adults. An attempt will be made to provide clients covering a suitable range of age, sex, level of disability, and ethnic origins, as outlined in the placement guidelines attached.

5) group work

The trainee will have major involvement in planning, assessment and implementation of a training group for social skills specific to contemporary courtship rituals and relationships with the opposite sex.

Essential indirect work

AIMS

1) The trainee to complete all stages of work with a carer

2) The trainee to participate in ongoing work with parents and relatives - getting information from them and helping them to understand and manage problems with their relative. This may be joint work with a Social Worker.
3) The trainee to observe role of psychologist in service advisory work. The trainee to discuss in supervision the service context i.e. purchaser/provider split, business planning and service agreements, activity data and quality data, and clinical audit. The trainee to become familiar with issues concerning service evaluation.

4) The trainee to participate in Kensington & Chelsea and Hammersmith & Fulham Community Teams, in regular clinical meetings, business meetings and Awayday reviews.

Work within the organisation

Aims

1) The trainee to work in a staffed house, a day centre, a mental handicap hospital, clients homes and family homes. The trainee to observe the service to people with mild learning disabilities and mental health problems in the secure unit (Henry Rollin Unit), Horton Hospital.

2) The trainee to participate in teaching to some front-line staff.

Richard Millington
Supervisor

George Christo
Trainee
Older Adult Mental Health Core Placement Contract

Trainee: George Christo  
Second year PsychD in clinical psychology  
University of Surrey  
Guildford  
Surrey GU2 5XH  
01483-259266

Supervisor: Lesley Parkinson  
Riverside Mental Health Trust  
Services for older adults  
2 Wolverton Gardens  
London W6 7DY  
0181-846-6616

Duration of placement: 22 November 1995 to 19 April 1996.

Aim of Placement
The aim of the placement is to fulfil the requirements of a core placement in the area of Services for older Adults (as described in the clinical log book).

To achieve the above aim the trainee and supervisor agree the following general requirements:

Trainee requirements:
* To be reliable, presentable and punctual.
* To provide legible notes on activities and status of clients.
* To keep up to date files on all clients.
* To undertake communications with other health care professionals as necessary.
* To provide, were necessary and with the client's permission, tape recordings of therapeutic client work.

Supervisor requirements:
* To provide opportunities for the trainee to observe client work in progress.
* To provide access to appropriate clients.
* To instruct the trainee on how to manage all relevant aspects of patient files.
* To provide supervision of at least one hour per week.
* To provide ample warning should any of the trainee's work be substandard.
* To make the trainee aware of relevant facilities and services.
* To arrange, as necessary, contact with relevant facilities, services and individuals.

Objectives of Placement

1. To provide opportunities which would lead to the development of skills in assessment, formulation and therapy in the main problem areas. Cognitive and behavioural approaches will be mainly explored.

2. Psychometric assessment skills will be developed so that the trainee will be able to conduct such assessments independently.

3. An understanding of organisational issues will be achieved.

4. Observation and direct work will be conducted in as wide a range of hospital and community settings as is possible. E.g., primary care settings, CMHTs, day hospitals, in patient wards, out patient settings, the voluntary sector, resource centres, home visits, acute, long stay and rehabilitation settings. The trainee will be able to present professionally, have an understanding of the roles of different professionals working in the various settings, will
be able to liaise with the relevant network in an appropriate manner.

**Essential requirements of placement**

The trainee has direct and indirect experience of the assessment of challenging behaviour and work in institutional settings.

The trainee must carry out assessment and treatment with clients with both functional and organic conditions.

The trainee must carry out independent treatment for a range of more standard approaches and also at least one case which is more complex and requires a more individualised formulation and treatment plan.

The trainee must demonstrate clinical skills with both individual clients, couples, families and groups as well as carers and staff.

The trainee must be able to work with families and informal carers and can plan and execute appropriate family focused interventions, particularly for those caring for a person with dementia.

The trainee must cover a broad range of treatments including behavioural, cognitive behavioural, and verbally based psychotherapeutic work as well as more indirect consultative work.

**Skills**

Discussion with the trainee has identified the following strengths and weaknesses.
Considerable experience: Substance misuse treatment and evaluation.
Basic counselling skills (Rogerian).
Facilitating and organising therapy groups (structured and unstructured)
Psychological report-writing
Depression
Anxiety
Eating disorders
Cognitive behaviour therapy

Less experience: Sexual abuse
Family therapy
Personality disorders
Neuropsychological assessment of specific impairment
Obsessional compulsive disorders
Psychotic disorders and continuing care
Elderly people with learning disabilities
Challenging behaviour

No experience: Elderly suffering physical ill health
Challenging behaviour among elderly
Strokes
Dementia
Bereavement
Depression in old age
Cognitive change with age
Adjustment and adaptation difficulties as a result of dependency and / or disability.
The relevance of gender and ethnicity for older adults
Mortality

The trainee will have the opportunity to observe psychologists’ work in assessment and treatment and will gain experience in assessment, formulation and treatment of many of the problem areas highlighted above. An attempt will be made for the trainee to have
independent experience in the above “less” and “no experience” areas.

Clients:

An appropriate mix of male and female clients will be provided.

The trainee will have approximately six to eight cases at any one time, aiming for about ten in total for intervention.

The age range will be between 60 to 85 years of age.

Conditions / complaints will cover those highlighted in the "no experience" area above.

The trainee will have direct or indirect exposure to assessment or therapy with a client from a different cultural background.

The trainee will discuss a case of older adult disability which a colleague is treating. They will also visit the service available and where possible meet the users of the services.

Planned Experiences and Contacts

An induction will be provided and meetings with the members of the Riverside services will be arranged:

Consultant Psychiatrist
Other medics
CPNs
OTs
Social workers

Other CMHT psychology department meetings will be attended to give a broader view of Riverside's operations.
In addition, meetings with the individual members of the psychology department will be organised. Department of psychology members will explain their own specialist fields.

- Elderly
- Neuropsychology
- Long term care
- Primary care

The trainee will observe work within rehabilitation and long term care, he will conduct some limited clinical work in this area. Exposure to in-patient facilities and care for the long term mentally ill will be provided.

The trainee, will conduct a psychometric assessment using appropriate tests of which the WAIS-R is considered the minimum. A report of the trainee’s assessment will be provided. A neuropsychological assessment can then be undertaken with an appropriate test of specific cognitive functions.

The trainee will observe a psychologist working within a primary health care setting.

The trainee will participate in teaching and making presentations. The trainee will provide information and expertise to the clinical psychology department and to other professions where appropriate.

The trainee will observe or participate in specific projects which are being undertaken in the department. Exposure to organisational issues will be provided e.g., quality assurance and audit procedures. Opportunity to discuss and understand organisational issues will be created.

**Sessional Breakdown of Placement and Supervision**

There will be six sessions weekly:
Two sessions will consist of direct client contact.
One session will comprise of an average of one and a half hours supervision, plus an additional one to two hours contact weekly. E.g., joint sessions, observation, meetings and informal discussions.

Three sessions will be allocated to the following:
Clinical advancement
Report writing
Preparing new material
Planning clinical sessions
Attendance at meetings
Reading
Visiting other facilities (hospital or community)
Meeting other psychologists and health care professionals

Leslie Parkinson
Principal Clinical Psychologist

George Christo
Clinical Psychologist in training
CONTRACT FOR PLACEMENT IN

CLINICAL PSYCHOLOGY

Trainee: George Christo  
Start Date: 25.04.96

End Date: 02.11.96

Supervisor: Andrew Rapley

Mid-placement review: 01.08.96

Agreed Hours: 9.00-5.00

B. 1. **Orientation/Induction: Normal Child Development**

The trainee’s prior experience with children (both professional and informal) and level of confidence in relating to children is as follows. It may be desirable for the trainee to have further contact with normal children to establish a knowledge base and appropriate confidence (e.g. time spent in a nursery, observing health visitors, observation or play with known babies or children)?

B. **Prior Experience**

Observation of friend’s children ages 4, 5, 6, and 5-17.

B. **Need:**

Further observation of ordinary children.

B. **Specific Goals**

1. Visits to and observation in Social Services Day Nursery.
2. Observation in ordinary school with older children - to be arranged with Educational Psychologist if possible.

2. **Observed experience, or joint work with supervisor**

Planned observational experience:

1. Assessment and treatment with supervisor
2. Work of other Clinical Child Psychologists at Chelsea & Westminster
3. Family Therapy at Wolverton Gardens
4. Family work in Child Psychiatry at Collingham Gardens
5. Social Services - duty desk and statutory Case Conference
6. Paediatric Wardrounds and Outpatient Clinics
7. Special Needs Services at Child Development Centre
3. **Consultant and Service planning**

The trainee would be expected to have exposure to the following:-

1. Observation of Child Psychologists' consultation to other professionals and services

2. Service planning via:-
   (i) Community Child Psychology Meetings
   (ii) Child Speciality Meetings

B. 4. **Direct Case Experience**

The types of case work the trainee will be expected to undertake in various settings are as follows:-

1. Working with individual child
2. Working with family
3. Working with parents
4. Indirect work through other professionals and agencies, (e.g consultation, liaison, programme planning).

1. Assessing a child individually
2. Psychometric Assessment of a child
3. Treatment - direct with child and family
   - indirect through other workers
4. Behavioural management programme/parent training
5. Range of problems
6. Range of ages - pre-school
   - junior
   - adolescent
7. Working in the Community (nursery, school, home and in Paediatrics (Ward, Outpatients).

5. **Regular Meetings**

1. Weekly supervision
2. Fortnightly Community Child Psychology Section Meeting
3. Monthly Child Speciality Meetings

6. **Other Experience**

Additional aims for the placement.

1. Passout of psychometric assessment of child
2. Produce a case report on placement
3. Observation and discussion of family work
4. Research/Audit project
5. Literature Search/Article Review
6. Teaching experience
7. **Expected trainee caseload:**
   1. Observation of 10 cases
   2. Direct involvement in 10 cases

8. **Expectation regarding written reports and correspondence**
   1. Every client contact recorded in notes
   2. Monthly Departmental statistics to be completed
   3. Reports and letters to be seen by supervisor before being sent.

Trainee: ___________________________  Supervisor: ___________________________
Specialist Placement in Substance Misuse Services Placement Contract

Trainee: George Christo
Third year PsychD in clinical psychology
University of Surrey
Guildford
Surrey GU2 5XH
01483-259266

Supervisor: Frank Ryan
Riverside Mental Health Trust Substance Misuse Services
5-7 Wolverton Gardens
London, W6 7DY
Tel: 0181 846 7751


Aim of Placement
The aim of the placement is to expand the trainee's current knowledge of clinical practice, and to fulfil the requirements of a specialist placement in the area of Services for Substance Misuse (as described in the clinical log book).

To achieve the above aim the trainee and supervisor agree the following general requirements:

Trainee requirements:
* To be reliable, presentable and punctual.
* To provide legible notes on activities and status of clients.
* To keep up to date files on all clients.
* To undertake communications with other health care professionals as necessary.
* To provide, if necessary and with the client's permission, tape recordings of therapeutic client work.

Supervisor requirements:
* To provide opportunities for the trainee to observe client work in progress.
* To provide access to appropriate clients.
* To instruct the trainee on how to manage all relevant aspects of patient files.
* To provide supervision of at least one hour per week.
* To provide ample warning should any of the trainee's work be substandard.
* To make the trainee aware of relevant facilities and services.
* To facilitate, if necessary, contact with relevant facilities, services and individuals.

Objectives of Placement

1. To provide opportunities which would lead to the refinement of skills in assessment, formulation and therapy in the main problem areas. Cognitive and behavioural approaches will be mainly explored.

2. The trainee will gain experience of the research culture developed between Riverside Substance Misuse Services and Charing Cross and Westminster Medical School (the Centre for Research on Drugs and Health Behaviour).

3. An understanding of Riverside Substance Misuse Services organisational issues will be achieved.

4. Observation and direct work will be conducted in as wide a range of hospital and community settings as is possible. E.g., drug dependency units, specialist clinics, in patient wards, out patient settings. The trainee will be able to present professionally, have an understanding of the roles of different professionals working in the various settings, will be able to liaise with the relevant networks in an appropriate manner.

5. The trainee will appreciate limits of competency and understand the professional boundaries of applied psychology as they relate to other professional groups working within Riverside Mental Health Trust.

General expectations of placement

The trainee has direct and indirect experience of the assessment of drug use behaviour and
work in institutional settings.

The trainee will carry out assessment and treatment with clients with "dual diagnosis" of substance misuse and other mental health conditions.

The trainee will demonstrate clinical skills with both individual clients, and groups as well as carers and staff.

The trainee will cover a broad range of treatments including behavioural, cognitive behavioural, and verbally based psychotherapeutic work as well as more indirect consultative work.

**Planned Experiences and Contacts**

An induction will be provided and meetings with the members of the Riverside Substance Misuse Services will be arranged:

- Management staff
- Consultant Psychiatrist
- Other medics
- Clinical Care Coordinators and other nursing staff
- OTs
- Researchers

The trainee will observe work within the specialist alcohol and drug services (Central assessment unit, Alcohol Team, Methadone Maintenance clinic, methadone reduction, Stimulant Clinic, and Community Drug Team), he will conduct some clinical work in this area. Exposure to care for long-term drug users will be provided.

The trainee will participate in teaching and making presentations. The trainee will provide information and expertise to the clinical psychology department and to other professions where appropriate.

The trainee will observe or participate in specific projects which are being undertaken in the
department. Exposure to organisational issues will be provided e.g., research and development strategies. Opportunity to discuss and understand organisational issues will be created.

The trainee will run groups for one or more of the specialist clinics.

Sessional Breakdown of Placement and Supervision

There will be six sessions weekly:
Two sessions will consist of direct client contact.
One session will comprise of an average of one and a half hours supervision, plus an additional one to two hours contact weekly. E.g., joint sessions, observation, meetings and informal discussions.
Three sessions will be allocated to the following:
Clinical advancement
Report writing
Research
Preparing new material
Planning clinical sessions
Attendance at meetings
Reading
Visiting other facilities (hospital or community)
Meeting other psychologists and health care professionals

Frank Ryan
Consultant Clinical Psychologist

George Christo
Clinical Psychologist in training
Specialist Placement in Neuropsychology Service, Placement Contract

Trainee: George Christo
Third year PsychD in clinical psychology
University of Surrey
Guildford
Surrey GU2 5XH
01483-259266

Supervisor: Janis Flint
Riverside Mental Health Trust Neuropsychology Service
Charing Cross Hospital
London, W6
Tel: 0181 846 1514

Duration of placement: 8 April 1997 to 11 August 1997.

Aim of Placement
The aim of the placement is to expand the trainee's current knowledge of clinical practice, and to fulfil the requirements of a specialist placement in the area of applied neuropsychology (as described in the clinical log book).

To achieve the above aim the trainee and supervisor agree the following general requirements:

Trainee requirements:
* To be reliable, presentable and punctual.
* To provide legible notes on activities and status of clients.
* To keep up to date files on all clients.
* To undertake communications with other health care professionals as necessary.

Supervisor requirements:
* To provide opportunities for the trainee to observe client work in progress.
* To provide access to appropriate clients.
* To instruct the trainee on how to manage all relevant aspects of patient files.
* To provide supervision of at least one hour per week.
* To provide ample warning should any of the trainee's work be substandard.
* To make the trainee aware of relevant facilities and services.
* To facilitate, if necessary, contact with relevant facilities, services and individuals.

Objectives of Placement

1. To provide opportunities which would lead to the refinement of skills in neuropsychological assessment and formulation. The trainee will be able to chose appropriate test combinations to suit individual clients needs.

2. Observation and direct work will be conducted in as wide a range of settings as is possible. E.g., specialist clinics, in patient wards, out patient settings. The trainee will be able to present professionally, have an understanding of the roles of different professionals working in the various settings, will be able to liaise with the relevant networks in an appropriate manner.

3. The trainee will be given experience (direct and observational) in the use of a wide range of neuropsychological tests.

4. The trainee will appreciate limits of competency and understand the professional boundaries of applied psychology as they relate to other professional groups working within Riverside Mental Health Trust.
Sessional Breakdown of Placement and Supervision

There will be two sessions weekly which will be allocated to the following:

Direct client contact.
An average of one hour of supervision, plus joint sessions, observation, meetings and informal discussions.
Clinical advancement
Report writing
Preparing new material
Planning clinical sessions
Attendance at meetings
Reading
Visiting other facilities (hospital or community)
Meeting other psychologists and health care professionals

Janis Flint
Consultant Clinical Psychologist

George Christo
Clinical Psychologist in training
Abstracts of Clinical Cases
Clinical case in general adult mental health supervised by Susan Mumford

This 31 year old woman was 14.5 stone at 5'5" tall, and appeared to be suffering from binge eating disorder. She was quite distressed by her inability to lose weight. A cognitive behavioral/situational approach was adopted with two major goals, to stop binge eating by reducing sensitivity to identified problematic situations, and then target weight loss. The situational approach was incorporated at the outset so that a firm foundation for relapse prevention could be established. A deeper perspective was provided by the additional use of the concept of Early Maladaptive Schemata. The initial treatment goal, to stop binge eating by reducing sensitivity to identified problematic situations, was achieved. However, the subsequent target of weight loss had not been achieved by the end of the placement.

Clinical case in service for people with learning disabilities supervised by Richard Millington

This 24 year old epileptic gentleman was referred by his social worker who wished to arrange access to a supported housing scheme for people with learning disability. There was some question regarding his suitability for the learning disability services because his IQ was assessed as being in the "normal" range. Thus, an assessment of his level of disability was required in order to proceed with the housing application. His attention, processing and memory problems were found to be a form of 'learning disability'. And he was assessed as fitting the criteria for the sheltered housing. A report was sent to his social worker and was very well received.

Clinical case in older adults service supervised by Lesley Parkinson and Janis Flint

This 76 year old man with a history of heavy alcohol use collapsed at his home in March 1995. He and his wife had become increasingly concerned about his poor memory for recent events and it was possible that the memory problems may have preceded the collapse. His B12 was low and early dementia was suspected. A detailed neuropsychological assessment was requested as an aid to investigations. A range of tests revealed that delayed memory recall was very poor and was indicative of organic memory impairment. The findings and some relevant recommendations were fed back to the referrers in the form of a report.
Verbal feedback was also given to the gentleman and his wife.

Clinical case in children and adolescent service Supervised by Andrew Rapley

This 11 year old boy was referred for help with tantrums, disobedience, argumentativeness and aggressive behaviour. The problem behaviours were reported to be causing great difficulties both at home and at school. The behaviours were attributed to poor limit setting and inconsistent parental approaches to discipline. The emphasis of therapy shifted away from anger-management, which had already been covered in prior work, to improved communication and understanding within the family. Thus, the boy’s mother was present during sessions and acted as a vector for the transmission of session content back to the rest of the family. Notable improvements in behaviour were achieved.

Clinical case in Substance Misuse Services Supervised by Frank Ryan

This 21 year old woman was referred by the Drug Dependency Unit on 1.1.97 for help in reducing her injecting behaviour and drug use. In the absence of injectable drugs, she was reported to persist in her injecting behaviour by injecting water. It was thought that she would benefit from addressing emotional disorders rooted in childhood trauma, before attempting a methadone reduction. She wanted to stop her "needle fixation" behaviour and wished to understand the underlying reasons for her self-harm. A motivational interviewing approach was combined with coping strategies devised and rehearsed using a standard Relapse Prevention approach. A Schema Questionnaire was also used to identify any Early Maladaptive Schemata which may otherwise covertly impede treatment. During treatment she found some alternative interests, got a job, and found a non drug using partner. By 26.3.97 she had become drug free.
Section 3: Research
Among populations of treated drug users, the majority of individuals will experience a lapse at some point in their recovery (Hunt, Barnett & Branch, 1971). Some lapses can lead to further addictive behaviour or relapse, and Shiffman (1989) suggested that the transition from lapse to relapse could be as high as 90%. However, these depressing figures are derived from clinical populations and not all drug users end up in treatment centres. It is likely that clinicians can learn a lot from non-clinical research of community populations. This review will explore reasons for using, and not using, drugs among both clinical and community populations. The purpose being to bring a deeper perspective as to why post treatment drug use is thought to occur. Clinicians working in the field would benefit from a broader picture of the factors associated with drug use and cessation. Salient emergent issues are summarised at the end of this review.

All research used here, was written in the English language and published in books or peer reviewed journals. Searches of literature published over the last 20 years were conducted on the "Psychlit" CD ROM database, other relevant references from read articles were also followed up. The subject of reasons for drug use is far too broad to permit a comprehensive review, and article inclusion was ultimately a function of the author's personal judgement of relevance. The focus of this review is on illicit drug use. However, relevant work on models and methods associated with post treatment relapse among alcoholics has been reviewed by Donovan and Chaney (1985). Also, a review by Brownell, Marlatt, Lichtenstein and Wilson (1986) has integrated knowledge of relapse from the fields of alcoholism, smoking and obesity. The smoking perspective was further covered by Sutton's (1989) review of relapse theories. Psychological perspectives associated with the study of relapse are also reviewed by Saunders & Allsop (1987).
This review begins with a description of the sociological and clinical perspectives associated with research into drug use, it will indicate that illicit drug use need not always end in "addiction". Factors associated with cessation will largely be derived from sociological studies and relapse will be studied from a clinical perspective. A diathesis-stress model of addiction will be used to explore the differences between these two research perspectives. The last section of this review introduces the various conceptual structures that have been used for the categorisation of lapse situations among clinical populations.

In order to clarify the broad areas of investigation, it is first necessary to describe the two basic models used for most research into drug use. These are best termed the "natural history" and "career" models, as outlined by Strang, Gossop and Stimson (1988). The "natural history" model is the common clinical approach, it starts with the end point (e.g., the addict in treatment) and then looks back in time to identify earlier stages, thus establishing the natural process that led to the current treatment situation. However, the "career" viewpoint is derived from a sociological perspective, it begins with the onset of the use of drugs in the community and this shows a different picture with a diversity of outcomes. From the career viewpoint, spontaneous recovery (i.e., cessation of drug use without need for a treatment intervention) could be said to happen to most of the people who used illicit drugs. As they grow older and more mature with jobs, spouses and families, the role of drugs may become less important in their lives. Winick (1962, 1964) demonstrated these effects of ageing in his "maturing out" hypothesis.

Winick (1962) explored the records of the Federal Bureau of Narcotics. He found 7234 "addicts" who were reported for drug use or possession in 1955, but who had no subsequent reports up to 1959. These individuals were presumed to have become "inactive" based on the assumption that all regular users were bound to come to the attention of legal or health authorities within a period of two years. Winick found that many of these "inactive" drug users were around 30 years old in 1960 and their mean length of using drugs was 8.6 years. He suggested that "maturing out" of drug use at around 30 may have been a function of age or length of drug use career. He further suggested that adolescent addicts may thus be resistant to treatment. Winick (1964) stated that drug users over 30 have significantly higher abstinence rates than younger drug users. He also found that the younger a person starts on drugs, the longer is their period of drug use likely to last. Thus, it would appear that age, as opposed to duration of use, was the relevant factor in cessation. He also pointed out that
cessation still occurred well within the ceiling effect of death/disability from old age. It was suggested that persons who began drug use at different ages, did it for different reasons.

Winick's maturing out effect can also be readily observed in the use of legal drugs like alcohol, few people drink as heavily in their 30's as they might have done in their late teens and 20's. "Acceptably low" or "social" levels of drug use has also been demonstrated among heroin users. Zinberg and Jacobson (1976) described five case histories illustrating controlled use of opiates or "chipping". They could not discriminate "controlled" from "compulsive" users on the basis of drug availability, family, job, education, marital or personality variables, or even on the basis of amounts consumed. However, it appeared that the "chippers" had developed and internalised social rituals around occasional use, either individually or through their using group. The authors concluded that controlled use of opiates is possible and a lot of people do it, but they are very secretive. Caught between the "straight world" and the "drug world", resented by "junkies" because they will not commit themselves to heroin use and the addict lifestyle; these "chippers" rely on social aspects for stability of using pattern. Harding et al. (1980) described a study of 10 individuals who had moved from "addiction" to stable "controlled" opiate use. All were reported as using in a "controlled" fashion for at least the last two years prior to the study. The authors described a drift in the direction of abstinence reflecting growing disenchantment with the rigors of obtaining drugs and dealing with other addicts. They identified five strategies commonly employed to limit opiate use: 1) never use alone, 2) limit money available for drugs, 3) control the dose used at one time, 4) never use with strangers, 5) never share syringes. The controlled users in this study were generally condemnatory of "drug addicts".

Relapse rates appear minimal from the "career" perspective, as illustrated by the famous "Vietnam study" (Robins, Helzer & Davis; 1975) of American soldiers. Before arrival in Vietnam, drug use was casual and only 1% of the sample had ever been addicted to drugs. In the month of September 1971, 13,760 soldiers returned to the US and 1,400 had urines testing positive for opiates on leaving Vietnam (despite being warned that they would be tested before leaving). Of those with negative urine specimens, half had tried narcotics and 20% reported opiate addiction. A sub set of all the returners were followed up eight months after return to the US, there were no differences between those having tested positive or negative on leaving Vietnam. For both groups, drug use and addiction had returned to pre Vietnam levels. There was no correlation between drug use and the nature of assignments,
danger or death of friends. Self-reports indicated drugs were used because of euphoria, army regulations, homesickness, depression, boredom and fear. The best predictors of post Vietnam use were: parental drinking or arrests, drug use before or in Vietnam, dependence on barbiturates, and being an enlistee not drafted. The authors compared their drug positive follow up sample (N=341) with 122 drug addicts one month out of treatment. Only 8% of the Vietnam drug users were in "addiction" whereas 70% of the treatment sample had relapsed to "addiction". The study illustrated that the massive relapse rates (outlined further in the next paragraph) associated with opiate use, were not an inevitable consequence of prior physical dependence to opiates. Long-term addiction was not a function of the drug, it was more likely due to personal and situational factors.

When viewed from the "natural history" perspective, relapse rates appear to be much higher for those individuals who find themselves in clinical populations of drug users. Hunt, Barnett & Branch (1971) performed a meta analysis comparing relapse rates across smokers, alcoholics and opiate addicts. Regardless of substance, the authors plotted an initial steep decline leaving only 40% abstinent by the first three months followed by a gradual levelling off to about 20% at 12 months. De Soto et al. (1989) also reported that relapse rates among alcoholics reduced with time after initial steep declines. During their four year follow-up study of Alcoholics Anonymous members, they found a 46% relapse rate among subjects with less than six months abstinence at baseline. For those who had been between six months and two years abstinent at baseline, the relapse rate dropped to 24%. It was only 8% for those between two and five years abstinent; and for the 108 subjects who were greater than five years abstinent at baseline, there were no relapses at all. However, both Hunt et al. (1971) and De Soto et al. (1989) counted even isolated drug use instances as relapses; outcomes do not appear so bad when a relapse is defined as continued regular drug use. Simpson and Marsh (1986) found that during the first six year follow-up period of the Drug Abuse Reporting Programme, only 36% of their (n=405) sample had one or more relapses to daily opioid use. Of all subjects who abstained from daily opioid use for at least 24 months, 91% were still abstinent a year later. Of those able to abstain between 3 to 23 months, only 74% were still abstinent a year later. Gossop et al. (1987), found that, despite a high rate of initial lapses after leaving treatment, many addicts subsequently became abstinent from opiates and half of their sample were abstinent at six months. Gossop et al. (1989) later found that 71% of their subjects used opiates within the first six weeks and there was a gradual increase of
abstinent subjects until 45% were abstinent and living in the community at the six month follow-up. Despite the findings of Harding et al. (1980), Gossop et al. (1989) found that occasional use of opiates after treatment was not a stable pattern, with only 10% of subjects able to use opiates in this way at six months. Wille (1978) also found that occasional use had become an enduring state for very few (2 of 128) of their treatment population. The differences between the conservative findings of Hunt et al. (1971) and the more liberal findings of Simpson & Marsh (1986) and Gossop et al. (1987) illustrated the need for consistent measures of drug use and discrimination between a lapse and a relapse. However, in all cases these "clinical sample" outcomes were far worse than the outcomes of Robins et al.'s (1975) Vietnam veterans. Waldorf and Biernacki (1979) adopted the "career" perspective to review the incidence literature on "natural" or "spontaneous" recovery from heroin addiction. They consistently found that drug users who had never sought treatment had better outcomes than those who did. The authors concluded that opiates were not so addictive that their use was necessarily followed by addiction. They also suggested that factors associated with "spontaneous" remission from drug use were an important area for research. However, problems of generalisability remain; it is possible that those drug users who never sought treatment may not have been "hard case addicts" in the first place.

Waldorf and Biernacki (1981) subsequently conducted a "grounded theory" analysis of 50 spontaneously remitted heroin users, i.e., who had stopped their drug use without the aid of treatment. Their findings cast doubt on the then commonly held view that an emotional "rock bottom" or "existential crisis" was a necessary precursor or reason for drug cessation. They identified other reasons such as reasoned rational decisions; anger with the situation; the aversive effects of prison, concerns for children, a general drifting away from the drug scene, and getting tired of drug use as one tires of a boring job or unsatisfactory relationship. Subjects reported being tired of repeated withdrawal symptoms; the constant threat of arrest; the exploitative and egocentric behaviour of other addicts; and of spending so much time in prison. These general motivational influences were often found to be coupled with triggering events such as being fired from a job resulting in loss of status and esteem. Other events included the death or loss of friends; being humiliated; or being faced with the actual or potential loss of freedom. Successful maintenance of abstinence was associated with a physical move from the drug scene and development of a new social identity or the resumption of the old pre-drug user identity (for those who started drug use later in life).
Other long term strategies involved affiliation with, colleges of further education, the helping professions, fundamentalist churches, political reform groups, or alcoholics anonymous. Christo and Franey (1995) also found that attendance of Narcotics Anonymous meetings was associated with less drug use among a sample of treated addicts in the community. Waldorf and Biernacki suggested that these actions helped the drug users to form new associations and develop new attitudes and values which took the place of those related to drug using. It was also found that some individuals did not decide to give up drugs, they merely stopped using opiates. These subjects usually substituted with alcohol which brought problems just as severe as those experienced with heroin. This latter finding was confirmed in a longitudinal study of a treatment population of opiate addicts (Wille, 1978). The transition to being drug free was found to have an intermediate stage where there was a considerable increase in the use of other drugs. However, Gossop et al. (1989) found little evidence of drug substitution among their treatment sample of 80 opiate addicts; only two subjects were reported as drinking heavily six months after treatment.

Stall and Biernacki (1986) expanded on the work of Waldorf and Biernacki (1981) by reviewing the literature associated with spontaneous Remission from the problematic use of all substances. They attempted to build an inductive model derived from a comparative analysis of the alcohol, opiate, tobacco, and food/obesity literatures. They identified several cessation factors common to all areas: health problems, social pressures and sanctions, financial problems, marriage, religiosity, positive reinforcement for quitting and change in life style. The authors also derived a category called "significant accidents", such events may or may not have objective significance but they are subjectively perceived as important in the successful cessation of drug use. They include mystic or religious experiences or a "miraculous" escape from arrest or serious injury during which the real costs of substance use become vividly clear. Another emergent category was the "management of cravings" through substitute activities such as jogging, work, or meditation. Ludwig's (1985) study of cognitive processes associated with spontaneous recovery from alcoholism supported the above findings. Initiation of abstinence was perceived as being due to "hitting a personal bottom", alcohol induced physical problems, allergy or physical aversion, lifestyle change, or spiritual-mystical experiences. To maintain abstinence, subjects cultivated negative associations with ideas of drinking.

It could be argued that cultural differences may limit the generalisability of the findings.
of Waldorf and Biernacki (1981) and Stall and Biernacki (1986), since their research was conducted on American populations. However, their findings have been largely replicated by Klingemann's (1992) grounded theory descriptive study of the coping and maintenance strategies of 30 alcohol and 30 heroin spontaneous remitters in Switzerland. He found that social support was not useful for motivation to quit or the attempt itself, but it was useful for maintenance of abstinence once established. Illicit drug users were found to get less social support than alcohol users because of the social unacceptability of illicit drug use. Remission for drug users was found to be more difficult, but more stable once established. Most illicit drug users stopped their use of other drugs after remission, they were also found to have a more internal locus of control than the general population.

It is also interesting to note that reasons for abstinence have not changed much over the years, as illustrated by Ray (1961). He suggested that the addict's social world has a language, artifacts, market, pricing system, stratification and ethics system all of its own. Commitment to these values gives the addict status and identity which is consolidated by the judgemental views of mainstream society. Judged in terms of lack of will power, being degenerate or mentally ill, drug users find it difficult to reject society's labels. They eventually abstain because of social stress and dissatisfaction with the addict identity as they find themselves being "ripped off" by their own social group. Dissatisfaction causes them to question their old identity and values, and self debate ensues about the conflict between old and new values or relationships. Ray suggested that the recovering addict must adopt non addict values and perspectives.

Clinical populations have also been used to explore spontaneous remission, although by definition, the unaided attempt at abstinence will have failed. Among a treatment population of 50 opiate addicts attending a drug dependency unit, Gossop, Battersby and Strang (1991) found that 47 had attempted to detoxify themselves without professional assistance. Their reasons for doing so were due to the negative consequences of their drug use: physical, legal, health and also social pressure from their family or a significant other. The authors recorded 212 attempts in all, 107 involved abrupt cessation with physical withdrawal symptoms "cold turkey", and 105 attempts involved a gradual reduction of drug use. Over half of the attempts failed within the first week, one quarter failed within a month, and about 16% lasted more than a month. The authors stated that this outcome was comparable to general reports of most outpatient programmes, where only 17% of attenders complete a detoxification.
Benzodiazepines were reported as being useful for sleep difficulty, whereas alcohol and cannabis use was said to make it worse. Cravings were reported as being dealt with by using distraction through physical activity. Physical withdrawal symptoms were helped by having baths or massage; temptations were combated by leaving the neighbourhood, staying in bed, or staying indoors. Failure of the detoxification attempts was generally attributed to temptation by availability, lack of support and severity of withdrawal symptoms.

It is necessary to consider whether the evidence from spontaneous remission or sociological studies is actually derived from people with a high predisposition, vulnerability or diathesis (see next paragraph) for drug dependency. Clearly Winick's is not, his sample were anyone who came to the attention of the authorities, most referrals would have been from the police and would indicate drug possession at one instant as opposed to chronic or heavy use. Likewise, Robins et al. (1975) used a general population of soldiers temporarily in an area of high drug availability. Perhaps it is better to explore "addiction" using the "natural history" viewpoint with emphasis on a clinical, as opposed to a general, population. It might be safe to assume that drug users presenting for treatment will have a greater proportion of "high predisposition" people among them. Bearing these limitations in mind, it is still possible for a clinician to extract clinically useful insight from the more "career" oriented research.

The concepts of 'drug related harm' and 'drug dependency' can be seen as operating independently of each other. But Robins et al. (1975) have demonstrated that even physiological dependence is not the only component of that which is commonly known as "addiction". If it were, then a detox would be sufficient treatment for all addicts once they have achieved the "appropriate age" as specified by Winick (1962, 1964). There are obviously more long lasting motivational factors at play in clinical populations. The best way to conceptualise these motivational factors for the purpose of this discussion is with the use of the diathesis-stress model (often used for depression e.g., Robins & Block; 1989). This model produces multivariate, interactional representations of interactions of person and event and has more recently been applied to the addictive behaviours by Gorman and Brown (1992). Environmental stressors interact with a person’s diathesis (vulnerability or predisposition) to develop addictive patterns of drug use. Gorman and Brown explored the relationship between vulnerability and life events, and identified three pathways into addiction: childhood trauma; early delinquency; or initial drug use via peers. Tarter (1988) produced a good overview of
evidence linking temperament deviations to substance abuse vulnerability, activity level, emotionality, and sociability. He suggested that genetic vulnerability was expressed behaviorally as temperament deviations, these predispose child to develop personality dispositions influenced by family environment and environmental interactions. These factors were thought to influence adjustment in school and selection of peer groups. Social adjustment and employment factors were posited to interact with drug availability which would then influence the risk of developing a drug problem. However, there is no space in this review to ascertain whether the predisposition is a learned behaviour, a personality effect, a disease, a product of parental factors, or of a robust and mutually reinforcing constellation of attitudes. We need only define events as happening inside (diathesis) or outside (stress) the individual. Thus, just as not all users of alcohol become "alcoholics", not all users of heroin become "junkies". It is likely that clinical samples are made up of individuals who have a "high diathesis" to addictive drug use. These individuals are the "tip of the iceberg" of all drug users, legal or otherwise.

In a good illustration of the above point; Jurich and Polson (1984) explored the self-reported reasons for drug use among 48 pairs of drug "users" and drug "abusers" matched for sex, marital status, residence and socioeconomic status. Both groups claimed they used drugs to escape, seek personal identity, and rebel against authority. However, "users" were more likely to use drugs for recreational purposes; while "abusers" used to cope with an external locus of control, a low self-concept, feelings of disillusionment and personal stresses. The authors emphasised that "users" and "abusers" had different motivations for drug use and must be considered as two distinct groups. However, as pointed out by Gorman and Brown (1992), it is often difficult to assign causality to such retrospective studies. Many of the professed reasons for drug "abuse" are as likely to be products of abuse rather than causes, this may indicate that reasons for initiating drug use may be different from reasons for continuing drug use despite (or because of) adverse effects.

Fulmer and Lapidus (1980) interviewed 80 treated heroin addicts and explored the differences in professed reasons for beginning, and continuing heroin use. They found that the desire to get high was the most popular motive for initiating heroin use, this was followed by curiosity and lastly, peer pressure. The authors suggested that the stereotype of the innocent youngster reluctantly experimenting with heroin because of pressure from their gang of friends, was not consistent with their results. Heroin use did not begin as an attempt to
relieve depression or anxiety, but rather as something interesting, exciting, relaxing, or enjoyable to do with friends. On the other hand, physiological addiction was reported as the most important motive for continuing heroin use. Although the pleasure of getting high declined somewhat in popularity, it was still rated as the second most popular motive for continuing heroin use. However, reasons related to coping with negative factors (feeling depressed, painful thoughts, boredom, tension, loneliness and rejection by others) were seen to rise significantly in importance in the later stages of addiction.

Among treatment populations, the trend has been towards the exploration of reasons for post treatment lapse and relapse, as opposed to looking for reasons for maintained abstinence, uninterrupted drug use or initiation of drug use. The emphasis on the systematic exploration of reasons for relapse was due to an attempt to reduce the high relapse rates experienced by most treated "addicts" as described earlier. Research on reasons for relapse originated in the alcohol field as Litman et al. (1977) developed inventories to assess situations that abstinent alcoholics perceived as being dangerous or risky in terms of precipitating a possible relapse. The authors used factor analysis to identify four high risk situations: negative mood states, settings associated with drinking, interpersonal anxiety and decreased cognitive vigilance (for lapse situations). Chaney, O'Leary & Marlatt (1978) also developed a categorisation of four types of relapse situations. They claimed that most alcoholic relapses (43%) were due to negative emotional states, 17% were due to interpersonal temptation (social pressure), with 15% each in intrapersonal temptation and frustration or anger. Marlatt (1979) subsequently analyzed the responses of 70 inpatient alcoholics and found that 38% of them reported negative affect prior to a lapse. Of relevance to these developments, were Solomon's (1980) elaborations upon his "Opponent Process" theory of acquired motivation where a pleasant hedonic tone was thought to be followed by a longer lasting unpleasant effect. Therefore chronicity and degree of dependence might be seen to influence the difference between initiating drug use for pleasure or relief. Chronic substance abusers could be expected to use drugs for the relief of unpleasant feelings as opposed to the acquisition of pleasant ones. However, Fulmer and Lapidus (1980) indicated that, even in the later stages of addiction, the pleasure of getting high was still a popular motive for continuing heroin use. When Chaney, Roszell and Cummings (1982) applied Solomon's (1980) opponent-process theory to the relapse episodes of 38 opiate addicts, they found that relapses in a hedonically positive situation were more likely to take place in the presence of friends who were using drugs. However, the authors observed that the largest single reason for relapse among their
population was due to physical withdrawal symptoms.

In developing their "Relapse Prevention" approach, Marllatt & Gordon (1980) introduced a more detailed classification scheme to retrospectively examine relapse episodes among 137 users of different substances. They produced a nested categorical structure whereby 13 lapse categories were nested into eight major categories subsumed by two major themes. The first theme was labelled "intrapersonal determinants" and comprised of "negative emotional states" (anger and frustration or other bad feelings); "positive emotional states" (drug use to feel good); "testing personal control" (to try moderate drug use); and "urges and temptations" (in the presence, or absence, of a drug related reminder / cue). The second theme was labelled "interpersonal conflict" and comprised of "interpersonal conflict" (anger and frustration or other bad feelings); "social pressure" (direct or indirect); and "positive emotional states" (enjoying oneself with others). Cummings, Gordon & Marllatt (1980) then content analyzed the lapse accounts of 327 subjects representing alcoholics, smokers, heroin addicts, compulsive gamblers and dieters. Negative affect was the most frequent relapse precipitant for all groups except for the 135 addicts, for whom social pressure was found to be the greatest cause of relapse. Gossop et al. (1989) also found that most initial lapses to opiates (63%) occurred in the company of other drug users, thus illustrating the dangers associated with social influence and maintained contact with the drug scene. Myers & Brown (1990) also reported that 90% of adolescent's risky situations were related to social pressure, with very few mentions of negative affect. Barber, Cooper & Heather (1991) found that social pressure, followed by negative emotional states, were seen by heroin users as being the most difficult situations for avoiding drug use.

Bradley et al. (1989) developed their own classification scheme to examine the lapse episodes of 58 opiate users. They identified 11 categories of lapse precipitant: cognitive factors, mood states, external influences, withdrawal symptoms, inter-personal influences, social pressure, loss of support after leaving a sheltered environment (institution), drug availability, drug related cues, craving, and priming. Also, many subjects from the Bradley et al. study claimed it was impossible to give a single most important precipitant. Thus, transcripts were content analyzed for the number of mentions given to each lapse precipitant. Most of the Bradley et al. categories were similar to those of Marllatt with the exception of
the following: priming (with a different drug) which was similar to Shiffman's (1982) observation that cigarette lapse was associated to alcohol use; removal of a sheltered environment; and cognitive factors which, although similar to Marlatt's category of "testing personal control", introduced the possibility of a premeditated lapse for other motives (e.g., boredom or curiosity to sample the effects again). Bradley et al. (1989) noted that "social pressure" was the least important factor, despite also finding that most initial lapses to opiates (63%) occurred in the company of other drug users (Gossop et al., 1989). Their discrepancy with the findings of Cummings et al. (1980) hinged on the differing definitions of 'social pressure', and illustrated the arbitrary way that apparently "valid" conceptual structures could be imposed on a collection of relapse events. Unlike Cummings et al., the definition of 'social pressure' used by Bradley et al. excluded the related concepts of availability and drug related cues; they chose to address those separately.

Heather and Stallard (1989) analysed the lapse situations of 64 drug users using a model to allow for more than one type of event to qualify as a precipitant. They found that a "main reason only" analysis seriously underestimated the importance of social pressure, substance cues (reminders of drugs) and craving. Heather, Stallard & Tebbutt (1991) then added another 29 heroin users to the 64 featured in their Heather & Stallard (1989) book chapter. Their main finding was the same as before, substance related temptations or urges were, on average, the most important self-reported reason for relapses.

Annis (1990) studied individual differences among drinkers in an attempt to predict the type of lapse situation an individual may be most likely to find problematic. Using Modal Profile Analysis, she and her colleagues identified a "high negative profile" (drinking in response to unpleasant emotions or conflict with others) and a "high positive profile" (drinking in response to positive situations and social pressure). Clients with a high negative profile were more likely to drink alone, have a higher level of alcohol dependence, and be female. These findings were comparable to Chaney, Roszell and Cummings' (1982) application of opponent-process theory, as mentioned earlier.

Most relapse research had concentrated on single situations and frequency of exposure to risky situations prior to a lapse had been ignored. However Unnithan, Gossop & Strang (1992) examined the frequencies of 14 lapse related events among 17 lapsed and 25 non
lapsed opiate addicts undergoing outpatient detoxification. They found a significant difference between the rated frequencies of interpersonal items (e.g., I saw someone else use or saw drugs and felt I had to use); but they found no differences among the intrapersonal group of items (e.g., I felt sad). Although negative emotional states are often cited as contributing to lapses, the authors pointed out that they were chronic background factors that could only precipitate a lapse when coupled with a more specific relapse precipitant. Christo and Sutton (1994) have illustrated that negative emotional states persist among drug users for many years after they have become abstinent. This supported Sutton's (1989) view of the importance of base rate frequency of events when assessing lapse precipitants. However, a major flaw in the study of Unnithan et al. was that causality should not have been inferred. Increased contact with drug users could have been caused by a resumption of regular drug use.

When looking at chronic factors, the issue of preoccupation and craving for drugs emerges as a salient cause of relapse. McAuliffe et al. (1986) examined relapse to opiate addiction following successful treatment completion in a six month follow-up of 184 subjects. Recently detoxified subjects reported more craving than longer term clients despite the fact that the latter group were more often exposed to drug related environmental cues. Frequency of craving at discharge was related to the extent of relapse at follow-up. Stimuli associated with euphoric effects, high availability and with relief of negative feeling states were most likely to cause craving. The authors used causal modelling to demonstrate that the effects on relapse of most of their variables, except physical dependence, were mediated by craving. Heather and Stallard (1989) suggested that craving was an important but underestimated factor in relapse research. They claimed that events themselves cannot lead directly to a lapse. They must be mediated by an emotional state which, in turn, leads to craving either directly or indirectly by means of social pressure or the presence of substance related cues.

Since cravings are likely to consist of intrusive thoughts, one might expect that cravings would be associated with an increased tendency to dream about that which is being craved for. Klingemann (1992) observed that cravings were triggered among his subjects on morning after dreaming about heroin. Fiss (1980) explored the relationship between craving and dreams among inpatient alcoholics and found that 80% of his "high cravers" dreamed about drinking, whereas only 20% of his "low cravers" reported having such dreams. These findings indicated that the frequency of drug related dreams may be a useful indicator of craving. Christo and Franey (in press) found that 85% of their sample of 101 treated drug
users reported having dreams about drugs within a few weeks of abstaining. Drug dream frequency was found to be positively related to self-reported craving. Higher baseline measures of drug dream frequency were prospectively related to greater subsequent drug use.

Summary

Illicit drug use appears less dangerous from the "career" perspective. Many individuals just grow out of it (Winick 1962, 1964), or use drugs in a controlled way (Zinberg & Jacobson, 1976; Harding et al., 1980), and relapse rates appear minimal (Robins, Helzer & Davis; 1975). However, when viewed from the "natural history" perspective, relapse rates appear to be much higher (Hunt, Barnett & Branch, 1971; Simpson & Marsh, 1986; Gossop et al., 1987; Gossop et al., 1989; De Soto et al., 1989), and controlled drug use appears to be less possible (Wille, 1978; Gossop et al., 1989). Because of these different research perspectives Waldorf and Biernacki (1979) found that drug users who had never sought treatment had better outcomes than those who did. Bearing in mind the greater heterogeneity of community samples, the literature on unaided cessation of drug use (Ray, 1961; Waldorf & Biernacki, 1981; Ludwig, 1985; Stall & Biernacki, 1986; Gossop, Battersby and Strang, 1991; Klingemann, 1992) provides a useful insight into the recovery process.

Clinical and community population differences are best conceptualised with the use of the diathesis-stress model (Gorman and Brown (1992), and the interactive effect between personality and environmental factors (Tarter, 1988). It is likely that clinical samples are made up of individuals who have a "high diathesis" to addictive drug use (Jurich & Polson, 1984). However, it is also possible that many of the observed differences may be product, and not a cause, of chronic addictive drug use (Fulmer and Lapidus, 1980).

Relapse research is almost totally conducted on clinical samples, it was developed on alcoholics who were predominantly found to lapse because of negative emotional states (Litman et al., 1977; Chaney, O'Leary & Marlatt, 1978; Marlatt, 1979;). Chronic substance abusers could be expected to use drugs for the relief of unpleasant feelings as opposed to the acquisition of pleasant ones (Solomon, 1980). However, social pressure was found to be the greatest cause of relapse among drug users (Cummings, Gordon & Marlatt, 1980; Gossop et
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al., 1989; Myers & Brown, 1990; Barber, Cooper & Heather, 1991; Unnithan, Gossop & Strang, 1992), this is likely to be linked to a quest for pleasure (Fulmer & Lapidus, 1980; Chaney, Roszell & Cummings, 1982). Although clinical research was supposed to be more precise than the grounded theory approaches of the sociologists, it is shown to be plagued by methodological problems like the lack of standardisation of conceptual structures. On allowing for some of the methodological limitations, substance related temptations or urges were, on average, the most important self-reported reason for relapses (Heather & Stallard, 1989; Heather & Stallard, 1989). The issue of preoccupation and craving for drugs thus emerges as another salient cause of relapse (McAuliffe et al., 1986; Heather and Stallard, 1989; Christo and Franey, in press).

Conclusions

It would thus appear that the majority of individuals who use drugs can stop their use without treatment intervention. Those individuals eventually seen by clinicians are a self-selecting population who find abstinence far more difficult to achieve, and their relapse rates are generally high. However, there are still many clinical aspects to be found in common with populations studied using the sociological perspective. It is likely that the motivational factors identified in the sociological studies (e.g., repeated withdrawal symptoms; the constant threat of arrest and prison; the exploitative and egocentric behaviour of other addicts; job loss; and loss of friends or family) still apply to clinical populations. This raises interesting questions about the "harm reduction" approaches currently employed to cushion drug users against the negative consequences of their drug addiction (e.g., by supplementing drug income with low threshold methadone maintenance). While it is necessary for treatments to attract and engage drug users, the balance must be maintained between providing drugs and causing individuals to remain addicted longer than may be necessary. As well as the risks of iatrogenic sustained addiction to opiates (methadone), the substitution of other drugs (e.g., alcohol) is also a risk that should be clinically monitored. Both clinical and sociological research has found that successful maintenance of abstinence may be facilitated by the avoidance of drug using friends or situations, and affiliation with non-drug using social support networks like Narcotics Anonymous. These actions would help drug users to form new associations and develop new attitudes and values to take the place of those related to
drug using. However, motivation for maintained abstinence should not be taken for granted. to help an addict overcome physical withdrawals and negative affect is not a sufficient intervention. Addicts also use drugs for pleasure (not just relief), therefore a good intervention should ensure continued motivation by ensuring the client does not forget the negative consequences that caused them to present in the first place. Cravings and preoccupations are driven by pleasant memories of drug effects and are a continual drain on the resolve of individuals in early recovery. Psychology clearly has a part to play in the development of treatments to address these dysfunctional cognitions. However, the purely behavioural approach of "cue exposure therapy" is clearly not good enough (Dawe et al., 1993), and the management of intrusive drug related thoughts is an area worthy of future research.
References


Narcotics. 16 (1), 1-11.


Appendix

The above essay has been accepted for publication in a peer reviewed journal:

Development and evaluation of a social skills group for people with learning disabilities

Abstract

A cognitive-behavioural "friendship skills" group for people with learning disabilities was developed using client feedback and a combined modelling, experiential learning, theory of mind, approach. The group constituted a series of eight weekly meetings attended by 15 participants. It was evaluated using baseline and follow-up scores on the Behaviour Skills Assessment (BSA) which measured knowledge of social skills commonly used in the development of friendships. The group was required to cover issues involving being understood and understanding, conversation, self-esteem, appropriate assertiveness and anger expression. More intimate themes like dating, giving compliments and keeping confidences, were less popular issues. The meetings were generally viewed as enjoyable experiences, and attendance was 81%. Younger individuals were less likely to join the group, and less likely to be available for assessments. Mean BSA scores were "significantly" elevated at follow-up. However, these gains were not related to the number of meetings attended by group members. Improvements in BSA scores were positively related to baseline BSA scores. However, flaws in the study's methodology indicate that these findings should not be taken at face value.

Introduction

Friendships are an important determinant of an individual's quality of life (Firth & Rapley, 1990). Dunne (1991) pointed out that people with learning disabilities are no different from anyone else in their great desire for steady relationships. People with mild
learning disabilities have found friendships crucial to their success in trying to pass as "normal" individuals (Edgerton & Bercovici, 1976). Siperstein (1992) stated that social competence is now more critical than ever if we are to assist people with learning disabilities in their efforts to become contributing members of society.

The awareness of, and ability to follow, society's unwritten rules of social etiquette is crucial to the formation of friendships, it is also something that many individuals take for granted. However, people with learning disabilities are often disadvantaged in the social domain because of their inherent difficulty assimilating new information, e.g., about how to behave in social situations. Also, people with learning disabilities most frequently continue to live with their families, in group homes, or some type of sheltered accommodation (Osman, 1982). Those living with their families spend most of their time with other family members (McEvoy, O'Mahoney & Tierney, 1990), and those in group homes spend most of their time with other people with learning disabilities (Richardson & Ritchie, 1989). Thus, slow social learning is compounded by the fact that people with learning disabilities are often deprived of necessary opportunities to practice social interactions with "normal" individuals.

Friendship formation may have been helped by the recent policy of community care (e.g., Blunden & Allen, 1987) and direct intervention to facilitate greater social involvement by people with learning disabilities (O'Brien, 1981; McConkey & McCormack, 1983). But McEvoy, O'Mahoney and Tierney (1990) concluded that it is misguided to assume that community living automatically provides opportunities for integration into local activities and the development of friendships. They had noted that people with learning disabilities are still predominantly engaged in passive activities and carry out many of these activities alone. Thus, there remains a need for interventions targeting the development of social skills, in order to facilitate relationships between people with learning disabilities and those around them.

Social skills training is usually based on behaviour therapy principles (e.g., Goldstein, 1981; McFall, 1982), but such mechanistic training does not necessarily generalize to other settings (e.g., Furman, et al., 1989). Therefore there is a need to provide environments, in conjunction with social skills training, that are conducive to appropriate behaviour. Opportunities should be provided for the observation of competent models, imitation of appropriate behaviour, practice, and feedback on performance. Steerneman, et al. (1996)
have shown that the addition of a cognitive dimension to social skills training has proved to be an effective approach among children with social handicaps. Steerneman, et al. developed an effective training programme which aimed to develop social insights using techniques derived from a "theory of mind" perspective (e.g., Frye & Moore, 1991). The term "theory of mind" generally refers to an individual’s ability to ascribe thoughts, feelings, ideas and intentions to others and to use this ability to anticipate the behaviour of others. The ability to recognise emotions in self and others, is seen as a basic element of theory of mind (Steerneman, et al., 1996).

The purpose of this research is to develop, and then evaluate the effectiveness of, a combined behavioural and "theory of mind" based friendships group among adult people with learning disabilities. It is thus hypothesised that individuals who attend the group meetings will demonstrate significant gains in knowledge of appropriate social behaviour; also that such gains will be positively related to the number of meetings attended.

**Methods**

**Development of the friendships group programme**

It was concluded that a good friendships / social skills training package should provide behavioural models, opportunities for practising the desired behaviours in safe but varied environments, feedback, cognitive and affective elements. A search of relevant materials revealed that very little has been developed for the needs (as defined by Frith & Rapley, 1990) of adult people with learning disabilities.

Time scale projections revealed that, once development and recruitment stages were complete, there would only be time for a series of eight group meetings before the end of this author's learning disabilities placement. Two co-facilitators were required as the group was expected to have a maximum size of 21, although prior group experiences indicated that a 50% shrinkage should be expected. Group exercises would consist largely of modelling, role play, feedback and discussion. In keeping with the "theory of mind" perspective, participants would be encouraged to explore the thoughts and feelings of various parties in modelled social interactions. As such, the group had to be a safe place to experiment, self-disclose, and make
mistakes without fear of being ridiculed or harshly judged. The group was also expected to facilitate friendships between individuals from different locations. A sense of group cohesion was to be encouraged and so all meetings were to be available to group members only.

Relevant subject matter was extracted from the following literature: Firth and Rapley (1990), Grove-Stephenson and Quilliam (1991), Haugen (1992), and Rinaldi (1992). Subject matter was roughly organised using Firth and Rapley's (1990) general categories which were broadly defined as follows:

**Opportunities For New Friendships:** Activities likely to make new friendships; importance of appearances; following "unwritten rules" of social introductions; use of social clubs/activities, churches; helping others; dating opportunities; shared values; differences between friendships and sexual relationships; social networking; confidence, embarrassment, self-image; when to take risks; how to deal with rejection.

**Developing Existing Friendships:** Importance of shared activities; standing up for friends, loyalty; self-disclosure, confidences; the limits of honesty; degrees of trust; respect; physical and psychological personal boundaries; tolerance; moderating demands, selfishness; jealousy; respecting privacy; listening; empathising; sharing news.

**Behaviours and Skills to Maintain Friendships:** How to express dissatisfaction; appropriate assertiveness; apologising; the art of compromise; giving and accepting compliments; sharing things, borrowing and lending; helping people feel important; smiling, laughter and the use of humour; dealing with teasing, criticism; positive regard; giving and accepting help; repayment of debts and favours; recognising emotions in self and others e.g., anger, depression, joy & fear; appropriate expression of emotions; self-control; managing conflicts effectively; communicating effectively; giving, receiving and asking for feedback; adjusting to changing needs.

Naturally there would not have been time to do justice to all the above areas during the eight meetings. Some feedback was required in order to guide programme development, so 24-item feedback questionnaires were included with the group promotion literature and
referral forms (appendix 1). The instruction set for the care workers was as follows: "Please read or show the attached questionnaire to the service users you would like to refer; it would be helpful if you could ensure that it gets filled in". Items were chosen to reflect specific aspects of the above subject matter. They were scored using a dichotomous "yes" / "no" response to the following question: "Would you be interested in some help with any of these things?.....". It was assumed that care workers would read the items to prospective participants who may not have been able to read for themselves. Once feedback / referral forms were returned, the programme for the series of meetings was developed and typed up so that all facilitators had a "script" to follow for each meeting (see appendix 2).

Participants

Participants were recruited with the use of circulars (appendix 1) targeting all appropriate services and group homes served by the Riverside Mental Health Trust. Inclusion criteria were as follows: "Mild to moderate learning disability, using verbal communication, able to stay in the room for an hour, able to tolerate groups of people, and able to get to the venue independently". Twenty three individuals (15 males and 8 females) were initially referred for the group, 16 of whom provided feedback on issues they would like the group to cover. Two referred males were not accepted for the group due to known incompatibility with other group members (e.g., having sexually molested them in the past). Seven of the accepted individuals did not arrive for any meetings, one disruptive female was excluded after the first meeting, and one female joined the group without prior notice. Thus, 15 participants (9 males and 6 females) took part in the series of eight group meetings.

Evaluation instruments

A search of commonly available assessment tools (e.g., Mulhall, 1989; Nihira, Leland & Lambert, 1993) revealed little that selectively focused on social skills used in the development of friendships. One such instrument, the Behaviour Skills Assessment (BSA; Haugen, 1992; see appendix 3), was eventually found. This contained 89 items phrased as questions and scored in the following way: $2 = participant$ can answer item independently;
1 = verbal prompts / assistance needed to answer item; 0 = Cannot accomplish. The questionnaire also contained the scoring categories "demonstration needed" and "physical assistance needed", but these categories were not used in this study as all items were verbally mediated and did not require physical activity. Seven items about "running away" and "good behaviour when riding in a vehicle" were also eliminated because they were not considered relevant. The remaining 82 items were read to participants and scored by the assessor, the available total score range being from 0 to 164. The items addressed such concepts as rule compliance, stealing, expressing anger, respect for others, apologizing, lying, rudeness, threatening, respecting others' privacy and belongings. This instrument was administered at baseline before the group meetings started, and at follow-up when the group had run its course.

At follow-up, participants were also asked "how much did you enjoy the groups?" Respondents were required to point to one of five "faces" (see appendix 4) coded in the following way: 1 = very sad face; 2 = moderately sad face; 3 = neutral face; 4 = moderately happy face; 5 = extremely happy face.

Procedure

The group met weekly for eight weeks every Thursday at 5.30pm to 6.30pm between 14th September to 2nd of November 1995. The three facilitators (this author, a social worker and a speech therapist) took turns facilitating, role playing, or acting as "scribe" on a flip chart, participants were also encouraged to role-play (see appendix 2). Baseline and follow-up assessments took between 30 to 90 minutes, they were all conducted by this author at appointments made outside of group time. At baseline interviews, prospective participants gave informed consent after being told what they could expect from the group. Participants were also told who else was likely to attend the group, thus ensuring compatibility with other group members. At the end of the group, participants were given a signed summary of group proceedings to act as an aide memoir (appendix 5).
Results

Data Analysis

All analyses were carried out using two-tailed tests on the SPSS for Windows version 5.0.1. statistical software package. Since only two hypotheses were being formally tested, the alpha level was retained at 5%. A single database was constructed for every item of raw data from baseline and follow-up assessments. The data were cleaned before any transformations were performed. Variable descriptives and data matrix value labels were used to identify any out of range values or missing cases. Fidelity was good and no errors were found. The BSA raw data were then converted to usable interval form by a series of transformations which produced total scores and follow-up - baseline differences. Before any hypotheses were tested, an exploratory data analysis was performed in order to identify unexpected associations and possible confounds.

Missing cases

An independent samples t-test revealed that the 15 group participants (mean age 41.5, SD = 11.7) were significantly older (t = -2.29, df = 22, p = .032 [Mann-Whitney U = 31.5, p = .031]) than the 9 non participants (mean age 31.3, SD = 8.1). Gender was unrelated to participation in the group (Fisher’s exact p = 1.0). Among the 15 participants, two females and one male were unavailable for baseline or follow-up assessment. This was because one participant joined the group without prior notice and the other two were unable to attend assessment appointments. An independent samples t-test revealed that the 12 assessed participants (mean age 44.5, SD = 10.5, range 24 - 63) were significantly older (t = -2.21, df = 13, p = .045 [Mann-Whitney U = 3.0, p = .03]) than the 3 non assessed participants (mean age 29.6, SD = 9.5). There was a 100% follow-up rate of the 12 participants assessed at baseline. It would thus appear that younger individuals are less likely to participate in the group and are also less likely to be available for assessment. Non-parametric tests were also performed due to the small sample sizes, but they made no difference to this finding. The possible confounding effects, of this selection bias towards older participants, will thus be allowed for in subsequent analyses.
Meeting attendance

Fifteen participants (9 males and 6 females) took part in the series of eight group meetings and, of the 120 potential opportunities for attendance, 81% were filled. Thus attendance was good (range = 4 to 8 meetings attended by each participant, mode = 7 meetings) and only four individuals attended five or less meetings. These data suffer from restricted variance, they are also skewed (skewness = -.63, SE skew = .58) so non-parametric analyses were used when analysing the variable of "attendance". Gender was not related to the number of meetings attended (Mann-Whitney U = 21, df = 13, p = .53) nor was age (Spearman rho = .16, df = 13, p = .57).

Feedback questionnaires

Affirmative responses to feedback questionnaire items were summed and expressed as a percentage of the 10 male respondents, 6 female respondents, and all 16 respondents (Table 1). There was no notable association between gender and responding pattern. However, in order to avoid the possibly misleading effects of multiple significance testing, no statistical tests (e.g., chi square) were used to formally test non-association.

Items were ranked in order of total affirmative responses (Table 1). Rankings indicated that the most popular themes, endorsed by about 90% of all respondents, were: being understood and understanding, conversation, self-esteem, appropriate assertiveness and anger expression. The group protocols were thus designed with these priorities in mind. The least popular themes, endorsed by about 50% of all respondents, were: dating, selfishness, giving compliments and keeping confidences.

Enjoyment of groups

Of the 12 group attenders who were assessed by the "faces" enjoyment questionnaire at
follow-up, one respondent endorsed the "neutral" face, two respondents endorsed the "moderately happy" face, and nine respondents endorsed the "very happy" face. It may thus appear that the meetings were generally viewed as enjoyable experiences. The scores (range 3 - 5) of the "faces" enjoyment ratings are ordinal data, as well as having a restricted variance. So non-parametric tests were used when analysing this variable.

Table 1. 24-item feedback questionnaire and percentage affirmative responses, items ranked in order of percentage total response.

<table>
<thead>
<tr>
<th>10 males (%)</th>
<th>6 females (%)</th>
<th>all respondents (%)</th>
</tr>
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<tbody>
<tr>
<td>Being understood by others</td>
<td>90</td>
<td>100</td>
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<tr>
<td>Understanding &amp; getting on with others</td>
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<td>Sharing, borrowing and lending things</td>
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<td>How to give compliments</td>
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<td>67</td>
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<tr>
<td>Talking about secrets with friends</td>
<td>60</td>
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Hypothesis tests

The first hypothesis states that individuals who attended group meetings will demonstrate significant gains in knowledge of appropriate social behaviour (as measured by the BSA). A paired-samples t-test revealed that the mean follow-up BSA score ($M = 102.4$, $SD = 46.0$, range 33 - 158) of the 12 assessed group attenders were significantly higher ($t = -2.9$, $df = 11$, $p = .014$) than the mean baseline score ($M = 94.6$, $SD = 39.7$, range 36 - 151). The null hypothesis was thus rejected. Participants of the group meetings did demonstrate significant gains in mean BSA scores at the end of the group.

The second hypothesis states that these gains will be positively related to the number of meetings attended. Baseline BSA scores were subtracted from follow-up BSA scores to give BSA score changes. These BSA changes were then correlated with the number of meetings attended by the 12 assessed individuals and no relationship was found (Spearman $\rho = -.15$, $df = 10$, $p = .60$). The null hypothesis could not be rejected, BSA score changes were not related to the number of meetings attended by group attenders.

Post hoc analyses

A set of three exploratory correlations examined the relationship between "BSA changes", and the variables "group enjoyment", "age" and "baseline BSA scores". There was no relationship between "BSA changes" and "group enjoyment" (Spearman $\rho = .15$, $df = 10$, $p = .64$). Neither was there a relationship between "BSA changes" and "age" (Pearson $r = .22$, $df = 10$, $p = .49$). However, "BSA changes" were related to "baseline BSA scores" (Pearson $r = .61$, $df = 10$, $p = .035$) and this relationship remained "significant" even after the effects of age were controlled for in a partial correlation ($r = .63$, $df = 9$, $p = .038$). In any case, controlling for age would not have been expected to make any difference because age had already been shown to have no relationship to "BSA changes".

It may thus appear that participants with the greatest initial knowledge of friendship skills were the ones who benefited the most from the group. However, due to the moderating effects of multiple testing in a post hoc analysis, this finding should be replicated before being
fully accepted.

Discussion

Summary of findings

Respondents required the group to cover issues involving being understood and understanding, conversation, self-esteem, appropriate assertiveness and anger expression. More intimate themes like dating, giving compliments and keeping confidences, were less popular issues. The meetings were generally viewed as enjoyable experiences, and attendance was good among those who joined the group. Younger individuals were less likely to join the group, and less likely to be available for assessments. Group members did demonstrate significant gains in knowledge of appropriate social behaviour (as measured by the BSA) at the end of the study. However, these gains were not related to the number of meetings attended. Participants demonstrating the greatest initial knowledge of friendship related social skills appeared likely to be the ones who benefitted the most from the group.

Study flaws and limitations

The instruction set for the 24-item feedback questionnaire requested care workers to "read or show the attached questionnaire to the service users". However, this study had no way of knowing whether the questionnaires were a fair representation of the service users self-reported requirements. It is possible that many care workers could have completed the questionnaires alone; thus giving an indication of what the care workers thought their clients needed, which may not necessarily have been what clients actually wanted.

The reliability and validity of the BSA and "faces" questionnaires, has not been formally assessed. However, they are face valid, were always administered by the same person, and the BSA was not used as an "absolute" measure, so the absence of inter-rater reliability or norms may not have been an issue. But in the absence of test-retest reliability studies, it is possible that the observed gains in BSA scores could simply have been due to a practice or
rater effect. The rater was not "blind" as can be seen in appendix 3, baseline BSA scores were visible to the rater while entering follow-up scores. A "matched control" group may have helped to ensure that the observed gains were "real" and were actually the product of meeting content, but controls were beyond the scope of this research project.

The "faces" questionnaire suffered from restricted variance thus increasing the likelihood of Type II errors. However, the correlation between "group enjoyment" and "BSA change" was so low that the non-significant finding was unlikely to have been a Type II error. None the less, the absolute level of self-reported group enjoyment must be brought into question. Sigelman et al. (1981) revealed that the tendency to acquiesce is a significant problem among people with learning disabilities. In addition, problems of acquiescence were found to be significantly associated with intelligence, indicating that the majority of people with severe mental retardation will provide affirmative answers irrespective of question content (Felce & Perry, 1995). Despite these problems, the 81% attendance rate might indicate that the group was at least considered worthwhile by its members, who were free to go elsewhere if they so wished.

The findings of this study are limited to a population with mild to moderate learning disability, all group members could use verbal means of communication. Generalisability is further limited by selection problems and small sample size, it was found that younger referees were less likely to join the group. But care workers did not report how many approached individuals declined to be referred at all, thus the true refusal rate remains unknown.

As can be seen, the most useful product of this study is the group protocol, as described in appendix 2. Although this study has attempted to evaluate the protocol, it can only be considered to be a preliminary investigation in need of expansion and replication.

Interpretation of findings

Since the problems of taking the findings at their face value have been made clear, the subsequent discussion will remain largely hypothetical until the findings will have been properly replicated.
If the BSA gains were "genuine" and not a rater or practice effect, then two questions remain: Firstly, why were these gains not related to the number of meetings attended? Secondly, why did they appear to be positively related to baseline BSA scores when a "ceiling effect" may have been expected to restrict further increases on initially high BSA scores?

The absence of a relationship between BSA "gains" and meetings attended may have been a case of restricted variance, as all participants attended a minimum of four meetings. It could be argued that "significant" knowledge gains may already have occurred during that time. However, the correlation between "attendance" and "BSA gains" was so low that the non-significant relationship was unlikely to have been a Type II error. The alternative explanation returns to the "artefact" view that observed "gains" were not a product of any group process but were actually a rater or practice effect.

The possible relationship between baseline BSA scores and subsequent BSA gains may be explained by the assumption that baseline BSA scores were positively related to intellectual or learning ability. Those participants with greater intellectual ability may have been more able to learn from the groups, and were also more able to express that learning when questioned. Alternatively, poor learning ability could be expected to reduce any benefits to be gained from prior practice with a questionnaire. Likewise a rater, who may not have been expecting participants to be capable of learning, would be less likely to produce a positive rater bias. In either case, it may have been useful to formally assess intellectual ability among the participants.

There are obvious problems associated with eliciting self-reports from people with learning disabilities. A substantial percentage of people with learning disabilities have limited understanding of spoken or signed language. They also have limited means of expressing themselves. Sigelman et al. (1981) found that unpredictability of responsiveness increased with severity of disability; some people with severe mental retardation, and the majority of people with profound mental retardation, were unable to respond to questions at all, regardless of truth or accuracy.

Conclusions
A cognitive-behavioural "friendship skills" group protocol was developed using client feedback and a combined modelling, experiential learning, theory of mind, approach. There is no other such product available; Rinaldi’s (1992) *Social Use of Language Programme* is slightly similar, but was designed for children, not adults. The above study would have been a good "evaluation" if used to sell the intervention to unsophisticated purchasers. However, as a piece of "scientific research" it is so flawed as to be useless. In any case, the combination of approaches used in the group render it of little theoretical interest as there is no isolated conceptually pure approach to be evaluated.

Future research must incorporate a control group matched for age, sex, social skill and intellectual ability. Further studies should also validate and standardize the BSA by supplying norms for criterion groups of appropriate individuals. The follow-up column of the BSA should not have been visible next to baseline measures, also test-retest and internal consistency reliability should be established. A better outcome measure may also have included objective observations of an increased circle of friends or social support.

It could be argued that individuals of lesser intellectual ability (e.g., moderate as opposed to mild learning disabilities), should be excluded from such groups because they may not appear to benefit from them. However, perhaps the experience may have been worthwhile for those of lesser intellect, despite the absence of "demonstrable gains". They appeared to be amused by the role-playing efforts of facilitators and peers. Attendance rates and "faces" questionnaires may suggest that the group was successful as an evening’s entertainment if nothing else. In any case the more able individuals may have found it beneficial for their self-esteem to be able to care for their less able peers. "Caring" was promoted as an important friendship quality by the "friendships" group preambles which were repeated at the beginning of each group. Regardless of whether they learned anything or not, a good time was had by all.
References


Appendix 1.

Group promotion literature and referral forms
Dear colleague

In an ideal world all people would get on well with each other and have lots of friends. However, since this is not the case, we are now taking referrals for a new course on "friendships: getting on with others". It's tough out there, we need all the help we can get, the areas covered will be as follows:

**Opportunities For New Friendships**

Activities likely to make new friendships; importance of appearances; following "unwritten rules" of social introductions; use of social clubs/activities, churches; helping others; dating opportunities; shared values; differences between friendships and sexual relationships; social networking; confidence, embarrassment, self-image; when to take risks; how to deal with rejection.

**Developing Existing Friendships**

Importance of shared activities; standing up for friends, loyalty; self-disclosure, confidences; the limits of honesty; degrees of trust; respect; physical and psychological personal boundaries; tolerance; moderating demands, selfishness; jealousy; respecting privacy; listening; empathising; sharing news.

**Behaviours and Skills to Maintain Friendships**

How to express dissatisfaction; appropriate assertiveness; apologising; the art of compromise; giving and accepting compliments; sharing things, borrowing and lending; helping people feel important; smiling, laughter and the use of humour; dealing with teasing, criticism; positive regard; giving and accepting help; repayment of debts and favours; recognising emotions in self and others eg. anger, depression, joy & fear; appropriate expression of emotions; self-control; managing conflicts effectively; communicating effectively; giving, receiving and asking for feedback; adjusting to changing needs.

Naturally we will not have time to do justice to all the above areas during the modelling and role plays. The depth that the above areas are covered will depend on the feedback that we get from you (see enclosed feedback sheets for clients).
Criteria

* Participants can be male or female, we will aim for a 50:50 mix.
* Mild to moderate learning disability.
* Will use verbal communication.
* Will be able to stay in the room for an hour.
* Will be able to tolerate groups of people.
* Ability to get to Piper House independently.

The group will meet weekly for eight weeks every Thursday at 5.30pm between 14th September to 2nd of November 1995. The closing date for referrals is August 14th 1995.

Please read or show the attached questionnaire to the service users you would like to refer; it would be helpful if you could ensure that it gets filled in. If they are interested then please send referrals to:

George Christo
Riverside Mental Health
Learning Disability Service
20 Kingsbridge Road
North Kensington
London W10 6PU

Please bring the course to the attention of anybody who may be interested and contact us for further information on 0181-746-5858 (Extension 5836).
Dear service user,

* We are planning to run a regular group on how to make friends and be liked.

* We hope you will get a lot out of it. We also expect to have fun and a few laughs as well.

* We hope to have about 5 men and 5 women in the group.

* The group will meet every Thursday between 14th September to 2nd of November 1995.

* Each group will go on for one hour. They will start at 5.30pm. They will be at Piper House.

Are you interested in coming?

Name: ........................................................................................................

Address: ....................................................................................................................
....................................................................................................................
....................................................................................................................

Tel:  ..................... D.O.B.  .................................

Comments/reason
for referral ........................................................................................................
....................................................................................................................

Is there anything we haven’t covered that you would like to learn about?
....................................................................................................................
....................................................................................................................
....................................................................................................................
....................................................................................................................
....................................................................................................................
....................................................................................................................
Would you be interested in some help with any of these things?

<table>
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<tr>
<th>Question</th>
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<td>How to look your best</td>
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<td>What to do at a social gathering</td>
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<td>Making conversation</td>
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<td>Being embarrassed about your disability</td>
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<td>Dealing with criticism or teasing</td>
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<td>Understanding strange feelings</td>
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<td>Understanding and getting on with others</td>
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<td>Being understood by others</td>
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Appendix 2.

Group protocol "scripts" for facilitators to follow at each meeting
Friendships Group Protocol

introduce selves (2 mins) George Alison Lynn

state brief aims of group (2 mins)
* talking to people, listening
* learning about ourselves
* making friends more easily
* talking in social situations

General overview of how it will work (5 mins)
* make it fun
* OK to make mistakes
* OK to ask questions
* important that friends care for one another
* learn social skills by role plays play acting
* different situations
* split down to smaller groups

Exercise 1 (10-15 mins)
* throw the ball
* say name and something interested in, or like, or done today
* if already spoken then throw the ball to someone else

Brainstorm (5 mins)
"what is important when you are talking to somebody?"
if no response, use a facilitator plant to start giving ideas
keep record of responses on flip chart Lyn

Role play 1 (2 mins)
Content: two LD clients meeting at a group for first time.
whats your name?
what area do you live in?
how did you get here?
* how much money have you got? (inappropriate question)
what do you think this groups going to be like?
do you know anybody else in the group?

Process: bad listener...
do not maintain eye contact
walk around
make inappropriate responses not related to previous conversation
Interrupts in mid conversation
picks nose or scratches self

Feedback: (10 mins)
did that seem ok?
what was wrong or right about it?
what did you think about me?
what did you think about Lynn?
should identify: eye contact
appropriacy of response
timing of the response

Role play 2: (2 mins)
Content: two LD clients meeting at a group for first time.
what's your name?
what area do you live in?
how did you get here?
what do you think this group's going to be like?
do you know anybody else in the group?

Process: good listener...
maintain eye contact
appropriate proximity
appropriate responses related to previous conversation
taking turns to speak
do not pick nose or scratches self

Feedback: (5 mins)
did that seem ok?
what was wrong or right about it?
what did you think about A?
what did you think about B?
should identify: eye contact
appropriacy of response
timing of the response
Individual Role play:

split into pairs *(5 mins)*

mixed ability *(do not mention this)*

preferably someone not known

will have to take pot luck this first time round

Content: two LD clients meeting at a group for first time.

introductory chat *(5 mins, 3 facilitators circulate)* eg...

whats your name?

what area do you live in?

how did you get here?

what do you think this groups going to be like?

do you know anybody else in the group?

Process: Good listeners

Feedback: *(10 mins)* split into three groups *(one facilitator for each)*

How did you feel doing it?

What good things did your partner do?

What did you think about your partner?

should identify: eye contact

appropriacy of response

timing of the response

Close
Friendships Group Protocol
Session 2 (21.9.95)

5:30 introduce selves (1 min)

state brief aims of group (1 min)
* talking to people, listening
* learning about ourselves
* making friends more easily
* talking in social situations

General overview of how it will work (3 mins)
* make it fun
* OK to make mistakes
* OK to ask questions
* important that friends care for one another
* learn social skills by role plays
* a lot of people felt that they needed help in understanding and being understood

Chinese whisper (10 mins)
* I am going to whisper two words to my neighbour, who will then whisper them to the next person and so on around the group
* it is important that only your neighbour can hear you so do not shout the words out
* ask last person to say what they heard
* tell group what you started with
* this illustrates why listening is important, because if you do not listen carefully then you can misunderstand people

Exercise 1 (10-15 mins)
* split into pairs (stay in circle) and introduce yourself to your partner, they will then introduce you to the group
* say name and something interested in, or like, or done today
* pass the ball, introduce your partner to the group

Brainstorm (5 mins)
"what is important when you are listening to somebody?"
if no response, use a facilitator plant to start giving ideas
keep record of responses on flip chart
taking turns, not interrupting, looking, appropriate smiling...
Role play 1 (2 mins)

Content: two LD clients meeting at a group for second time (met last week).

hi. I saw you last week. what's your name?
how has your week been?
what have you been doing since last week?
never mind about you, let me tell you about my week (inappropriate interruption)
how has your week been? (repetition)
never mind about you, let me tell you about my week (inappropriate interruption and repetition)
what do you think this group's going to be like?

Process: bad listener...
do not maintain eye contact
walk around
make inappropriate responses not related to previous conversation
Not taking turns, interrupts in mid conversation

Feedback: (10 mins)
did that seem ok?
what was wrong or right about it?
what did you think about A?
what did you think about B?
should identify: eye contact, interruption, repetition
appropriacy of response
timing of the response

Role play 2: (2 mins)

Content: two LD clients meeting at a group for second time (met last week).

hi. I saw you last week. what's your name?
how has your week been?
what have you been doing since last week?
what do you think this group's going to be like?

Process: good listener...
maintain eye contact
appropriate proximity
appropriate responses related to previous conversation
taking turns to speak
do not pick nose or scratches self
Feedback: (5 mins)

- did that seem ok?
- what was wrong or right about it?
- what did you think about A?
- what did you think about B?

should identify: eye contact

appropriacy of response

timing of the response

Individual Role play: (5 mins)

split into pairs (same partner as beginning)
mixed ability (do not mention this)
preferably someone not known

Content: two LD clients meeting at a group for second time (met last week).

* "how are you?"
* "what things have you done since the last group?"

Process: Good listeners

Feedback: (10 mins) back into one circle and pass the ball for turns

How did you feel?
What listening skills did your partner use?
What did you think about your partner?

should identify: eye contact

appropriacy of response

timing of the response, taking turns

Fin at 6:30 pm.
Friendships Group Protocol  
Session 3 (28.9.95)

introduce selves (1 min)
state brief aims of group (1 min)
* talking to people, listening
* learning about ourselves
* making friends more easily
* talking in social situations

General overview of how it will work (3 mins)
* make it fun
* OK to make mistakes
* OK to ask questions
* important that friends care for one another
* learn social skills by role plays
* different situations

Exercise 1 (10 mins)
* in the last group we discussed listening skills and the need to look at people when you talk to them
* pass the ball
* say name and something liked, or disliked about last group

Today's subject, awareness of self and others. appearances and giving compliments
Buzzword: being complimentary

Brainstorm (5 mins)
"what is a compliment? (get examples), why is it good to give compliments?"
if no response, use a facilitator plant to start giving ideas
keep record of responses on flip chart and then summarise feedback

Activity 1 (10 mins)
An important thing about relationships is to be aware of what people look like. I am now going to ask my colleague Lynn to stand in the middle of the room and display herself. I want you to look at her closely.
* I will then ask her to leave the room and we will then try to describe what she looks like.
* Scribe writes down the observations
Lynn comes back in and we read the list one by one. Lynn gives feedback.
(optional) feedback from group. Did Lynn look happy or sad when we said these things about her.

Role play 1 (2 mins)
Content: two LD clients meeting at a group. Both have new items of clothing or hairdo.
Hi, what have you been doing this week?
I went to the hairdressers
I went shopping and bought a new jumper, look
I'm not interested in your jumper, look at my hairdo
My jumper's much nicer than your hairdo
Oh no it's not, oh yes it is...... (ad nauseam)
Process: Both are fishing for compliments, both demonstrating egocentricity, neither is complimenting the other.
Feedback: (3 mins)
did that seem ok?
what was wrong or right about it?
what did you think about A?
what did you think about B?
ask A and B how they felt
should identify: selfishness
not attending to the other person's needs

We now need two volunteers to show us how it should be done. Give them instructions to pretend to have new jumper or hairdo and compliment each other.

Role play 2 (5 mins)
Content: two LD clients meeting at a group. Both have new items of clothing or hairdo.
Hi, what have you been doing this week?
I went to the hairdressers
I went shopping and bought a new jumper, look
Your jumper's really nice, do you like my hairdo
Your hairdo is great, it looks very smart
Process: Both are fishing for compliments, both get them.
Feedback: (5 mins)
did that seem ok?
what was wrong or right about it?
what did you think about A?
what did you think about B?
should identify: compliments

attending to the other person's needs

Individual Role play: (5 mins)
I would now like you to mix around the room and go up to as many people as you can and pay them a compliment by saying something nice about the way they look. Allow them to return the compliment. Let us see who can give the greatest number of compliments.

Feedback: (10 mins)
* Pass the ball
* What did you hear about yourself?
* How many compliments did you give / receive
* How did you feel when giving / receiving?
* Record responses on flip chart and summarise

Ending: (3 mins)
* Thank everyone for taking part
* Giving compliments is a good thing to do, it makes people feel good
* The more compliments you give, the more you receive
* Same time next week
introduce selves (1 min)

state brief aims of group (1 min)
* talking to people, listening
* learning about ourselves
* making friends more easily
* talking in social situations

General overview of how it will work (3 mins)
* make it fun
* OK to make mistakes
* OK to ask questions
* important that friends care for one another
* learn social skills by role plays in different situations

Exercise 1 (10 mins)
* in the last group we discussed awareness of self and others, appearances and giving compliments. Buzzword: being complimentary
* pass the ball
* say name and something liked, or disliked about last group
* pass ball again (to practice awareness of others)
* say someone else's name and remember one thing they said about group

Today's subject, saying no and asserting rights

Buzzword: you are allowed to say no

Brainstorm (5 mins)
* 1. "why do we need rules / limits?" (to safeguard the rights of others, allow everyone to be the same)
* 2. "can we identify some rules and limits?" (don't hit people, don't force someone to do something they don't want to, don't steal)
* 3. "what does assertive mean? Like when you are being confident about something, not being shy. (difference between unassertive, aggressive. How do it: relaxed open posture, maintained eye contact, adequate volume, clear statement of facts.
* if no response, use a facilitator plant to start giving ideas
* keep record of responses on flip chart and then summarise feedback
Role Play 1 (10 mins)
An important thing about relationships is to show respect for the other person and to be clear about your own wishes. My associates will model how to do this in 3 ways:

* being unassertive
* aggressive
* last of all we do assertive. Using the ball in each case.

* get Jackie to model appropriate assertiveness with ball (with Lynn)

Exercise 1 (5-10 mins)
I will ask my colleague (George) to stand in the middle of the room and we will pass the ball, he will ask you to give it to him and you will stand up and say no in an assertive way.

* How did that feel? Scribe writes down the observations

Role play 2 (2 mins)
Content: One LD client coming into other one’s room. How not to deal with persistency.

* come into your bedroom? - well I was just about to go to bed.
* come in anyway, nice bag can I have it? - well it’s my favourite and I haven’t got another
* takes it anyway, give me a kiss before I go? - well I don’t know if I want that, your breath is a bit smelly and I don’t know you that well anyway.
* I know you want it really - A goes to hug B, B cringes and pretends to throw up.

Process: B is unassertive. A is persistent, won’t take no for an answer.

Feedback: (3 mins)
did that seem ok?
what was wrong or right about it?
what did you think about A?
what did you think about B?
ask A and B how they felt
should identify: feelings of powerlessness, resentment, selfishness
not attending to the other person’s desires

Role play 3 (2 mins)
Content: One LD client coming into other one’s room. How not to deal with intrusion.

* come into your bedroom? - no get lost you snivelling pig I am going to bed. (throws something at door)
* walk off in a huff - well I’m never going to talk to her any more, she was
really rude to me for no reason at all.

Process: B is aggressive. A is caught by surprise, feels rejected and angry.
Feedback: (3 mins)

did that seem ok?
what was wrong or right about it?
what did you think about A?
what did you think about B?
ask A and B how they felt
should identify: feelings of regret, resentment, rejection

Role play 4 (2 mins)

Content: One LD client coming into other one’s room. How to deal with persistency in an appropriately assertive way.

* come into your bedroom? - well I was just about to go to bed, I would prefer you to knock in future.
* come in anyway. nice bag can I have it? - no you can’t have it, its my favourite and I haven’t got another. I said I was about to go to sleep. I would like you to go now.
* give me a kiss before I go? - no. I don’t want to do that
* why not - I just don’t want to and I don’t have to give you any explanations. I have the right to say no, I have the right to some privacy and respect.

Process: B is appropriately assertive. A is persistent, but does take no for an answer.
Feedback: (3 mins)

did that seem ok?
what was wrong or right about it?
what did you think about A?
what did you think about B?
ask A and B how they felt
should identify: feelings of minor irritation but satisfaction that you stood up for yourself

Individual Role play: (5 mins)

I would now like you to split in pairs. one person will be seated and the other tries to take their seat, they assertively say no. Remember to be firm, speak clearly and look the other person in the eye.
Feedback: (10 mins)

* Pass the ball
* What did you say?
* How did you feel when saying no / being refused the seat?
* Record responses on flip chart and summarise

Ending: (3 mins)
* Thank everyone for taking part
* Remember, you have the right to say 'no'
* It is best to be firm, but not rude
* Same time next week
introduce selves (1 min)
state brief aims of group (1 min)
* talking to people, listening
* learning about ourselves
* making friends more easily
* talking in social situations

General overview of how it will work (3 mins)
* make it fun
* OK to make mistakes
* OK to ask questions
* important that friends care for one another
* learn social skills by role plays in different situations

Exercise 1 (10 mins)
* in the last group we discussed saying no and asserting rights
  Buzzword: you are allowed to say no
* pass the ball
* say name and something liked, or disliked about last group

Today's subject, giving and receiving criticism, problem solving
Buzzword: how to say something you don't like about someone

Brainstorm 1 (5 mins)
* 1. "what does criticism mean?" (to point out an undesirable characteristic)
* 2. "what's good about being criticised?" (better insight of how others see you, opportunity to improve)
* 3. "what's bad about being criticised?" (makes you feel bad about yourself)
* if no response, use a facilitator plant to start giving ideas
* keep record of responses on flip chart and then summarise feedback
* would anyone like to share an example of some teasing that happened to them?

Role Plays 1 & 2 (10 mins)
An important thing about criticising is to show respect for the other person. My associates will model how not to do this:
Role play 1  
(2 mins)
 Content: One LD client criticising other about something they cannot change. How not to criticize.
* Hello, you look nice today - yes I do don't I. I don't like your glasses, they make you look silly.
* well I can't help it. I can't see without them. I have to wear them.
 Quick Feedback: (3 mins)
did that seem ok?
what did you think about A?
what did you think about B?
Ask A and B how they felt
should identify: feelings of low self esteem, inadequacy

Role play 2  
(2 mins)
 Content: Facilitator criticising LD client in front of other people. How not to criticize.
* Hello, I met you last week - yes that's right good to see you.
* (facilitator interrupts) oh there you are Lynn, you're late again. You should try harder and get here on time, you just don't seem to be making any effort - I'm sorry.
* Ha Ha you've just got in trouble
 Quick Feedback: (3 mins)
did that seem ok?
what did you think about A?
what did you think about B?
Ask A and B how they felt
should identify: feelings of embarrassment

Brainstorm 2  
(5 mins)
* 4. "what are good ways of criticising?" Speak to person on their own, be clear about what you are saying, don't criticise something the person cannot change, say why you are doing it. Be polite e.g., relaxed open posture, maintained eye contact, adequate volume, clear statement of facts.
I know you're trying to be helpful, but...
There's something I want to talk to you about...
I know it's difficult for you but...
5. "what are bad ways of criticising (teasing)?" Criticising in front of lots of other people so that the person will feel embarrassed; criticising things the person can't change and probably knows already (e.g., height, weight colour of hair etc.), if you keep going on about it.

* if no response, use a facilitator plant to start giving ideas
* keep record of responses on flip chart and then summarise feedback

Group Exercise 1  (10 mins)

An important thing about criticising is to show respect for the other person, we would like you to practice doing this. George will go around the group sporting a new and socially unacceptable hairdo. We would like each of you to criticise this, first in a bad way, and then in a good way. Here are some examples of how it could be done (start with facilitator).

* George, there’s something I want to talk to you about...
* I hope you don’t mind but...
* I do care about you a lot, but I think you should know...
* Please forgive me for saying this but...
* There may be a better way that you could do this...
* Have you considered...
* Remember to be caring, speak clearly and look the other person in the eye.

(Alison make note of the odd useful phrase on the flip chart and summarise)

Feedback:  (1 min)

did that seem ok?
what were the best / worst comments?

Group problem solving:  (5 mins)

Here is a pretend situation that we are going to use as an example to practice solving problems between friends:

* Your best friend always arrives half an hour late. Whenever you arrange to go out together, he’s always half an hour late. You are left hanging around waiting for him and it’s beginning to get on your nerves!

Talk through possible outcomes:

1. Tell him if he’s late, you won’t go out with him any more.
   This might start up an unnecessary argument, the friend may not realize he is always late, but if you threaten that you won’t go out with him again, he may get annoyed and refuse to go out with you.

2. Don’t say anything.
   You will have to put up with his lateness and find another way to deal with your irritation.
Role play 3 (3 mins)
I am now going to ask two people to act out how to deal with a friend who is being late all the time (facilitator picks two people who are judged to be adequate to the task).

Quick Feedback: (2 mins)
- did that seem ok?
- what did you think about A?
- what did you think about B?
- Ask A and B how they felt

Ending: (2 mins)
- Thank everyone for taking part
- Remember, if you feel you need to criticize someone, do it nicely so as not to hurt their feelings
- It is best to be caring, and not rude
- Same time next week
Friendships Group Protocol
Session 6 (19.10.95)

introduce selves (1 min)
state brief aims of group (1 min)
* talking to people, listening
* learning about ourselves
* making friends more easily
* talking in social situations

General overview of how it will work (3 mins)
* make it fun
* OK to make mistakes
* OK to ask questions
* important that friends care for one another
* learn social skills by role plays in different situations

Exercise 1 (10 mins)
* in the last group we discussed giving and receiving criticism, problem solving
  Buzzword: how to say something you don’t like about someone
* pass the ball
* say name and something liked, or disliked about last group

Today’s subject, borrowing, lending, sharing and the art of compromise.
Buzzword: sharing and caring.

Brainstorm 1 (2 mins)
* 1. "why is it good to share?" (people will like you more if you do)
* keep record of responses on flip chart and then summarise feedback

Role Plays 1 & 2 (10 mins)
Sharing things is a good way to considerate and to show respect for the other person. My associates will model how not to do this:

Role play 1 (2 mins)
Content: One LD client stuffing face with smarties, other person looking on.
* Hello, those look good - yes they are aren’t they
Quick Feedback: (3 mins)
did that seem ok?
what did you think about A?
what did you think about B?
Ask A and B how they felt
should identify: feelings of disappointment

Role play 2 (2 mins)
Content: One LD client stuffing face with smarties, other person looking on.
* Hello, those look good - yes they aren’t they. Do you want some? -
thank you that’s very kind. You can have some of mine when I get some.
Process: A hints would like some of B’s sweets. B takes hint, offers some to A.
Quick Feedback: (3 mins)
did that seem ok?
what did you think about A?
what did you think about B?
Ask A and B how they felt
should identify: feelings of disappointment

Brainstorm 2 (5 mins)
* “what is the difference between borrowing and lending?”
* “what’s good about borrowing and lending?”
* “what’s bad about borrowing and lending?”
* “would anyone like to share an example of a time they borrowed or lent anything?”
* if no response, use a facilitator plant to start giving ideas
* keep record of responses on flip chart and then summarise feedback

Role Plays 3 & 4 (10 mins)
When asking to borrow something it is always good to say “please” and also to specify a time
when you will return the borrowed item. My associates will model how not to do this:

Role play 3 (2 mins)
Content: One LD client writing on a pad. Other person comes to borrow their pen,
does not return it.
* Hello, can I borrow your pen - well actually I was in the middle of using it
* well I will take it anyway. Bye bye
Process: A wants to borrow B’s pen. B does not want to lend it. A takes it anyway,
I93

does not say please, does not specify a time when he will return it. B looks
upset and exasperated.

Quick Feedback: (3 mins)
did that seem ok?
what did you think about A?
what did you think about B?
Ask A and B how they felt
should identify: feelings of irritation

Role play 4 (2 mins)
Content: One LD client writing on a pad, other person comes to borrow their pen,
does not return it.

* Hello, can I borrow your pen please - well actually I was in the middle of
using it, but you can have it as soon as I am finished: there I am done, you
can have it now.

* thanks very much, I shall return it as soon as I have written out my
shopping list; bye bye.

Process: A wants to borrow B’s pen. B does not want to lend it straight away. A
waits patiently, does say please, does specify a time when he will return it.
B feels safe in the knowledge that she will get her pen back.

Quick Feedback: (3 mins)
did that seem ok? who was borrowing who was lending?
what did you think about A?
what did you think about B?
Ask A and B how they felt
should identify: feelings of cooperation

Role play 5 (2 mins)
* Can we have two volunteers to show us the correct way to borrow an item?
* Did that seem OK?

Brainstorm 3 (5 mins)
* "what is a compromise?" (giving in a little bit)
* "why should we compromise at all?" (helps you get on with people)
* if no response, use a facilitator plant to start giving ideas
* keep record of responses on flip chart and then summarise feedback

Role Plays 5 & 6 (10 mins)
Let us now take a look at what happens when people are not prepared to make a compromise:
Role play 5  
(2 mins)

Content: Two LD clients find last drink in the fridge, both of them want it all. neither is prepared to compromise.

* Hello, I'm really thirsty - so am I
* let's get a drink - oh, there's only one left
* that's a shame, it means you can't have one because I'm having it
* oh no you're not, oh yes I am......... (ad nauseam)

Process: They both want it, no compromise, argument ensues. Both are upset and exasperated.

Quick Feedback:  
(3 mins)

did that seem ok?
what did you think about A?
what did you think about B?
Ask A and B how they felt
should identify: feelings of frustration

Role play 6  
(2 mins)

Content: Two LD clients find last drink in the fridge, both of them want it all, but they are prepared to compromise.

* Hello, I'm really thirsty - so am I
* let's get a drink - oh, there's only one left
* that's a shame, I really wanted a whole bottle, but seeing as it's the last one left, why don't we share it
* OK that sounds like a good idea, let's do that then

Process: They both want it, but do compromise, both are satisfied, justice is seen to be done

Quick Feedback:  
(3 mins)

did that seem ok?
what did you think about A?
what did you think about B?
Ask A and B how they felt
should identify: feelings of frustration ultimately resolved

Group Exercise on sharing  
(10 mins)

Every second person will have a biscuit, we would like you to break it in half and share it with your neighbour who does not have one. George will then go around again and this time will give a different biscuit to those who did not get one the first time around. Then it is their turn to share it.
Quick Feedback: (2 mins)

did that seem ok?

Ending: (2 mins)

* Thank everyone for taking part
* Remember, if you want to borrow something, always say when you will give it back.

Friends often share things and make compromises over their differences.
* It is best to be caring, and sharing, you will make friends more easily that way
* Same time next week
introduce selves (1 min)

state brief aims of group (1 min)
* talking to people, listening
* learning about ourselves
* making friends more easily
* talking in social situations

General overview of how it will work (1 min)
* make it fun
* OK to make mistakes
* OK to ask questions
* important that friends care for one another
* learn social skills by role plays in different situations

Exercise 1 (10 mins)
* in the last group we discussed borrowing, lending, sharing and the art of compromise.

Buzzword: sharing and caring.

* Briefly describe overview of what did last week
* pass the ball
* say name and something liked, or disliked about last group

Today’s subject, understanding yourself and others’ feelings and opinions.

Buzzword: friends are understanding

Brainstorm 1 (10 mins)
* Pass ball (probe the more able individuals further)
* What "feeling" words do you know? Tell us one. (happy: pleased delighted ecstatic. 
sad: sorry, tearful, devastated. angry: miffed, cross, furious. frightened: nervous 
made me jump, horrified).
* Can you think of a time when you felt that way?
* What did you say and how did you say it? (musical, brighter, softer, more highs and 
lows; quiet, slow, low, sound like going to cry: loud, tight, faster)
* keep record of responses on flip chart and then summarise feedback
Role Plays 1, 2 & 3 (10 mins)

How can we tell what other people are feeling? What things do we look for when identifying emotion in others?

We will now model the same dialogue three times. Each time we will convey a different feeling, see if you can guess what it is:

Content:

* 'Hello, what's on the telly tonight?'
* 'Oh, there are neighbours, star trek and the bill.'

Process: A and B do the dialogue in (1) happy, (2) sad, and then (3) angry way.

Quick feedback each time:

what were they feeling this time?
how did you know they were happy, sad, angry?
how were they moving? what was their tone of voice?

Brainstorm 2 (5 mins)

* 'why do we need to know how people feel?'
* keep record of responses on flip chart and then summarise feedback (e.g., you can find out more about them, you can try and make them feel better, it helps you understand things they do, they may want to be left alone, you can ask if there is anything you can do.)

Role Plays 3 & 4 (10 mins)

What happens when you don’t pay attention to how people feel? My associates will model this:

Role play 3 (2 mins)

Content: Two LD clients meet in the street, one is on her way to the shops, one is on her way to the dentist.

* 'Hello, what a beautiful day it is today - it's OK I suppose'
* 'I’m going to go down to the shops to have a look at the clothes and then have a cup of coffee - That’s nice for you'
* 'Yes it is isn’t it, well I had better be off then, bye bye - bye.'

Process: A is happy, B is miserable. A pays no attention to B’s mood state and does not enquire as to it’s cause. B is left unsupported.

Quick Feedback: (3 mins)

did that seem ok?
what did you think about A?
what did you think about B?
Ask A and B how they felt
should identify: feelings of isolation, loneliness, abandonment
Role play 4 (2 mins)

Content: Two LD clients meet in the street, one is on her way to the shops, one is on her way to the dentist.

* Hello, what a beautiful day it is today - it's OK I suppose
* What's the matter? You don't look very happy today - no, my tooth hurts and I am on my way to the dentist. I am scared of dentists but I have to go on my own because there was no one around to go with me. And now I don't know what bus to take either.
* Oh, I'm sorry to hear that, what dentist are you with? - Mr Jones in the high street

* Well I was going that way myself why don't you come with me? I know which bus to take - thanks, that would be really helpful
* I was going to have a look at the clothes shops and then have a cup of coffee; but I can wait with you in the waiting room - oh would you?
* And then we could go for a coffee afterwards - oh yes, that's a great idea, I'm feeling much happier now

Process: A is happy. B is miserable. A enquires as to B's mood state and adapts his own feelings in an empathic manner. B feels supported and begins to cheer up.

Quick Feedback: (3 mins)

did that seem ok?
what did you think about A?
what did you think about B?
Ask A and B how they felt
should identify: feelings of empathy, caring, feeling cared about

Group Exercise: Modelling statues (5 mins)

My two associates are now going to play a game, one will pretend to be a "shop dummy", the other will move them into a position that depicts a particular feeling, can you guess what feeling it is?
* Can we have two volunteers who would like to try the same thing?

Brainstorm 3 (5 mins)

So let us now take a brief look at opinions and their importance in friendships.
* "why should you care what anyone else thinks?" (it helps you find out about other people; you can find out if you think the same; it's interesting; it helps you to see things in a way you haven't thought of)
* if no response, use a facilitator plant to start giving ideas
* keep record of responses on flip chart and then summarise feedback
Group exercise 2 (10 mins)
I would like you to split into pairs and find out what are your partner's opinions about smoking.
* Do they smoke?
* Do they mind people smoking in front of them?
* Should it be banned completely?
* Or should people be free to do what they like with cigarettes?
* Pass the ball
* Each person will then tell the group what they found out about their partner's opinions on smoking

Ending: (2 mins)
* Thank everyone for taking part
* Remember, friends are sensitive to each other's feelings and opinions.
* It is best to be aware of your own feelings and those of others, you will make friends more easily that way
* It is our last group next week and we will be looking at places to go with friends and where to meet new friends. In the meantime, please think about any good places that you have been to so that you can share them with the rest of us next week.
Friendships Group Protocol
Session 8 (2.11.95)

introduce selves (1 min)
state brief aims of group (1 min)
  * talking to people, listening
  * learning about ourselves
  * making friends more easily
  * talking in social situations

General overview of how it will work (1 min)
  * make it fun
  * OK to make mistakes
  * OK to ask questions
  * important that friends care for one another

Exercise 1 (10 mins)
  * in the last group we discussed, understanding yourself and others' feelings and opinions.
    Buzzword: friends are understanding
  * Briefly describe overview of what did last week
  * pass the ball
  * say name and something liked, or disliked about last group

Today's subject, things to do and places to go with friends, discovering common interests
Buzzword: friends like doing things together

Presentation 1
Robert E. and Genie Jean will make a presentation of things to do and places to go
  * Questions
  * Answers

Brainstorm 1 (10 mins)
  * What makes a good friend?
    sticks up for you; helps if you can't do something; someone you can talk to; listens;
    likes the same sort of things; can keep a secret; tell my problems; does not fight.
  * How do you make friends?
    Find out about person; what they like; where they live; tell about you; what have in
    common; suggest them come around or go out.
If you don't get on or don't have much in common, don't worry about it or get annoyed - some people get on better than others - such is life.
* (Probe the more able individuals further)
* keep record of responses on flip chart and then summarise feedback

Group exercise 1  (10 mins)
* Pass out makaton enhanced handouts of summary of past 7 groups
* Read out summary to group
* Pass the ball
* How do you feel about today being the last group?
* keep record of responses on flip chart and then summarise feedback (e.g., sad, want more groups)
* What can you do about this?
* keep record of responses on flip chart and then summarise feedback (e.g., you can organise things for yourselves)

Group exercise 2  (10 mins)
I would like you to split into pairs with someone you do not know too well but would like to know better.
* find out about the person
* what do they like doing?
* where do they live?
* tell them about yourself
* find out what you have in common
* pass the ball
* what did you find out about the other person?
* do you have any common interests?

Ending:  (2 mins)
* Remember, friends like doing things together
* There are many things to do and places to go with friends
* It is best to find out what your friends like, if you have common interests, you will make friends more easily that way
* Sadly, this is our last group but you will continue to meet many friends and we hope the things we have looked at over the past few weeks will be of use to you.
* Thank everyone for taking part
Appendix 3.

Behaviour Skills Assessment, specimen questionnaire
<table>
<thead>
<tr>
<th>CONTENT</th>
<th>18</th>
<th>20</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Identifies 2 rules at school/workplace</td>
<td>0 0</td>
<td></td>
</tr>
<tr>
<td>B. Follows rules at school/workplace</td>
<td>0 0</td>
<td></td>
</tr>
<tr>
<td>C. Indicates where rules are posted/located</td>
<td>0 0</td>
<td></td>
</tr>
<tr>
<td>D. Indicates 1 consequence of not following the rules</td>
<td>0 0</td>
<td></td>
</tr>
<tr>
<td>A. Defines term, &quot;stealing&quot;</td>
<td>2 2</td>
<td></td>
</tr>
<tr>
<td>B. Indicates it is wrong to steal</td>
<td>2 2</td>
<td></td>
</tr>
<tr>
<td>C. Refrains from stealing</td>
<td>1 2</td>
<td></td>
</tr>
<tr>
<td>D. Refrains from looking through others' purses/wallets</td>
<td>2 2</td>
<td></td>
</tr>
<tr>
<td>A. Describes how a 2-year-old might act when angry</td>
<td>0 0</td>
<td></td>
</tr>
<tr>
<td>B. Indicates what helps him/her calm down when angry</td>
<td>1 1</td>
<td></td>
</tr>
<tr>
<td>C. Indicates 1 acceptable way to show anger</td>
<td>1 0</td>
<td></td>
</tr>
<tr>
<td>D. Displays anger in acceptable manner</td>
<td>2 2</td>
<td></td>
</tr>
<tr>
<td>A. Treats peers with respect</td>
<td>0 1</td>
<td></td>
</tr>
<tr>
<td>B. Defines term, &quot;rights&quot;</td>
<td>0 0</td>
<td></td>
</tr>
<tr>
<td>C. Identifies 2 rights of all people</td>
<td>0 0</td>
<td></td>
</tr>
<tr>
<td>A. Refrains from cursing when angry</td>
<td>2 2</td>
<td></td>
</tr>
<tr>
<td>B. Indicates need to seek help immediately if being cursed at by staff</td>
<td>2 2</td>
<td></td>
</tr>
<tr>
<td>C. Accepts redirection if asked to stop cursing</td>
<td>0 0</td>
<td></td>
</tr>
<tr>
<td>A. Refrains from destroying property of others</td>
<td>0 0</td>
<td></td>
</tr>
<tr>
<td>B. Identifies 1 item impossible to replace</td>
<td>0 0</td>
<td></td>
</tr>
<tr>
<td>C. Stores valuables in safe place</td>
<td>2 2</td>
<td></td>
</tr>
<tr>
<td>A. Describes 2 examples of good behavior</td>
<td>1 0</td>
<td></td>
</tr>
<tr>
<td>B. Accepts compliments for good behavior</td>
<td>0 1</td>
<td></td>
</tr>
<tr>
<td>A. Defines term, &quot;privacy&quot;</td>
<td>0 0</td>
<td></td>
</tr>
<tr>
<td>B. Refrains from handling others' private possessions</td>
<td>0 1</td>
<td></td>
</tr>
<tr>
<td>C. Knocks on closed door before entering</td>
<td>0 0</td>
<td></td>
</tr>
<tr>
<td>A. Allows staff to handle behavior problems</td>
<td>0 0</td>
<td></td>
</tr>
<tr>
<td>B. Treats staff with respect</td>
<td>0 0</td>
<td></td>
</tr>
<tr>
<td>A. Defines term, &quot;nervous&quot;</td>
<td>0 0</td>
<td></td>
</tr>
<tr>
<td>B. Informs staff/parent if nervous</td>
<td>0 0</td>
<td></td>
</tr>
<tr>
<td>C. Gives 1 example of something that makes him/her nervous</td>
<td>0 0</td>
<td></td>
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<tr>
<td>D. Indicates 1 way to calm down when nervous</td>
<td>0 0</td>
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Pre tot = 53    Post tot = 65
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<tr>
<th>CONTENT</th>
<th>12</th>
<th>14</th>
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<tbody>
<tr>
<td>1. Identifies 1 example of need to apologize</td>
<td>2</td>
<td>0</td>
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<tr>
<td>2. Defines term, “apology”</td>
<td>2</td>
<td>2</td>
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<tr>
<td>3. Apologizes when need arises</td>
<td>0</td>
<td>1</td>
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<tr>
<th>CODES</th>
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| 1. Indicates a person controls his/her own behavior | 8 | 0 |
| 2. Defines term, “self-control” | 0 | 0 |
| 3. Describes 1 way good behavior affects friendships | 1 | 1 |
| 4. Describes 1 way negative behavior affects friendships | 1 | 1 |

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| 1. Gives 2 examples of rude comments | 0 | 0 |
| 2. Indicates why rude comments hurt people’s feelings | 0 | 0 |
| 3. Refrains from making rude comments | 2 | 2 |

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<th>AREA</th>
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| 1. Defines term, “lie” | 2 | 2 |
| 2. Gives 1 example of a lie | 2 | 2 |
| 3. Identifies 1 reason why telling the truth is important | 0 | 1 |

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<tr>
<th>AREA</th>
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| 1. Identifies 1 danger of running away | 1 |
| 2. Refrains from threatening to run away | 1 |
| 3. Refrains from running away | 1 |

<table>
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<th>AREA</th>
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<th>CN</th>
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</table>

| 1. Identifies 2 examples of good behavior when riding in a vehicle | 1 |
| 2. Identifies 1 danger of distracting driver | 1 |
| 3. Identifies 1 reason to keep arms/legs/head inside of moving vehicle | 1 |
| 4. Displays good behavior in vehicles | 1 |

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**IVIOR SKILLS ASSESSMENT**

**VE:**

**JATED BY:**

**IOD OF TESTING:** (Use the Teacher's Guide during this assessment.)

- RBAL
- GESTURES
- PICTURES
- SIGN LANGUAGE

**HERE (Explain)**

*be more than one (1) of the above methods*

**WORDS used in this assessment:** Indicates, Identifies, Explains, Defines, Informs, Gives. They are meant as general terms to evaluator flexibility to chart according to the Method of Testing being utilized.

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**COMMENTS**

**IV CARD**

1. Refrains from asking the same question over and over
   - 0 1

2. Defines term, "threaten"
   - 0 0

3. Gives 1 example of a threat
   - 0 0

4. Refrains from threatening others
   - 0 0

5. Identifies 1 way to handle being yelled at
   - 2 2

6. Defines term, "peer"
   - 0 0

7. Identifies 1 way to deal with "bossy" peer
   - 0 0

8. Indicates 1 reason people should not hit each other
   - 1 1

9. Describes 1 way hitting affects friendships
   - 1 1

10. Refrains from hitting when upset
    - 0 1

11. Identifies 3 unacceptable ways to show anger
    - 0 0

12. Defines term, "disappointment"
    - 0 0

13. Identifies 1 acceptable way to deal with disappointment
    - 0 0

14. Identifies 1 good behavior seen on T.V.
    - 0 1

15. Identifies 1 bad behavior seen on T.V.
    - 0 0

16. Identifies 2 T.V. shows that make him/her feel happy
    - 0 0

17. Demonstrates nice way to ask someone to turn down the music
    - 2 2

18. Identifies 1 way to be considerate of others
    - 0 1

19. Thanks peers/staff when appropriate
    - 1 1

20. Explains "reward" system for good behavior
    - 0 0

21. Gives 1 example of a compliment
    - 0 0

22. Defines term, "self-abuse"
    - 0 0

23. Identifies what to do if peer is hurting himself
    - 2 2

24. Refrains from self-injurious behavior
    - 1 0

25. Identifies 1 rude behavior at the dinner table
    - 2 2

26. Identifies 1 positive mealtime topic
    - 1 1

27. Identifies 2 house rules at his/her home
    - 0 0

28. Indicates 1 home rule he/she would make
    - 0 0

29. Indicates 1 home rule he/she would change
    - 0 0

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**OR SKILLS ASSESSMENT**

**E: **

**FED BY:**

**3 OF TESTING:** (Use the Teacher's Guide during this assessment.)

- GESTURES □ PICTURES □ SIGN LANGUAGE

ER (Explain): ________________________________________

(Use the Teacher's Guide during this assessment.)

- Indicates, Identifies, Explains, Defines, Informs, Gives. They are meant as general terms to
- Indicate flexibility to chart according to the Method of Testing being utilized.

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</table>

*Any area marked VP, D, PA or CN is considered a need.*

**N CARDS**

1. Defines term, "bad mood" 1 0

2. Identifies 2 activities that can be done alone 1 0

3. Defines term, "borrow" 2 2

4. Models proper way to ask to borrow an item 2 2

5. Defines term, "personal space" 1 1

6. Refrains from invading peer's "personal space" 1 1

7. Waits for person to finish talking before asking question 1 1

8. Relates that it is rude to interrupt someone who is talking 1 1

**SONALIZED DRAW CARDS**

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Appendix 4.

"Faces" used in answer to the question "how much did you enjoy the groups?"
Appendix 5.

Signed summary of group activities
We talked about the following good things when making friends.

1) As well as talking to people also listen to them.

2) Look at someone when you are talking to them.

3) Do not move around when talking to someone.

4) Tell people nice things about themselves.
If you want to tell someone something you do not like make sure it is something they can change, e.g. their hairstyle, not the fact they need glasses.

If you do not want to do something say NO confidently but not in an angry way.

Sharing what you have with others can make people happy.

If you borrow something from someone remember to give it back.

People can feel differently. Sometimes they can be happy, sad, angry,
ired etc. It is good to try and see how someone is feeling, you may be able to help.

REMEmBER TO BE CARING AND UNDERSTANDING TO OTHERS
Post Substance Dependence Stress Syndrome: a complex post-traumatic stress disorder (PTSD) conceptualisation of residual psychopathology during abstinence after substance dependence

Abstract

This study posits that protracted subjective abnormalities among recovering addicts are caused by the unmasking of a type of complex PTSD which is the product of chronic dependent substance use. Fifty five currently abstinent individuals with a history of substance dependence were shown to have high levels of trait anxiety, trait anger and low self-esteem. As expected, the sample demonstrated a high lifetime prevalence of commonly recognised traumatic events. All of the symptoms of PTSD were noted to occur among the sample, and one quarter met all the DSM-IV criteria for a diagnosis of PTSD. However, the specific subject matter of dreams, intrusive thoughts, cue reactivity, and avoidance, was shown to be directly related to aspects of substance use rather than any other traumatic events. Trait anger was not related to PTSD symptoms, but trait anxiety and self-esteem were. Intrusion regarding substance use material was related to high anxiety and low self-esteem. Avoidance of substance use material was also related to high anxiety but it was not related to self-esteem. Intrusion and avoidance of substance use material was not related to the type of substance used, degree of prior dependence, duration of regular substance use, or the duration of current abstinence. Intrusion (but not avoidance) regarding substance use, was related to the number of different lifetime traumatic events experienced. A PTSD conceptualisation may encourage the adoption of PTSD instruments and therapeutic approaches for substance misuse treatment, it may also add further theoretical structure to psychological research of the recovery process.
Introduction

Protracted anxiety after abstinence

Christo & Sutton (1994) found that 'normalisation' of anxiety and self-esteem among 200 Narcotics Anonymous members appeared to occur about five years after cessation of drug use. These findings can be compared with studies of alcoholics which also suggest that the process of recovery may take many years. A cross-sectional study of 312 Alcoholics Anonymous members, found that symptomatology (including anxiety) approximated normal levels only in subjects who had been abstinent for 10 years or more (De Soto, O’donnell, Allred & Lopes, 1985). Moos, Finney and Chan (1981) found a difference on a simple measure of anxiety between married alcoholic patients, classified as remitted two years after treatment, and a group of matched community controls. This difference was no longer evident eight years later (Finney & Moos, 1991). These studies suggest that full recovery from such psychological discomfort may take at least two years and as long as 10 years.

Organic and psychological perspectives on protracted anxiety

Gossop, Griffiths, Bradley and Strang (1989) indicated that, even with a lengthy 21 day detoxification, opiate addicts are fully recovered after 40 days. However, a review by Satel, Kosten, Schuckit, and Fischman (1993) suggests that both physical and subjective abnormalities exist beyond the acute withdrawal period of alcohol or opiates. Satel et al. stressed the need for a clearer distinction between pharmacologic withdrawal and general cessation phenomena in order to clarify the concept of protracted withdrawal. An outline was offered in which symptoms of protracted withdrawal could be conceptualised as being caused by: attenuated physiologic rebound, toxic residuals, expression of pre-existing symptoms unmasked by cessation of use, and a global post use syndrome. This particular study will concentrate on the latter two psychologically based causes. Organic and pharmacologic aspects of protracted withdrawal are reviewed elsewhere (e.g., Satel et al., 1993; Geller, 1992).
Co-morbid anxiety states

There is a well established link between alcohol dependence and phobic anxiety states (Nutt, 1988; Kranzler & Leibowitz, 1988). Alcohol is often perceived by its users as being helpful in coping with anxiogenic situations (Smail, Stockwell, Canter & Hodgson, 1984). The perceived tension reducing properties of substances may thus lead to attempts to self-medicate anxiety symptoms (Khantzian, 1985, 1990). Yet the occurrence of anxiety as a core symptom of alcohol withdrawal, might also lead to the development of an anxiety state by a process such as sensitisation or conditioning during repeated withdrawals (Nutt, 1988). Dependence upon alcohol has been associated with an exacerbation of agoraphobia and social phobias, and periods of abstinence are associated with subsequent improvements in these anxiety states (Stockwell, Smail, Hodgson & Canter, 1984). Vaillant (1983) has argued that psychopathology is generally the product, rather than the cause, of alcoholism. Subsequent alcohol literature indicates that in only a minority of cases do protracted subjective symptoms represent a pre-existing condition that is unmasked in the newly abstinent state (e.g., Brown & Schuckit, 1988; Brown, Irwin & Schuckit, 1991). It is thus possible that anxiety disorders may develop during the period of drug or alcohol use; only to become clearly discernable after the anxiety associated with acute withdrawal is over.

Post Traumatic Stress Disorder (PTSD) and substance misuse

PTSD is classified as an anxiety disorder (American Psychiatric Association, 1994) which describes a constellation of symptoms (re-experiencing, avoidance, and increased arousal) following exposure to a traumatic event. More recent reviews have linked PTSD to the abuse of alcohol (e.g., Stewart, 1996) and other substances (e.g., Brown & Wolfe, 1994). There are disproportionately high rates of sexual abuse histories among dependent drinkers (e.g., Moncrieff, Drummond, Candy, Checinski & Farmer, 1996) and drug users (e.g., Dansky, Saladin, Brady, Kilpatrick & Resnick, 1995). Crime related traumatic events are also more likely to occur among substance abusing populations (e.g., Dansky, Brady, Saladin, Killeen, Becker & Roitzsch, 1996). These studies have found such histories of traumatic events to be related to increased morbidity or PTSD symptoms.

Dansky et al. (1996) found that approximately 90% of individuals, receiving inpatient
treatment for substance use disorders, had a lifetime history of sexual and/or physical assault, and approximately 50% had crime related PTSD. Rates of exposure to traumatic events and PTSD have been shown to vary across the type of substance used (Cottler, Compton, Mager, Spitznagel & Janca, 1992), thus indicating that future studies should specify the drug categories used by their samples. However, Saladin, Brady, Dansky & Kilpatrick (1995) found only two "significant" differences ($p = .01$) among 20 comparisons of PTSD symptoms between users of alcohol and cocaine. Bearing in mind the limitations associated with multiple statistical testing, this would indicate that drug category may not be strongly related to PTSD symptomatology.

Kessler, Sonnega, Bromet, Hughes, and Nelson (1995) have found substance abuse to be prevalent among sufferers of PTSD, they also suggest that PTSD is more frequently the primary condition (unlike Cottler et al., 1992). With the exception of the study by Cottler et al., the majority of data reviewed by Stewart (1996) support the notion that PTSD symptoms tend to precede the development of alcohol abuse problems. The logical explanation would again invoke the self-medication model (Khantzian, 1985, 1990) as mentioned earlier in relation to phobic anxiety states.

However in cases where PTSD is secondary, the literature suggests that this may be due to a substance misuse lifestyle being related to a greater likelihood of exposure to traumatic events (e.g., Zweben, Clark & Smith, 1994). Individuals, who began abusing substances at an early age, may also be more susceptible to developing PTSD following traumatic exposure because they have failed to develop more effective stress coping strategies due to their reliance on substances as a way to combat stress in the past (Brown & Wolfe, 1994; Stewart, 1996). There may also be indirect relationships due to PTSD and substance misuse sharing common etiological pathways such as a history of conduct disorder or antisocial personality (Brown & Wolfe, 1994; Stewart, 1996).

Saladin et al. (1995) noted that PTSD sufferers seeking treatment for a substance use disorder, had more symptoms of avoidance and arousal than individuals suffering from PTSD alone. This was in part attributed to the greater prevalence of physical assault, rape and sexual molestation reported by the substance abusers. However, Saladin et al. (and also Kosten & Krystal, 1988) pointed out that there is considerable overlap between the symptoms
associated with drug/alcohol withdrawal and PTSD symptomatology; thus inflating the probability of endorsement of arousal and avoidance symptoms. None the less, Saladin et al. maintained that the reexperiencing symptoms of PTSD were so trauma specific that their endorsement was unlikely to be affected by drug/alcohol withdrawal. Saladin et al. suggested that future assessments of PTSD among substance abusers be conducted at least 7 days after detoxification. They also suggested that the assessor should ask the patient whether the various arousal and avoidance symptoms are associated with their drug use only. The implication being that, if that is the case, then the patient may not be suffering from PTSD. However Saladin et al., and other studies of PTSD and substance misuse to date, fail to consider that the experience of being dependent on a substance can, of itself, be cumulatively traumatic.

The DSM-IV (American Psychiatric Association, 1994) suggests that "dependence" is characterised by tolerance; withdrawal; use of larger amounts over longer periods than intended; persistent desire or unsuccessful efforts to cut down; great expenditure of time and effort to obtain the substance; consequent reduction of important social, occupational, or recreational activities; and continued use despite knowledge that it causes or exacerbates a persistent physical or psychological problem. It may appear fairly obvious that the above constellation would constitute an unpleasant and traumatic experience for almost anyone. Yet no literature has been found to suggest that subjective experiences of substance dependence itself can cause PTSD like symptoms on cessation. While substance dependence may be a common product of PTSD, it may in turn become the core subject matter of subsequent dreams, intrusive thoughts, and cue reactivity. Thus, subjective experiences of substance dependence can be seen as the "stressor events" in this PTSD conceptualisation, and the duration or degree of prior "dependence" may be expected to be related to the severity of PTSD symptoms. Opponents to this view may suggest that PTSD's "criterion A" is not met because substance dependence is not a single traumatic event, it is self-inflicted, and substance use is not wholly unpleasant. These arguments should be addressed.

Repeated injurious life-events (e.g., substance dependence) may cause pervasive, sustained stress due to extended periods of dissonance, apprehension and guilt between individual events. Herman (1992) suggested that prolonged repeated trauma, during subordination to any type of coercive control, could cause a complex PTSD. Scott and
Stradling (1994) have reported cases showing full PTSD symptomatology in the absence of a single acute traumatic event. They suggested that the distinction between acute and enduring psychosocial stressors be used to distinguish PTSD from a stress disorder caused by "prolonged duress" (PDSD).

Some drug related intrusive cognitions are appetitive, perhaps not generating sufficient aversive feeling to classify as memories of "traumatic" events. However, there is no mention in the DSM-IV that a threatening or injurious event has to be experienced as wholly unpleasant. Indeed, Jehu (1988) found that 58% of a population of survivors of sexual abuse reported experiencing physical pleasure during their abuse, and this apparently paradoxical experience was posited as being particularly traumagenic.

Unlike sexual abuse, substance dependence has no external perpetrator or duress, the condition is often seen as being "self-inflicted". However, a further comparison to the sexual abuse literature yields a different perspective; self-blame for sexual abuse is posited as being one of the "dysfunctional" beliefs leading to post abuse trauma (Jehu, 1988). Also, in the "Traumagenic Dynamics" model of post sexual abuse trauma (Finkelhor, 1988), "powerlessness" and "stigmatisation" are listed among four general areas of the abuse experience posited to create traumagenic dysfunctional beliefs. The dynamics of "stigmatisation" include the encouragement of self-blame for the abuse, pressure for secrecy, others reacting badly to disclosure, others blaming the individual for events, the individual infers attitudes of shame about their activities, the survivor is stereotyped as "damaged goods". Consequent psychological impacts are posited to consist of guilt, shame, lowered self-esteem, and a sense of differentness from others (Finkelhor, 1988). As can be seen, obvious parallels can be drawn to substance dependent populations for whom the inability to abstain, from an activity frowned on by society and perceived at some level as being 'wrong', is related to subjective perceptions of stigmatisation, loss of control (e.g., Kahler, Epstein & McCrady, 1995), or "powerlessness" (e.g., Narcotics Anonymous, 1982). Thus, the controversy often surrounding the issue of 'volition' in substance misuse, can be considered as contributing to subjective feelings of self-blame, guilt, shame, or lowered self-esteem, the latter having been shown to linger well into abstinence (Christo & Sutton, 1994).

Although non-specific "criteria D" PTSD symptoms like anger, anxiety and sleep disorder cannot be directly attributed to a particular subject or event; the subject matter of dreams,
intrusive thoughts, cue reactivity, and avoidance, can be shown to centre on drug use itself.
The case is illustrated using the framework of the current definition of PTSD, as appearing
in the DSM-IV (American Psychiatric Association, 1994). PTSD's defining criteria are
hereby introduced, and can be applied to drug abuser populations as follows:

Criterion A, (1): "... events that involved actual or threatened death or serious injury, or
a threat to the physical integrity of self or others". Dependent substance misuse is widely
accepted as being a threat to physical integrity (e.g., Tobutt, Oppenheimer & Laranjeira,
1996).

Criterion A, (2): "... response involved intense fear, helplessness, or horror". Repeated
episodes of substance misuse in the face of obvious adverse consequences can be seen as a
"helpless" response. The "twelve step" self-help groups (e.g., Narcotics Anonymous, 1982)
refer to this as being "powerless", and there is evidence to suggest that the inability to abstain
is related to subjective perceptions of loss of control (e.g., Kahler et al., 1995).

Criterion B, (1): "... recurrent and intrusive distressing recollections" about drug use are
commonplace among abstinent drug users (e.g., McAuliffe, Feldman, Friedman, Launer,

Criterion B, (2): "... recurrent distressing dreams" about drug use are also commonplace
among abstinent drug users (e.g., Christo & Franey, 1996).

Criterion B, (3): "... feeling as if the traumatic event were recurring" has been illustrated
in cases of conditioned withdrawal (e.g., Wikler, 1948; Kosten & Krystal, 1988).

Criterion B, (4 & 5): "... psychological distress..." and "physiological reactivity on
exposure to internal or external cues" about drugs is a well known effect among abstinent
drug users (e.g., Rohsenow, Niaura, Childress, Abrams & Monti, 1990-91).

Criterion C, (1 & 2): "efforts to avoid thoughts..." and "activities, places, or people that
arouse recollections". Avoidance of drug related cognitions and places has been noted to
occur among abstinent drug users (e.g., Waldorf & Biernacki, 1981).
Criterion C, (3): "inability to recall an important aspect" of drug use could be seen as being subsumed by the concept of "denial" which is often applied to drug users in treatment settings (e.g., Ward & Rothaus, 1991).

Criterion C, (4): "... diminished interest or participation in significant activities". This author was unable to find any research bearing directly on the above issue. However, it may be associated with depression or anhedonia, both states have been found in elevated levels among treated drug users (e.g., Dorus & Senay, 1980; Craig, 1982).

Criterion C, (5): "feeling of detachment or estrangement from others". Feelings of alienation have been associated with drug use (e.g., Horman, 1973). While anecdotal clinical experience suggests such feelings are likely to persist into early recovery, this author could not find any studies to either support or reject the supposition.

Criterion C, (6): "restricted range of affect (e.g., unable to have loving feelings)". This author was unable to find any research bearing directly on the above issue. However, drug users in treatment have been noted to have elevated levels of "tough mindedness" as measured by the Eysenck Personality Questionnaire (e.g., Gossop, 1978).

Criterion C, (7): "sense of a foreshortened future". Manganiello (1978) found that abstinent drug users in therapeutic communities had a shorter future time perspective than a control comparison group. The drug users tended to anticipate events which were restricted to the relatively immediate future.

Criterion D, (1): "difficulty falling or staying asleep". Sleep disturbance appears to be a common problem for drug or alcohol users, even months after cessation (Kay, 1975; Geller, 1992; Satel et al., 1993).

Criterion D, (2): "irritability or outbursts of anger" also appear to be a common phenomenon among abstinent drug users (e.g., Powell & Taylor, 1992; Walfish, Massey & Krone, 1990).

Criterion D, (3): "difficulty concentrating". Berry, Van-Gorp, Herzberg, Hinkin, Boone,
Steinman and Wilkins (1993) indicated that impairment in memory, visuo-spatial abilities and concentration is still present two weeks after cessation of cocaine use. Wilson and Wiedmann (1992) cite clinical reports of profound cognitive deterioration after prolonged drug use, and subsequent recovery may indicate a non-organic component to the noted cognitive deficits. Tiffany (1995) cites several studies indicating the deleterious effect of smoking urges (a type of intrusive thought) on the concentration of abstinent smokers.

*Criterion D, (4): "hypervigilance"*. Stetter, Ackermann, Bizer, Straube, and Mann (1995) have used a version of the "Stroop" colour naming task with abstinent alcoholics to illustrate selective information processing and attentional bias to alcohol related cues.

*Criterion D, (5): "exaggerated startle response"*. This author was unable to find any research bearing directly on the above issue. However, it is likely to be positively related to levels of anxiety, and these have already been shown to be high among newly abstinent drug or alcohol users (e.g. Christo & Sutton, 1994; Brown *et al.*, 1991; Walfish *et al.*, 1990; De Soto *et al.*, 1985; Moos *et al.*, 1981; De Leon, Skodol & Rosenthal, 1973).

*Criterion E: "duration of the disturbance (symptoms in Criteria B, C, and D) is more than one month"*. It is already known that there is considerable overlap between the symptoms associated with drug / alcohol withdrawal and PTSD symptomatology (Saladin *et al.*, 1995; Kosten & Krystal, 1988). However, most of the studies illustrating the above criteria were conducted on drug or alcohol users abstinent for periods greater than four weeks. Thus, it may be assumed that most of the conditions described had persisted for time periods in excess of one month and were not simply due to acute withdrawal symptoms.

*Criterion F: "the disturbance causes clinically significant distress..."*. Elevated anxiety, and other types of negative affect, are thought to contribute to relapse (e.g., Marlatt & Gordon, 1985). Recurrent intrusive thoughts about drugs have also been implicated in the relapse process (Heather, Stallard & Tebbutt, 1991; McAuliffe *et al.*, 1986). The relationships, between negative affect, intrusive thoughts and relapse, may thus indicate a form of "clinically significant distress".

In the interests of brevity, this was not intended to be an exhaustive review and more
illustrative examples may be obtained by referring to the references cited above. This brief review has illustrated that nearly all of the elements of PTSD have been noted to occur among recovering drug/alcohol user populations. Also that intrusion, cue reactivity and avoidance, experienced by recovering substance abusers, pertain specifically to substance use. However, it is acknowledged that the cited studies and reviews are derived from many different samples of alcohol and drug users. Thus, the degree of coincidence between the many different symptoms discussed, remains to be evaluated.

Aims and hypotheses

This study aims to assess whether sufficient elements of PTSD symptoms pertain to a past experience of substance dependence, and are present within the same individuals to illustrate the presence of a PTSD "syndrome". The individuals should also be abstinent for a sufficient period to ensure that the observed symptoms are not simply manifestations of acute withdrawal symptoms.

This study is a cross-sectional survey of currently abstinent individuals who had recently received treatment for substance dependence. As well as demonstrating the presence of PTSD symptoms pertaining directly to drug dependence, the relationship between lifetime traumatic events, anxiety, anger, self-esteem, PTSD symptoms, dependence, duration of substance use, and abstinence time will be assessed. The experimental hypotheses are as follows:

1. The sample is expected to have significantly high levels of trait-anxiety.
2. The sample is expected to have significantly low levels of self-esteem.
3. The sample is expected to have significantly high levels of trait-anger.
4. The sample is expected to have a high lifetime prevalence of traumatic events.
5. The sample is expected to endorse high levels of PTSD related symptoms which they will directly attribute to their substance use.
6. A significant proportion of the sample is expected to concurrently display sufficient
elements of PTSD to satisfy all DSM-IV criteria for a diagnosis of the PTSD syndrome.

7. Although there is a face valid link between PTSD symptoms of generalised avoidance and hyperarousal and trait-anxiety; a positive relationship (but less obvious) is expected to be found between all measures of psychopathology (anxiety, anger, and low self-esteem) and intrusion / avoidance specifically related to substance use.

8. Since the degree of dependence would be expected to lead to more intense substance related experiences, a positive relationship is expected between the degree of substance dependence and PTSD symptoms.

9. Since duration of use would be expected to lead to more substance related experiences, a positive relationship is expected between the duration of substance use and PTSD symptoms.

10. Since PTSD symptoms may also be caused by traumatic events other than substance dependence, a positive relationship is expected between the number of different lifetime traumatic events and PTSD symptoms.

11. A negative relationship is expected between the duration of current abstinence and all measures of psychopathology (anxiety, anger, low self-esteem, and PTSD symptoms).

Method

Statistical Power

Christo and Sutton (1994) observed that the duration of abstinence correlated .31 and -.33 respectively with measures of trait-anxiety and self-esteem among their sample of 200
Narcotics Anonymous members. Thus indicating that duration of abstinence was able to explain about 10% of the variance of psychopathology as measured in their study. A similar effect size was thus chosen as the guideline for this current study. A power target of .7 for a correlation of .3 at an alpha level of .05 was found to require 58 subjects. Thus, 58 subjects would ensure a 70% probability of avoiding a Type II error for an expected effect size of \( r = .3 \) with the alpha level set at \( p = .05 \) in a two-tailed statistical test. While it is customary to design studies to have a power of at least 80% (Armitage & Berry, 1994), limitations of time and resources meant this was an unrealistic target.

**Experimental Measures** (see questionnaire Appendix 1)

*Demographics:* Items were incorporated to assess age, gender, current employment status, and usual occupation. Socioeconomic status was assessed on the basis of subjects' usual occupation according to the British registrar general's classification: (V) unskilled, (IV) partly skilled, (IIIM) skilled manual, (IIIN) skilled non-manual, (II) intermediate, (I) professional.

*Drug use:* Subjects were asked to list their drugs of choice in order of preference. Subsequent items assessed chronicity of drug use in years ("For how long were you using regularly?"); current abstinence in months ("How long is your current drug free period?"); and summed abstinence in months ("For how long have you been drug free in total? please include past abstinent periods"). The questionnaire was easily adapted for drinkers by simply substituting the word "alcohol" for all occurrences of the word "drug" or "drugs".

*Severity of Dependence Scale* (SDS) (Gossop, Darke, Griffiths, Hando, Powis, Hall and Strang, 1995). This five item instrument is scored on a four point (zero to three) likert scale yielding a total minimum score of 0 and a maximum of 15. It is used to measure the psychological components of dependence experienced by users of different types of drugs. Its items are specifically concerned with impaired control over drug taking, and with preoccupation and anxieties about drug use. Gossop et al. (1995) found its scores to be related to behavioural patterns indicative of dependence; e.g., quantity frequency and duration of drug use, daily use, and degree of contact with other drug users. Drug users who have sought treatment are observed to score higher than non-treatment samples. Since the
population of this current study were abstinent and thus no longer dependent, SDS items were phrased in the past tense and referred to the subjects' past active drug/alcohol using period. E.g., "when you were using drugs, did you think your use of drugs was out of control?"

*National Comorbidity Study list of lifetime traumatic events (NCS-LTE)* (Kessler et al., 1995). This questionnaire contains 12 questions (see Appendix 1), one for each of 12 types of trauma, in an effort to focus subjects' autobiographical memory search. Eleven questions are about events that qualify as traumas in the DSM-III-R (American Psychiatric Association, 1987). A 12th question is an open ended question about "any other terrible experience that most people never go through". Subjects were asked "did any of these events ever happen to you?". They were allowed to endorse as many items as they considered appropriate, the number of items endorsed would act as an indicator of traumatic event exposure.

*Spielberger Trait Anxiety Inventory (STAI)* (Spielberger, Gorusch, Lushene, & Jacobs, 1984). This 20 item instrument is scored on a four point (one to four) likert scale yielding a total minimum score of 20 and a maximum of 80. Spielberger et al. (1984) suggested that "anxiety states are characterized by subjective feelings of tension, apprehension, nervousness, and worry, and by activation of or arousal of the autonomic nervous system"(p 1). The concepts of "state" and "trait" provide a useful approach: Trait anxiety refers to relatively stable individual differences in anxiety-proneness or the tendency to perceive stressful situations as threatening or dangerous, thus causing a heightened elevation of state anxiety in response. Trait anxiety may also reflect the frequency and intensity with which anxiety states had occurred in the past or will be experienced in the future. High trait anxiety individuals are more likely to respond with greater increases in state anxiety in situations that involve interpersonal relationships and threaten self-esteem. The individual's perception of threat may have a greater effect on state anxiety than the actual threat associated with any particular situation. The scale's median test-retest reliability coefficient for college students is .77; correlations with other popular measures of trait-anxiety range from .85 to .73.

*Rosenberg Self-Esteem Inventory (RSE)* (Rosenberg, 1965). For this study, the 10 item instrument is scored on a four point (one to four) likert scale yielding a total minimum score of 10 and a maximum of 40. Rosenberg (1965) described high self-esteem as "the feeling that one is good enough. The individual simply feels that he is a person of worth; he respects
himself for what he is, but he does not stand in awe of himself nor does he expect others to stand in awe of him. He does not necessarily consider himself superior to others." (p 31).

Rosenberg had developed the RSE to measure self-esteem as a global and stable trait-like disposition. Recovering addicts are found to have less self-esteem than a non-addict "normal" population (Christo & Sutton, 1994). The RSE was used for the following reasons:

(a) The RSE had only ten short and simple items, five positively keyed and five negatively keyed. All items used a four point scale, thus it was very compatible with the existing questionnaire.

(b) Validity: as they were so transparent, its items were also highly face valid. Rosenberg (1965) deliberately selected "items which openly and directly dealt with the dimension under consideration" (p 17). Rosenberg validated the RSE using the related criteria of depressive affect and physiological manifestations of anxiety. The RSE was also found to be in close agreement with the Tennesee Self Concept Scale (Lindblad, 1977). When scored as a likert scale (Kahle, 1976), it has also been compared to the Janis-Field Feelings of Inadequacy Scale ($r = 0.75$) and Cutick's Self-description Inventory ($r = 0.64$). Strangely enough, when the RSE is scored as a Guttman type scale (as originally intended by Rosenberg), the correlations drop to 0.48 and 0.44 respectively (see Kahle, 1976). Thus it was scored as a Likert scale in this study.

(c) Norms: Kahle (1976) used the RSE on college students; 149 males and 248 females, the means were $32.4$ ($SD = 4.1$) and $31.1$ ($SD = 3.9$) respectively.

(d) Wylie (1979) recommended the use of the RSE to determine the successful outcome of psychotherapy, thus it may be seen as a reasonable indicator of psychological health.

(e) Rosenberg (1965) examined the social antecedents of self-esteem (SE) and demonstrated the following:

1. Ethnic group affiliation is unrelated to SE.
2. Socioeconomic status is only weakly related to SE.
3. Religious affiliation has no effect on SE.
4. Sex is not related to SE.
5. Urban or rural backgrounds have no bearing on SE.

Since this current study used the same instrument as Rosenberg (the RSE), it was considered safe to adopt his observations and assume the above elements would not
serve as confounding variables.

Spielberger Trait-Anger Scale (STAS) (Spielberger, Jacobs, Russell & Crane, 1983). This 10-item scale measures individual differences in the disposition to experience anger. It is scored on a four point (one to four) likert scale yielding a total minimum score of 10 and a maximum of 40. Four items measure a general propensity to experience and express anger without specific provocation. Four items measure individual differences in the disposition to express anger when criticised or treated unfairly by other individuals. Thus, trait anger is defined as "the disposition to perceive a wide range of situations as annoying or frustrating, and the tendency to respond to such situations with more frequent elevations in state anger. Individuals high in trait anger experience state anger more often and with greater intensity than individuals low in trait anger" (Spielberger, 1988, p 1).

Davidson Trauma Scale (DTS) (Davidson, Book, Colket, Tupler, Roth, David, Hertzberg, Mellman, Beckham, Smith, Davison, Katz & Feldman, 1997). This 17 item scale measures each DSM-IV symptom of PTSD on five point (zero to four) frequency and severity scales targeting symptoms over the past week. As well as a total DTS score it has three sub scales, Intrusion (five items), Avoidance / numbing (seven items), and Hyperarousal (five items). Davidson et al. (1997) developed the scale in relation to many different types of traumatic experience. They have demonstrated good test-retest reliability ($r = .86$) and internal consistency ($r = .99$); the DTS was compared to other PTSD measures (e.g., $r = .64$ with the Impact of Events Scale [IES]) and a diagnostic accuracy of 83% was obtained at a cutoff DTS score of 40.

Some modifications to the DTS were necessary for this current study. The behavioural probe for intrusion and avoidance items (items one to eight) was, "regarding your past drug use...". Also, since "drug use" is not a singular event, "the event" in items one to eight was replaced with "it". E.g., "regarding your past drug use... have you ever had painful images, memories, or thoughts of it?" Numbing and hyperarousal items (items nine to seventeen) were not event specific and were thus prefaced with "more generally...". E.g., "more generally... have you had difficulty enjoying things?" As instructed in the DSM-IV, PTSD Criterion B was considered satisfied if subjects endorsed one or more intrusion symptoms (items one to five); Criterion C was considered satisfied if subjects endorsed three or more
avoidance / numbing symptoms (items six to twelve); and Criterion D was considered satisfied if subjects endorsed two or more hyperarousal symptoms (items 13 to 17). Since the DTS is a relatively new instrument, it was used in conjunction with a more well established PTSD scale (the IES).

Impact of Events Scale (IES) (Horowitz, Wilner & Alvarez, 1979). This 15 item scale measures two aspects of a person's response to stressful life events, intrusion (seven items) and avoidance (eight items). It also targets symptoms occurring over the past week and is one of the few PTSD scales to be used with populations other than combat veterans. Horowitz et al. (1979) found the two subscales had good internal consistency (.78 for intrusion & .82 for avoidance) and test-retest reliability (.89 for intrusion & .79 for avoidance). The moderate correlation \( r = .42 \) between the two subscales indicates that they are measuring different aspects of response to stress. Outpatients with stress response syndromes scored significantly higher on all but two items when compared with new medical students dissecting dead bodies. The IES was also shown to be sensitive to clinical change among the outpatients. The IES explicitly distinguishes intrusion and avoidance symptoms attributed to a particular event, but it was not used alone in this study because its correspondence to DSM-VI criteria is not exact. No modifications were necessary for this current study, other than to substitute the behavioural probe "drug use" for "the event" in the instructional set. E.g., "below is a list of comments made about drug use...".

Following the IES items, the remaining PTSD criteria (E, F and A) were assessed using items adapted from the Clinician Administered PTSD Scale (CAPS) (Blake, Weathers, Nagy, Kaloupek, Klauminzer, Charney & Keane, 1990).

Criterion E was assessed using a dichotomous (yes / no) response to the question, "have the things reported above lasted for more than 1 month?" (item 16).

Criterion F was assessed with the following three items: "do the above things cause clinically significant distress?" (item 17), "do the above things cause impairment in social areas of functioning?" (item 19), and "do the above things cause impairment in social areas of functioning?" (item 20). These three items were scored on five point (zero to four) Likert scales anchored at each end by "none" and "extreme".
Criterion A was assessed with the following two dichotomous (yes / no) response items: "Has your drug use ever involved actual or threatened death or serious injury, or a threat to the physical integrity of yourself or others?" (item 21). "Have you ever responded to drug using with intense fear, helplessness, or horror?" (item 22). Subjects were required to answer "yes" to both of these items in order to satisfy Criterion A.

At the end of the interview, subjects were asked to give some examples of their drug related intrusive thoughts, if they had any.

**Validity of self-reports**

Subjects were aware that their responses would be treated in confidence and their name was not recorded on the questionnaires. They were also aware that they were not obliged to take part in the survey, as it was an independent project unrelated to any treatment they may have been receiving. The consent letter (Appendix 2) merely stated that the purpose of the project was to "increase the knowledge currently available to addicts, doctors and psychologists about the difficulties people encounter when they stop using drugs". The questionnaire itself (Appendix 1) stated that "it will provide a lot of useful information about the recovery process". As such, subjects were unaware of the research hypotheses, but were aware that they would not derive any advantage from responding in any particular way.

Structured interviews, with behaviourally specific probes used to assess victimisation and PTSD, appear to be fairly robust across different methods of presentation (Dansky *et al.*, 1995).

Verification methods of drug using status by analysis of urine or hair samples were too costly to implement within the available budget. However, previous work on a similar population (Christo & Franey, 1995, 1996) found that random treatment instigated urine screens of 61 subjects from participating therapeutic communities revealed no discrepancies with their confidential self-reports. It was also considered preferable to avoid validation methods as they may have been construed by subjects as a lack of trust; thus damaging the relationship between the researcher and subject. In any case, Strang, Bradley and Stockwell (1989) suggested that the validity of self reported drug use is high. Bale, Van Stone,
Engelsing, Zarcone and Kuldau (1981) found that 101 of 121 ex-heroin users who claimed no use during the past three months were indeed found to have no morphine present in urine samples taken without notice after their interviews. Gossop, Green, Phillips and Bradley (1989) tested urine samples provided by 90% of contacted subjects in their follow-up study; they found 99% concordance between self-reported heroin use and urine test results. Darke, Heather, Hall, Ward and Wodak (1991) found an average agreement of 88.7% between self report and urinalysis for different drug types, most discrepancies were due to the urinalysis not detecting self reported cases of use. Zanis, McLellan & Randall (1994) also found that more patients (80%) self-reported opiate use than had been detected by urinalysis (57%); similar results were found for cocaine use. Powell, Dawe, Richards, Gossop, Marks, Strang and Gray (1993) found 80% and 83% agreement between urinalysis and reported opiate use at 6 week and six month follow-ups. Again, most discrepancies were due to reported use not being detected by the urinalysis. The population used in Powell’s study were very similar to those used in this project, thus it can be assumed that Powell’s findings may also generalise to this study.

**General procedure**

The project began in September 1996 and by January 1997, the questionnaires had been typeset and the fieldwork was ready to begin. Ethical approval was obtained from: Riverside Research Ethics Committee, Chelsea and Westminster Hospital, 369 Fulham Road, London SW10 9NH (ref. RREC 1312). Interviewing began on the fifth of February 1997 and ended on the fourth of July 1997.

Recruitment began by approaching four different facilities (see Appendix 3 for example of a typical treatment facility project introduction letter). Two abstinence based treatment facilities eventually provided subjects from their primary and extended care departments (Phoenix House, London; and Broadway Lodge, Weston-super-Mare). The author also recruited subjects from his own place of work (Riverside Mental Health Trust Substance Misuse Service, London), and from a social club for currently abstinent recovering addicts (Fun In Recovery Management, London). Criteria for entry to the study were that subjects should have a prior history of substance dependence, and should be currently abstinent and free of withdrawal symptoms for at least a week prior to the interview.
Interviews generally took place at the various participating sites except in the case of the ex-addicts' social club, which did not want research work done on their premises. In this instance, interviews took place in the researcher's car outside the facility. All eligible subjects were given a brief verbal description of the nature of the interview and, if interested, were then asked to read the subject information and consent form (Appendix 2). To protect their anonymity, subjects were not required to give their name or sign the consent form; consent was implicit in the subjects' completion of the questionnaire. Questionnaires were largely self-completed, and little additional help was required by the subjects as all items were self-explanatory.

Data Analysis

All analyses were carried out using two tailed tests on the SPSS for windows version 5.0.1. statistical software package. The data were cleaned before any transformations were performed. Variable descriptives and data matrix value labels were used to identify any out of range values or missing cases. Also, 10 questionnaires were randomly chosen to double check the data entered; no errors were found. The raw data were then converted to usable form by a series of transformations which recoded negatively keyed items and produced total scores ready for analysis.

Subjects

Sixty seven eligible participants were approached, 12 declined and 55 took part in the study (45 males, 10 females), thus the refusal rate was 17.9%. Fifty point nine percent of recruited subjects came from a therapeutic community, 18.2% from a National Health Service outpatient unit, 16.4% from a recovering addicts’ social club, and 14.5% form a residential 12 step facility. Subjects’ mean age was 34.3 years ($SD = 10.9$; range = 18 - 63), and 86% were unemployed at the time of interview. Socioeconomic status was assessed on the basis of subjects’ usual occupation according to the British registrar general’s classification as follows: 45.5% unskilled, 14.5% partly skilled, 21.8% skilled manual, 7.3% skilled non-manual, 1.8% intermediate, 9.1% professional.
Substance use

Subjects' mean period of regular substance use was 12.5 years ($SD = 10.3$; range = 2 - 43), their mean duration of current abstinence was 3.8 months ($SD = 3.7$; range = 0.1 - 13), and the mean duration of all abstinent periods summed was 14.6 months ($SD = 23.2$; range = 0.3 - 120). Sixty one point eight percent of subjects had been abstinent for two months or longer at the time of interview.

Subjects' substances of choice are listed in order of the percentage of subjects endorsing the substance as their primary drug, figures in brackets refer to the percentage of subjects endorsing the substance as a secondary choice: opiates 40.0% (9.1%), alcohol 29.1% (9.1%), cocaine 21.8% (18.2%), tranquillisers 5.5% (18.2%), amphetamines 3.6% (12.7%), cannabis 0% (20.0%), hallucinogens 0% (3.6%). The percentages in brackets do not sum to 100 because many subjects identified more than one substance as being a secondary drug of choice.

For the purposes of analysis, cannabis and hallucinogens were excluded because no subjects considered them to be a primary drug of choice. "Amphetamines" were collapsed into "cocaine" to form a category called "stimulants"; and "tranquillisers" were collapsed into "alcohol" to form a category called "sedatives". Thus, the subject by primary drug distribution was as follows: opiates 40.0%, sedatives 34.5%, stimulants 25.5%.

Results

Data quality, interactions, possible confounds

Since data analysis would largely rely on parametric statistical techniques, all continuous variables were tested for conformity to a normal distribution. Only four variables were found to differ significantly from a normal distribution, and these were age (skewness = .99, $SE$
duration of current abstinence (skewness = 1.23, SE = .32), duration of regular substance use (kurtosis = 1.74, SE = .63; skewness = .99, SE = .32), and duration of all abstinent periods summed (kurtosis = 9.36, SE = .63; skewness = 2.96, SE = .32). These positive skews indicated a bias toward less age and duration, non-parametric analyses would be used where these variables were involved. There was also a non-significant tendency for IES and DTS intrusion and avoidance subscales to be platykurtic (kurtosis ranged from -.75 to -1.11, SE kurtosis = .63) thus indicating a good spread of scores.

The literature indicated that gender and type of drug used may influence some of the variables relevant to this study. So before any hypotheses were tested, an exploratory data analysis was performed in order to identify any associations and possible confounds.

Independent samples *t*-tests and Mann-Whitney *U* tests were used to identify any confounding interactions between gender and other variables of interest. There were no interactive effects with age, trait anger, trait anxiety, self-esteem, SDS scores, DTS total scores, IES total scores, total number of different traumatic events, period of regular drug use, current drug free period, or duration of all abstinent periods summed.

One way analyses of variance and Kruskal-Wallis tests were used to identify confounding interactions between primary drug type (opiates, sedatives, and stimulants) and other variables of interest. There were no interactive effects with gender, trait anger, trait anxiety, self-esteem, DTS total scores, IES total scores, total number of different traumatic events, current drug free period, or duration of all abstinent periods summed. However, the mean age of the alcohol / sedative users was significantly greater (*χ²* [2] = 15.2, *p* = .0005) and consequently so was their mean period of regular drug use (*χ²* [2] = 13.2, *p* = .001). Stimulant users had a higher mean SDS score than either of the other two groups (*F* [2, 52] = 4.5, *p* = .02).

**Hypothesis 1, trait anxiety**

Table 1. indicates that subjects’ mean level of *trait anxiety* was significantly higher than the "working adult" norms appearing in Spielberger *et al.* (1977) and the "norm" comparison
### Table 1
Subject mean scores and relevant comparisons

<table>
<thead>
<tr>
<th>Scale</th>
<th>Subjects</th>
<th>Relevant Source of Independent</th>
<th>Source of Independent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean (SD) N</td>
<td>comparison group samples t-test</td>
</tr>
<tr>
<td>Severity</td>
<td>11.2 (2.6)</td>
<td>8.7 (4.0) 408 heroin users</td>
<td>(Gossop et al., 1995) 4.5 &lt;.001</td>
</tr>
<tr>
<td>Dependence</td>
<td>4.2 (3.3)</td>
<td>150 cocaine users</td>
<td>* 14.2 &lt;.001</td>
</tr>
<tr>
<td>Rosenberg</td>
<td>26.5 (5.9)</td>
<td>28.6 (5.4) 200 NA members</td>
<td>(Christo &amp; Sutton, 1994) -2.5 .01</td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>32.1 (5.3)</td>
<td>60 <em>norm</em> comparisons</td>
<td>* -5.4 &lt;.001</td>
</tr>
<tr>
<td>Spielberger</td>
<td>51.9 (10.7)</td>
<td>49.0 (9.4) 200 NA members</td>
<td>* 1.9 .06</td>
</tr>
<tr>
<td>Trait-anxiety</td>
<td>41.9 (8.1)</td>
<td>60 <em>norm</em> comparisons</td>
<td>* 5.7 &lt;.001</td>
</tr>
<tr>
<td></td>
<td>34.9 (9.2)</td>
<td>1387 working adult males</td>
<td>(Spielberger et al., 1977) 13.4 &lt;.001</td>
</tr>
<tr>
<td></td>
<td>34.8 (9.2)</td>
<td>451 working adult females</td>
<td>* 12.8 &lt;.001</td>
</tr>
<tr>
<td>Spielberger</td>
<td>22.2 (6.1)</td>
<td>18.7 (4.8) 2880 adult males</td>
<td>(Spielberger, 1988) 4.6 &lt;.001</td>
</tr>
<tr>
<td>Trait-anger</td>
<td>19.4 (5.1)</td>
<td>1182 adult females</td>
<td>* 3.9 &lt;.001</td>
</tr>
<tr>
<td>Davidson</td>
<td>55.9 (28.5)</td>
<td>62.0 (38.0) 67 trauma survivors with PTSD</td>
<td>(Davidson et al., 1997) -1.0 .5</td>
</tr>
<tr>
<td>Trauma</td>
<td>15.5 (13.8)</td>
<td>17 <em>minimal</em> PTSD</td>
<td>* 9.9 &lt;.001</td>
</tr>
<tr>
<td>Scale</td>
<td>14.0 (13.8)</td>
<td>27 <em>subclinical</em> PTSD</td>
<td>* 5.8 &lt;.001</td>
</tr>
<tr>
<td></td>
<td>41.7 (28.1)</td>
<td>36 <em>clinical</em> PTSD</td>
<td>* 2.1 .05</td>
</tr>
<tr>
<td></td>
<td>78.5 (27.1)</td>
<td>108.5 (15.4) 15 <em>severe</em> PTSD</td>
<td>* -6.9 &lt;.001</td>
</tr>
<tr>
<td></td>
<td>114.0 (8.4)</td>
<td>2 <em>very severe</em> PTSD</td>
<td>* -7.9 &lt;.001</td>
</tr>
<tr>
<td>Impact</td>
<td>32.0 (19.1)</td>
<td>35.3 (22.6) 16 male stress clinic patients</td>
<td>(Horowitz et al., 1979) -0.6 .8</td>
</tr>
<tr>
<td>of Events</td>
<td>42.1 (16.7)</td>
<td>50 female stress clinic patients</td>
<td>* -2.8 .01</td>
</tr>
<tr>
<td>Scale</td>
<td>6.9 (6.8)</td>
<td>75 male medical students</td>
<td>* 10.5 &lt;.001</td>
</tr>
<tr>
<td></td>
<td>12.7 (10.8)</td>
<td>35 female medical students</td>
<td>* 5.4 &lt;.001</td>
</tr>
</tbody>
</table>
As expected, subjects' anxiety levels were in line with those of the 200 Narcotics Anonymous recovering addicts appearing in Christo and Sutton (1994). A conservative Bonferroni correction for 21 multiple tests in Table 1 set the alpha level at .002 and the null hypothesis was rejected.

**Hypothesis 2, self-esteem**

Table 1 indicates that subjects' mean level of self-esteem was significantly lower than the "norm" comparison group used in Christo and Sutton (1994). As expected, subjects' self-esteem levels were in line with those of the 200 Narcotics Anonymous recovering addicts appearing in Christo and Sutton (1994). A conservative Bonferroni correction for 21 multiple tests set the alpha level at .002 and the null hypothesis was rejected.

**Hypothesis 3, trait anger**

Table 1 indicates that subjects' mean level of trait anger was significantly higher than the "adult" norms appearing in Spielberger (1988). A conservative Bonferroni correction for 21 multiple tests set the alpha level at .002 and the null hypothesis was rejected.

**Hypothesis 4, lifetime occurrence of traumatic events**

Eighty percent of subjects indicated that they had experienced at least one event that qualified as a trauma according to the DSM-III-R. Although this was not as high as the 90% figure reported by Dansky *et al.* (1996), it was well in excess ($X^2 [1] = 13.0, p < .001$) of the lifetime prevalence of 55.7% among the 5877 individuals from the general US population used in the National Comorbidity Survey (NCS, Kessler *et al.*, 1995). The null hypothesis was thus rejected.

Table 2 indicates that witnessing injury or death was the most prevalent experience, both among the recovering addicts and the NCS general population sample. The relative
<table>
<thead>
<tr>
<th>Current study Subjects</th>
<th>NCS general population in USA</th>
<th>Type of trauma from NCS (Kessler et al., 1995)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males % Females %</td>
<td>Males % Females %</td>
<td>(Items ranked in order of increasing prevalence among subjects in current study)</td>
</tr>
<tr>
<td>(n=45) (n=10)</td>
<td>(n=2812) (n=3065)</td>
<td></td>
</tr>
<tr>
<td>46.7 30.0</td>
<td>35.6 14.5</td>
<td>Witness injury or death</td>
</tr>
<tr>
<td>44.4 30.0</td>
<td>19.0 6.8</td>
<td>Threat with weapon, captive, kidnapped</td>
</tr>
<tr>
<td>40.0 20.0</td>
<td>25.0 13.8</td>
<td>Life-threatening accident</td>
</tr>
<tr>
<td>37.8 20.0</td>
<td>11.1 6.9</td>
<td>Physically attacked or assaulted</td>
</tr>
<tr>
<td>33.3 20.0</td>
<td>11.4 12.4</td>
<td>Shock as event happened to someone close</td>
</tr>
<tr>
<td>26.7 10.0</td>
<td>3.2 4.8</td>
<td>Physically abused as a child</td>
</tr>
<tr>
<td>24.4 0.0</td>
<td>2.1 3.4</td>
<td>Seriously neglected as a child</td>
</tr>
<tr>
<td>15.6 20.0</td>
<td>2.8 12.3</td>
<td>Sexually molested</td>
</tr>
<tr>
<td>13.3 20.0</td>
<td>2.2 2.7</td>
<td>Other terrible experience</td>
</tr>
<tr>
<td>11.1 10.0</td>
<td>18.9 15.2</td>
<td>Involved in fire, flood, or natural disaster</td>
</tr>
<tr>
<td>4.4 20.0</td>
<td>0.7 9.2</td>
<td>Raped</td>
</tr>
<tr>
<td>2.2 0.0</td>
<td>6.4 0.0</td>
<td>Direct combat experience in a war</td>
</tr>
<tr>
<td>84.4 60.0</td>
<td>60.7 51.2</td>
<td>Any of the above traumas</td>
</tr>
</tbody>
</table>
The prevalence of events within each sample was similar, however the recovering addicts were generally about twice as likely to have experienced various particular events. Natural disasters and combat were the only events more prevalent among the NCS population than among the recovering addicts.

The recovering addicts also cited the following events as "any other terrible experience that most people never go through":

* "Mother dying in road traffic accident when I was eight"
* "Rejected by mother"
* "Prostitution, and termination of a pregnancy far into it"
* "Benzodiazepine withdrawals" (mentioned by two subjects)
* "A serious panic attack that frightened the life out of me"
* "Alcohol detox in a general psychiatric ward"
* "A three day coma due to overdosing"
* "Emotional and physical abuse from partner"

Twelve post hoc exploratory Fisher's Exact tests were performed to assess the relationship between gender and event prevalence, but no significant differences were found and \( p \) values ranged between 1.0 and 0.1. However, there was a general trend for a greater event prevalence among males, and the absence of "significant" findings may have been due to a Type II error. Due to its larger sample size, the NCS survey found "significant" gender differences between all the events except "shock of event happening to someone close" and "other terrible experience".

**Hypothesis 5, levels of PTSD symptoms attributed to substance use**

The correlation of .64 between DTS and IES total scores in this study was identical to the correlation found between the two scales by Davidson *et al.* (1997) when assessing convergent validity of the DTS. This relationship may indicate that the scales were working much as expected. Seventy point nine percent of the subjects scored above the DTS cutoff score of 40 (recommended by Davidson *et al.*, 1997) indicating clinically significant levels of PTSD symptoms. Table 3 lists the subjects' mean scores on all PTSD measures.
Table 3
Mean scores of subjects ($N = 55$) on all PTSD measures

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>IES intrusion</td>
<td>15.6</td>
<td>10.8</td>
<td>0 - 35</td>
</tr>
<tr>
<td>IES avoidance</td>
<td>16.3</td>
<td>9.6</td>
<td>0 - 35</td>
</tr>
<tr>
<td>IES total</td>
<td>32.0</td>
<td>19.1</td>
<td>0 - 65</td>
</tr>
<tr>
<td>DTS intrusion</td>
<td>15.6</td>
<td>10.6</td>
<td>0 - 36</td>
</tr>
<tr>
<td>DTS avoidance</td>
<td>21.6</td>
<td>12.9</td>
<td>0 - 48</td>
</tr>
<tr>
<td>DTS hyperarousal</td>
<td>18.7</td>
<td>9.6</td>
<td>0 - 40</td>
</tr>
<tr>
<td>DTS total</td>
<td>55.9</td>
<td>28.5</td>
<td>6 - 117</td>
</tr>
</tbody>
</table>

Table 1 indicates that subjects’ mean $DTS$ total score was significantly higher than the "62 trauma survivors without PTSD" comparison group used by Davidson et al. (1997). As expected, subjects’ DTS scores were in line with those of the "67 trauma survivors with PTSD" also appearing in Davidson et al. (1997). When compared to groups rated by clinicians for global assessments of severity (Davidson et al., 1997), the recovering addicts’ mean score was in line with individuals rated as suffering from "subclinical PTSD". Table 1 also indicates that subjects’ mean $IES$ total score was significantly higher than the "medical student" comparison group used by Horowitz et al. (1979). As expected, subjects’ IES scores were in line with those of the "stress clinic patients" also appearing in Horowitz et al. (1979). A conservative Bonferroni correction for 21 multiple tests in Table 1. set the alpha level at .002 and the null hypothesis was rejected.

While it could have been argued that items 9 to 17 of the DTS did not specifically pertain to substance use, the same cannot be said of items 1 to 8. Table 3 indicates that between 87.3% and 38.2%of subjects had endorsed DTS items 1 to 8, thus indicating significant
Table 4

Percentage of subjects (N = 55) endorsing Davidson Trauma Scale items, and meeting PTSD criteria B, C and D

<table>
<thead>
<tr>
<th>Item</th>
<th>Percentage of subjects for whom item occurred at least once in the past week</th>
<th>Percentage of subjects endorsing sufficient items to meet relevant PTSD criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Have you ever had painful images, memories, or thoughts of it?</td>
<td>87.3</td>
<td></td>
</tr>
<tr>
<td>2. Have you ever had distressing dreams of it?</td>
<td>52.7</td>
<td></td>
</tr>
<tr>
<td>3. Have you felt as though it was recurring? Was it as though you were reliving it?</td>
<td>49.1</td>
<td></td>
</tr>
<tr>
<td>4. Have you been upset by something that reminded you of it?</td>
<td>74.5</td>
<td>Subjects endorsing 1 or more of items 1 to 5. Criterion B 92.7%</td>
</tr>
<tr>
<td>5. Have you been physically upset by reminders of it? (This includes sweating, trembling, heart racing, shortness of breath, nausea or diarrhoea.)</td>
<td>56.4</td>
<td></td>
</tr>
<tr>
<td>6. Have you been avoiding any thoughts or feelings about it?</td>
<td>60.0</td>
<td></td>
</tr>
<tr>
<td>7. Have you been avoiding doing things or going into situations that remind you of it?</td>
<td>65.5</td>
<td></td>
</tr>
<tr>
<td>8. Have you found yourself unable to recall important aspects of it?</td>
<td>38.2</td>
<td></td>
</tr>
<tr>
<td>More generally....</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Have you had difficulty enjoying things?</td>
<td>70.9</td>
<td></td>
</tr>
<tr>
<td>10. Have you felt distant or cut off from other people?</td>
<td>87.3</td>
<td></td>
</tr>
<tr>
<td>11. Have you been unable to have sad or loving feelings?</td>
<td>43.6</td>
<td>Subjects endorsing 3 or more of items 6 to 12. Criterion C 80.0%</td>
</tr>
<tr>
<td>12. Have you found it hard to imagine having a long life span and fulfilling your goals?</td>
<td>65.5</td>
<td></td>
</tr>
<tr>
<td>13. Have you had trouble falling asleep or staying asleep?</td>
<td>72.7</td>
<td></td>
</tr>
<tr>
<td>14. Have you been irritable or had outbursts of anger?</td>
<td>78.2</td>
<td></td>
</tr>
<tr>
<td>15. Have you had difficulty concentrating?</td>
<td>80.0</td>
<td></td>
</tr>
<tr>
<td>16. Have you felt on edge, been easily distracted or had to stay &quot;on guard&quot;?</td>
<td>89.1</td>
<td>Subjects endorsing 2 or more of items 13 to 17</td>
</tr>
<tr>
<td>17. Have you been jumpy or easily startled?</td>
<td>56.4</td>
<td>Criterion D 96.4%</td>
</tr>
</tbody>
</table>
intrusion and avoidance of substance use material (see Appendix 4 for details). Also, all IES items were directed at intrusion and avoidance of substance use material.

Hypothesis 6, satisfying all DSM-IV criteria for the PTSD syndrome

Eighty seven point three percent of subjects replied "yes" to item 21 (...drug use ever involved actual or threatened death or serious injury...), and 85.5% replied "yes" to item 22 (...ever responded to drug using with intense fear, helplessness or horror...). Eighty percent of subjects replied "yes" to both items, thus meeting criterion A.

Table 4 indicates that criteria B, C, and D were met by 92.7%, 80.0%, and 96.4% of subjects respectively.

Criterion E (symptoms lasted for more than one month [item 16]) was met by 63.6% of subjects.

Items 17, 19, and 20 were scored on five point (zero to four) Likert scales anchored at each end by "none" and "extreme". Only 29.1% of subjects endorsed "none" for item 17 (...above things cause clinically significant distress), the remaining subjects' mean score was 2.3 (SD = 1.1, range 1 - 4) indicating moderate distress. Only 18.2% endorsed "none" for item 19 (...above things cause impairment in social areas of functioning), the remaining subjects' mean score was 2.3 (SD = 1.0, range 1 - 4) indicating moderate impairment. Also, 41.8% endorsed "none" for item 20 (...above things cause impairment in occupational areas of functioning), the remaining subjects' mean score was 2.3 (SD = 1.1, range 1 - 4) indicating moderate impairment; but 85.5% of all subjects were unemployed anyway. In all, 87.3% of subjects indicated that their symptoms had caused them some type of distress or impairment and they were considered to have met criterion F.

All PTSD criteria were met by 43.6% of subjects; but in order to ensure adequate symptom severity, the DTS cutoff score of 40 (recommended by Davidson et al., 1997) was imposed. This left 36.4% of subjects who met all PTSD criteria and scored above 40 on the DTS. As pointed out by Saladin et al. (1995) there is considerable overlap between the
symptoms associated with drug / alcohol withdrawal and PTSD symptomatology. Saladin et al. suggested that future assessments of PTSD among substance abusers be conducted at least 7 days after detoxification. In a conservative effort to eliminate contamination from physical withdrawals, subjects less than two months abstinent at interview were discarded. This still left 25.5% of subjects who experienced the full PTSD syndrome, scored above 40 on the DTS, and were well beyond their detoxification. This was considered to be a "significant proportion" of the sample and the null hypothesis was thus rejected.

Hypothesis 7, psychopathology, drug related intrusions and avoidance

Six, two-tailed Pearson correlations were initially performed in order to assess the relationship between measures of psychopathology (trait anger, trait anxiety and self-esteem) and measures of PTSD symptoms (DTS and IES total scores). Where significant relationships were found, post hoc correlations were performed to assess the individual effects of intrusion and avoidance. A conservative Bonferroni correction for 6 multiple tests set the alpha level at .008.

Trait anger was not found to be significantly related to DTS total scores (r [53] = .33, p = .01), nor was it related to IES total scores (r [53] = .15, p = .3). No post hoc tests were performed.

Trait anxiety was found to be significantly related to DTS total scores (r [53] = .69, p < .001), it was also related to IES total scores (r [53] = .51, p < .001). Post hoc tests indicated relationships of similar order between trait anxiety and DTS subscales of Intrusion (r [53] = .59, p < .001), Avoidance (r [53] = .66, p < .001), and Hyperarousal (r [53] = .52, p < .001). Post hoc tests also revealed relationships between trait anxiety and IES subscales of Intrusion (r [53] = .55, p < .001), and Avoidance (r [53] = .40, p < .003). Of note is the difference in the strength of the anxiety - avoidance relationship between DTS and IES avoidance subscales, this is most likely due to four of the seven DTS avoidance items not being targeted specifically to "drug use". As general measures of difficulty enjoying things, feelings of isolation, restricted affect and negative expectations of life, their strong relationship to depression and anxiety is face valid and obvious. However, the IES avoidance
measure remained very subject specific throughout, thus avoiding contamination with generalised feelings of depression or anxiety. As such, IES avoidance scores may be expected to display a weaker relationship to anxiety than DTS avoidance scores.

Self-esteem was found to be significantly related to DTS total scores ($r [53] = -.56, p < .001$), it was also related to IES total scores ($r [53] = -.37, p = .006$). Post hoc tests indicated significant relationships between self-esteem and DTS subscales of Intrusion ($r [53] = -.46, p < .001$), Avoidance ($r [53] = -.60, p < .001$), and Hyperarousal ($r [53] = -.36, p = .006$). Post hoc tests also revealed a significant relationship between self-esteem and the IES subscale of Intrusion ($r [53] = -.42, p < .001$), but not Avoidance ($r [53] = -.25, p = .06$). Since the IES contains the more subject specific avoidance measure, it would appear that avoidance of substance related material is related to anxiety but not to self-esteem.

Thus, trait anger was not related to PTSD symptoms, but trait anxiety and self-esteem were. Substance related intrusion was related to high anxiety and low self-esteem. Substance related avoidance was also related to high anxiety but it was not related to self-esteem. As such, the null hypothesis was only partially rejected.

Hypothesis 8, prior substance dependence and PTSD symptoms

As shown in Table 1, the subjects' mean SDS score of 11.2 (SD = 2.6, range 4 - 15) was significantly higher than scores obtained by Gossop et al. (1995). This was to be expected as Gossop et al.'s "London drug takers" were recruited by means of Privileged Access Interviewing, thus including many individuals who were not in contact with treatment or other agencies. Gossop et al.'s samples were thus more likely to be "drug users", unlike the "drug dependent" treatment population sample used in this study.

Two, two-tailed Pearson correlations were initially performed in order to assess the relationship between retrospectively reported dependence (SDS scores) and measures of PTSD symptoms (DTS and IES total scores). But no relationship was found between SDS scores and either DTS ($r [53] = .12, p = .4$) or IES ($r [53] = -.09, p = .5$) total scores. No post hoc correlations were performed and the null hypothesis was not rejected.
Hypothesis 9, duration of substance use and PTSD symptoms

The alcohol / sedatives group had a longer duration of regular substance use than opiate or stimulant users so post hoc analyses were used to isolate the alcohol / sedatives group. Since duration of regular substance use was not normally distributed, two tailed Spearman Rank correlations were used to assess its relationship to PTSD symptoms.

When using the entire sample, no relationship was found between duration of regular substance use and DTS \( (r [n = 55] = -0.08, p = .5) \) or IES \( (r [n = 55] = -0.02, p = .9) \) total scores of PTSD symptoms.

When using stimulant and opiate groups only, no relationship was found between duration of regular substance use and DTS \( (r [n = 36] = -0.31, p = .06) \) or IES \( (r [n = 36] = -0.08, p = .7) \) total scores of PTSD symptoms.

When using the alcohol / sedative group only, no relationship was found between duration of regular substance use and DTS \( (r [n = 19] = 0.01, p = 1.0) \) or IES \( (r [n = 19] = 0.20, p = .4) \) total scores of PTSD symptoms.

No relationship was found between duration of regular substance use and PTSD symptoms, the null hypothesis was not rejected.

Hypothesis 10, traumatic events and PTSD symptoms

The total number of different traumatic events \( (M = 2.8, SD = 2.3, \text{ range } 0 - 8) \) endorsed by subjects was used as a continuous variable roughly indicating traumatic event exposure.

Two, two-tailed Pearson correlations were initially performed in order to assess the relationship between the total number of different traumatic events and measures of PTSD symptoms (DTS and IES total scores). No relationship was found between traumatic events
and IES total scores ($r [53] = .25, p = .06$). However, there was a significant relationship between traumatic events and DTS total scores ($r [53] = .32, p = .02$).

Three post hoc correlations were performed to explore the relationship between traumatic events and DTS subscales. The post hoc tests indicated a significant relationship between traumatic events and the DTS subscale of Intrusion ($r [53] = .36, p = .007$), but there was no relationship to Avoidance ($r [53] = .22, p = .1$), or Hyperarousal ($r [53] = .25, p = .06$).

The total number of different traumatic events endorsed by subjects was found to be related to intrusive drug related thoughts as measured by the DTS. But traumatic events were not related to IES scores, so the null hypothesis was only partially rejected.

**Hypothesis 11, psychopathology and duration of abstinence**

Since the duration of current abstinence (range = 0.1 - 13 months) was not normally distributed, two tailed Spearman Rank correlations were used to assess its relationship to trait anger, trait anxiety, self-esteem and PTSD symptoms.

No relationship was found between duration of current abstinence and trait anger ($r [n = 55] = -.05, p = .7$), trait anxiety ($r [n = 55] = -.15, p = .3$), self-esteem ($r [n = 55] = .24, p = .08$), or DTS ($r [n = 55] = .06, p = .7$) and IES ($r [n = 55] = .05, p = .7$) total scores of PTSD symptoms. The null hypothesis was not rejected.

The absence of a relationship between trait anxiety, self-esteem, and abstinence time may have been due to an insufficient spread of abstinence time among the current sample. Christo and Sutton's original (1994) sample ranged up to six years of abstinence time, and Christo (1994) noted that there did not appear to be much change happening within the first two years of abstinence. Christo and Sutton's (1994) data were thus reanalysed using only those 84 cases with 0 to 13 months of abstinence time, and no relationship was found between abstinence time and trait anxiety ($r [82] = -.13, p = .2$) or self-esteem ($r [82] = .19, p = .08$).
Discussion

Summary of findings

Fifty five currently abstinent individuals with a history of substance dependence were shown to have high levels of trait anxiety, trait anger and low self-esteem. They demonstrated a high lifetime prevalence of commonly recognised traumatic events. All of the symptoms of PTSD were noted to occur, and two thirds of the sample scored above the DTS cutoff score of 40 indicating clinically significant levels of PTSD symptoms. One quarter of the subjects experienced the full PTSD syndrome, scored above 40 on the DTS, and were well beyond their detoxification. The specific subject matter of dreams, intrusive thoughts, cue reactivity, and avoidance, was shown to be directly related to aspects of substance use rather than any other traumatic event. Trait anger was not related to PTSD symptoms, but trait anxiety and self-esteem were. Intrusion regarding substance use material was related to high anxiety and low self-esteem. Avoidance of substance use material was also related to high anxiety but it was not related to self-esteem. Intrusion and avoidance of substance use material was not related to the type of substance used, degree of prior dependence, duration of regular substance use, or the duration of current abstinence. Intrusion (but not avoidance) regarding substance use, was related to the number of different lifetime traumatic events experienced.

Limitations of the study

The cross-sectional design of this study has two main limitations. The first is that causality cannot be implied, for example it cannot be known whether intrusive thoughts of substance use cause anxiety or anxiety causes intrusive thoughts. The second limitation concerns the issue of differential dropout on the effects of duration of abstinence and other variables. For example, it is possible that those individuals with fewer PTSD symptoms may have seen no reason for continued support and may thus drop out of recovery support networks, as such they would become inaccessible to the study’s sampling technique. It is
equally possible that high levels of PTSD symptoms may cause relapse, or avoidance of other drug users (recovering or otherwise) again leading to dropout from treatment or support networks. Those individuals with greater duration of abstinence who continue to attend support networks, are a self-selecting sample who have neither relapsed or disengaged from further support because they are avoidant or are well and do not need it. It is well known that anxiety reduces with duration of abstinence and that baseline anxiety levels do not predict subsequent relapse (e.g., Brown et al., 1991; Christo, 1995). However, longitudinal studies have not been conducted to assess the relationship between PTSD symptoms, relapse, and duration of abstinence. As such, this research should be supported by a longitudinal study before attempting to generalise its findings to all recovering substance dependent individuals. Such a future study should include multiple follow-ups using a cross-lagged design which may be able to unravel causality. It should also retain contact with individuals regardless of their continued contact with support networks.

Since all participants were abstinent at the time of interview, the retrospective assessment of dependence is another limitation related to the cross sectional study design. Retrospective self-reports are open to recollection biases as individuals adapt their memories in order to make sense of, or justify, their current situation. For example, individuals with high PTSD symptoms (including avoidance) may have wished to minimise their memory of prior dependence as a cognitive form of avoidance. This selective retrospective bias may have countered the hypothesised trend and falsely supported the null hypothesis.

The absence of a comparison group (e.g., non-dependent social drink / drug users, or dependency clinic staff who talk about drink / drugs all day long) also limits inferences about the specificity of the findings. However, standardised tests with established norms were used wherever possible (Table 1), and comparisons were made to prior research where possible. Although the DTS was slightly modified, its relationship to the IES was exactly the same as that of the original version, thus indicating that the minor change in presentation may have had little effect on the test's performance.

Although the NCS measure of lifetime traumatic events provided a useful comparison with (Kessler et al., 1995), when used as a continuous variable it did not allow for multiple experiences of same event. It was also an ordinal as opposed to an interval variable, as such it may have been better suited to non-parametric analysis. However, the same can be said
of tests using combined likert scales (e.g., the STAI) and parametric techniques were considered acceptable as long as the normality assumption was not violated. A future study may find it useful to ascertain the timing of the NCS lifetime events (e.g., did they happen before, during, or after dependent substance use). However, issues of defining onset of dependence and discounting events during prior periods of abstinence, made the procedure too difficult to apply to this present study.

As mentioned at the beginning of the "method" section, the low power of the study (70%) has left many of the correlational findings open to the possibility of type II errors. This possibility has been increased by the use of Bonferroni corrections to allow for the effects of multiple statistical testing. However, it could be argued that weak relationships (i.e., accounting for less than 10% of the variance) are not clinically significant, even if they could have been made statistically significant by the use of a bigger sample.

This author experienced difficulty recruiting appropriate subjects, thus leading to three main problems with the current sample. Firstly, 38.2% of the sample had durations of current abstinence of less than 2 months. This left the assessment of PTSD symptoms open to contamination from residual physical withdrawal symptoms. However, Saladin et al. (1995) suggested that assessments of PTSD among substance abusers could be conducted at seven days after detoxification. This study used a two month cutoff for the diagnosis of 'true' PTSD among its sample, thus leading to the loss of 11% of the sample who, although they fulfilled all PTSD criteria, were not counted because of the temporal proximity of their detoxification. The absence of a link between PTSD symptoms and duration of abstinence time may indicate that physical withdrawals may not have been a major cause of PTSD symptoms in any case.

The second limitation of the sample pertains to the limited range of duration of abstinence as mentioned in the results under "hypothesis 11". It is likely that the demonstration of a cross-sectional link, between psychopathology levels and abstinence time, may have required some subjects to have a duration of abstinence in excess of the 13 months available within this current sample. However such individuals are hard to find, and Christo and Sutton's original (1994) sampling technique was very labour intensive and beyond the scope of this current research study.
The third limitation of the sample pertains to its lack of homogeneity. In order for sufficient recruitment to take place within the short time available, it was necessary to include users of legal as well as illegal drugs. Most illicit drug users use many different types of drug, but alcohol users frequently use only their drug of choice (perhaps supplemented by the odd benzodiazepine prescription). As such, alcohol users formed a distinct sub sample which was significantly older than the illicit drug users. The effects of subjects' age, duration of use, and their drug's social / legal acceptability, are likely to affect the type of dependence related events experienced and the type of coping mechanisms used to offset those events. None the less, subjects' accounts of the subjective experience of dependence appear to be relatively independent of the type of substance used. This study isolated the effect of substance type in the relevant analyses in any case.

Discussion of results

The endorsement of low levels of self-esteem, high levels of trait anger, trait anxiety, and traumatic life events were as expected. Thus indicating the current sample was behaving similarly to other samples from prior research on populations of recovering addicts or alcoholics. The study then sought to explore a psychological perspective on why such high levels of psychopathology endured many months after cessation of substance dependence.

The study moved into new ground by exploring levels of PTSD symptoms attributed to substance use or dependence. When the behavioural probe of "drug use" was applied, both the DTS and IES demonstrated their usefulness as evaluation instruments among recovering addict populations. A good spread of scores was obtained with many subjects indicating clinically significant levels of hyperarousal, intrusion and avoidance. As much as 48% of the variance of trait anxiety could be accounted for by the noted PTSD symptoms.

The key issue regarding the noted PTSD symptoms, pertains to what degree they are caused by the cumulative (if sometimes petty) cognitions and events associated with about 10 years of substance dependence. It is possible that they may just be overlapping symptoms associated with drug / alcohol withdrawal, or they may be caused by discrete traumatic experiences not necessarily exclusive to a substance dependence lifestyle (e.g., sexual abuse or crime related events). Saladin et al. (1995) maintained that if the reexperiencing symptoms
of PTSD were trauma specific, then their endorsement was unlikely to be affected by other issues like drug / alcohol withdrawal. The specificity of the behavioural probe used in this current study may thus indicate that it was elements of "drug use", as opposed to any other event, which were being reexperienced. Three quarters of the sample reported having painful images, memories, or thoughts of substance use; also being upset by reminders of it. Half of the sample were having dreams of it or being physically upset by reminders.

Future studies of PTSD among substance dependent populations should consider the effects of intrusive cognitions about substance use. While these cognitions may not be identified by a behavioural probe regarding a specific targeted traumatic event, they may still serve to inflate scores on more generalised symptoms of hyperarousal and avoidance/numbing. This may be why Saladin et al. (1995) noted more symptoms in the avoidance and arousal symptom clusters of individuals with PTSD and a substance use disorder, than among those with PTSD alone. Saladin et al. believed the effect may have been caused by physical withdrawal symptoms among those with substance use disorders, but this current study indicates that the effect may continue well beyond periods normally required for a full detoxification. For the purposes of further discussion this effect will be given the name of "Post Substance Dependence Stress Syndrome" (PSDSS).

This new concept (PSDSS) must be able to survive the two main counter arguments of, "is it a syndrome?" and "does it satisfy criterion A?". The testing of hypothesis 6 indicated that just under half of the sample fulfilled all the criteria required for the current DSM-IV definition of PTSD. Also, over three quarters of the sample indicated that their experience of substance dependence fulfilled criterion A. However, since PSDSS is posited to be a form of "complex" PTSD, it could be argued that "threatened death or serious injury" and "intense fear, helplessness or horror" may not have been a necessary criterion in any case. It is possible that the presence of prolonged dissonance or duress may have been sufficient to constitute a "complex" stressor.

The PSDSS concept is supported by the strong link between intrusion specifically of substance use material, and observed psychopathology (i.e., high trait anxiety & low self-esteem). However, it is interesting to note the absence of a link between IES avoidance and self-esteem, this may have been a Type II error. There was also no link between PTSD
symptoms and trait-anger, this may have been due to the relatively low levels of anger among the sample. Although trait anger was found to be "significantly" higher than Spielberger's (1988) comparison groups, the difference may not constitute a "clinically significant" elevation. Trait anxiety and self-esteem sample means were both about one standard deviation away from those of the relevant comparison groups. Whereas the trait anger sample mean was only half a standard deviation away from its comparison group, the difference was only "significant" by virtue of the large numbers used in Spielberger's (1988) comparison groups.

Due to the cross-sectional nature of this study, it cannot be known if anxiety causes thoughts about drug use or vice versa. It is likely that both directions of causality may be operating. High anxiety may be an internal cue (e.g., Tiffany, 1995) or reminder that it is time to self-medicate with drugs in order to obtain the expected relief. Thoughts of drug use may then trigger the full memory network of adverse consequences associated with drug use. Alternatively, repeated spontaneous intrusive substance use related cognitions are noted to be quite upsetting and may generate fears of relapse and consequent heightened anxiety. Thus a negative cycle of anxiety and preoccupation with substance use may develop.

The PSDSS position is weakened by the finding that the number of recognised NCS lifetime traumatic events, is related to the DTS intrusion subscale. If the behavioural probe "drug use" was targeting experiences other than the usual type of event commonly associated with PTSD, then why should intrusive thoughts of drug use be associated to standardly recognised PTSD generating events? There are two possible explanations for this. Firstly, it is likely that subjects' network of memories associated with "drug use" encompassed some discrete common traumatic events associated with a drug use lifestyle (e.g., witnessing injury, threat, or assault). Although subjects' descriptions of thoughts about "drug use" indicated that such events constituted the minority of noted intrusive cognitions, future research should clarify the concept of "thoughts about drug use" in order to ensure it is not contaminated with standardly recognised PTSD generating events. However, the precise nature of these thoughts was not known at the outset of this current study. It is only now that these thoughts have been identified as urges and cravings, self-doubt due to repeated experiences of failure to control drug use, memories of acute withdrawals, guilt about drug related losses, memories of shameful past behaviour while intoxicated, and pervasive stress involved in hiding substance use from others. It is also possible that the NCS events are related to intrusive drug use thoughts by common etiology. I.e., traumatic events cause PTSD in the usual
manner, which is then self-medicated with drugs, thus leading to dependence and the superimposition of PSDSS on top of a pre-existing PTSD.

The PSDSS position is also weakened by the findings of hypotheses eight and nine. If PTSD symptoms were caused by experiences of substance dependence, then one would expect those symptoms to be related to the severity or duration of that dependence. This was not found to be the case, and the correlations were so weak that they cannot be considered to be Type II errors. One counter argument may be that treatment seeking substance dependent samples may exhibit a ceiling effect in terms of consequences of severity or duration of dependence. This is specially the case among those seeking abstinence based treatments who (in this country) usually do so as a last resort, after attempts at control or substitute medication have failed. This view is supported by the difference of one standard deviation between the mean SDS scores of this sample and the (not necessarily dependent) drug "users" of Gossop et al.'s (1995) comparison groups. For example, one may expect that social drinkers, with little or no severity or duration of dependence, have 'normal' anxiety levels and do not ruminate about alcohol use (although this remains to be directly proved). If such a population were included in a future study to form a wide ranging continuum of "dependence", then severity and duration are bound to be strongly related to PTSD symptoms or PSDSS.

Treatment implications

The most obvious clinical application to be derived from this study pertains to the ease of adaptation of the IES and DTS for substance abuse treatment populations. The scales can be used for assessment and treatment evaluation, and they give useful insight into the subjective experiences of recovering addicts. Many such clients do not spontaneously report being troubled by intrusive thoughts regarding their substance dependence, and the structure provided by the IES and DTS makes such reporting a lot easier. The mean scores established in this study and listed in Table 3, can be used as comparisons and will give adequate warning of excessive preoccupation or avoidance regarding substance use material.

It is known that avoidance of drinking and drug using situations is a very beneficial strategy for avoiding relapse, particularly among those in early recovery who have not yet
developed a full repertoire of cognitive and behavioural coping strategies (e.g., Litman, 1980). However, during the course of clinical practice, this author has noted that avoidance of substance abuse issues can become maladaptive in many ways. For example, some avoidant clients refuse to consider any ways of coping with a possible relapse (i.e. Relapse Prevention [Marlatt & Gordon, 1980]) because they do not wish to entertain the possibility. Others will not attend relapse prevention groups because they do not wish to associate with other substance abusers, despite the fact that they may be abstinent. Many clients will not attend Narcotics Anonymous (NA) or Alcoholics Anonymous (AA) because they do not like hearing people talk about their substance abuse. Family tensions remain after an individual has become abstinent because significant others are afraid to discuss and resolve past behaviour in case it brings on a relapse. Parallels to PTSD can be used by clinicians to illustrate to clients the difference between adaptive and maladaptive types of avoidance in early recovery. This may help some clients to understand how their avoidance may be simultaneously perpetuating their psychological discomfort and isolating them from available support systems.

Desensitisation by exposure is the obvious approach to anxiety conditions perpetuated by avoidance. The idea of desensitising substance abusers to substance related material is well established, and cue exposure therapy (e.g., Rohsenow et al. 1990-1991) is a popular behavioural approach among clinical psychologists working in the substance abuse field. It appears to be slightly effective among alcohol abusers (e.g., Drummond & Glautier, 1994) but is of little use among opiate users (e.g., Dawe, Powell, Richards, Gossop, Marks, Strang & Gray, 1993). Cue exposure therapy has been derived from conditioning (e.g., Wikler, 1949) and cognitive (e.g., Tiffany, 1995) models which are reductionist and situational in their approach; they also do not appear to consider the possibility of spontaneous or unelicited intrusive states or cognitions.

To date, cue exposure has been a largely behavioural intervention. However, the addition of cognitive elements commonly used in the treatment of PTSD (e.g., "emotional processing" by Foa, Steketee & Rothbaum, 1989; Foa & Kozak, 1986), may augment the cue exposure process. Foa et al. (1989) noted that although PTSD was characterised by anxiety and avoidance, it should not be viewed (or treated) simply as a type of phobia. The main differences being that phobias do not always have a traumatic onset, nor are they characterized by nightmares, flashbacks, intrusive recollections, startle responses, sleep disturbance,
memory impairment, trouble concentrating, restricted affect, and feelings of detachment from others. If a period of chronic substance dependence can be considered a "traumatic onset", then it is certainly clear (e.g., Table 4) that many recovering addicts have more in common with PTSD than with phobias. It is acknowledged that premature avoidance can perpetuate either condition because anxiety is not extinguished prior to avoidance. None the less, Foa et al. (1989) maintain that cognitive factors should be given more attention in the treatment of PTSD. They suggest that the subjective meaning (cognitive appraisal) given to events is the mediating factor between traumatic events and the subsequent development of PTSD. Thus the events, responses to them, and cognitive appraisal of them, all become part of the same traumatic memory network or fear structure.

Foa et al. (1989) proposed that PTSD is distinguished from other anxiety disorders because "the traumatic event was of monumental significance and violated formerly held basic concepts of safety. That is to say, stimuli and responses that previously signalled safety have now become associated with danger" (p 166). The cognitive appraisal of 'safety equals danger", is particularly applicable to recovering addicts in two ways. Firstly, early experiences of drug use are generally pleasurable, or they are adaptive escapes from unpleasant situations or emotional states; largely among those who become subsequently dependent, the early experiences often give way to chronic unpleasant / dangerous consequences. Secondly, once drug use has become so unpleasant that abstinence is sought and achieved, drug related cues no longer indicate successful goal attainment / safety (i.e., a "score"), they indicate threat / danger of relapse. Heightened arousal among recovering addicts on exposure to drug related cues is thus composed of both appetitive (excitement) and aversive (fear) components, as what was once "safe" has become extremely dangerous.

Foa et al. (1989) suggest that the fear memory must first be activated before new information can be provided to include elements that are incompatible with those that exist in the fear structure. In the case of the target population of this current study, such information may include statements like, "relapse is not inevitable, you do not need to fail this time", "no one will jump out at you and force you to use drugs", "there will eventually come a time when your family will trust you again, what can you do to help things along?", or "you were not yourself when you did those things, you may be held accountable but you were not responsible". Foa et al. (1989) point out that avoidant individuals do not provide the
opportunity for the restructuring of their cognitive appraisals, and thus do not recover as quickly in the long term. Their observations about traumatic network formation, network activation / modification, and avoidance, are replicated by subsequent researchers (e.g., Creamer, Burgess & Pattison, 1992). Hunt (1997) described a similar model whereby disjointed traumatic memories of event, response and cognitive appraisal are stored in implicit (unconscious) memory in the form of dissociated mental imprints of sensory and affective elements of the traumatic event. As they are periodically activated and intrude into conscious awareness, they may either be avoided or cognitively processed. If processed, they are eventually stored in explicit memory in the form of a narrative whereby the traumatic memories are incorporated into a 'story' about the traumatic experience. The emerging personal narrative gradually contextualises the intrusions from implicit memory into a less upsetting form. Thus, although the event is never forgotten, it loses its ability to generate upsetting affect on recollection.

Dawe et al. (1993) found their recovering addict subjects reluctant to continue with cue exposure when cues no longer evoked craving, and drop out rates were high (16 out of 34, as opposed to 10 of 34 controls). They acknowledged the possibility that their treatment may not have been intensive enough to produce an effect, but rightly pointed out that it was unlikely that subjects would have put up with any more exposure in any case. They concluded by expressing major reservations about the practical value of cue exposure. Perhaps future exposure programs may benefit from a post exposure debriefing to help reprocess the aversive traumatic memory networks that must be activated during such exposure.

Dawe et al. (1993) also noted significant declines in cue reactivity which were independent of cue exposure treatment. This may indicate that intrusive memories could have been causing some type of imaginal or covert desensitisation, even in the absence of overt drug related stimuli. This would suggest that eye movement desensitization (see Shapiro, Vogelmann-Sine & Sine, 1994) developed for the treatment of PTSD, could also be adopted to augment recovery among abstinent drug users. Shapiro et al. (1994) describe a process whereby individuals are asked to isolate a single picture that represents an entire memory at its most traumatic point, they are also asked to describe their cognitive appraisal of the targeted event. Subjects are then asked to follow the therapist's finger moving in bi-
directional sweeps across their line of vision. The saccadic eye movements thus produced, are paired with new belief statements about the event images. Although there is little theoretical framework for the process, Shapiro et al. have noted that it produces large, fast and stable desensitisation effects on flashbacks and other forms of intrusive thoughts.

It is worth pointing out that many of the processes involved in cognitive or emotional processing are already well established in substance misuse treatment settings which have been observed during this author's research and clinical practice. For example, most therapeutic communities (12 step or otherwise) require their residents to produce a 'life story' to be read out to their peers; thus promoting the production of a personal narrative (as described by Hunt, 1997). A similar process also occurs in most NA / AA meetings. During the first half hour of such meetings, a designated individual is asked to 'share' their story. Subsequently, the other group members talk about elements of the story that they may have identified as being common to their own experiences. As such, the production of narrative is contextualised and normalised within the combined experiences of the group.

Some AA / NA group members avoid telling lengthy stories of their drug using days, they refer to these as "war stories" and prefer to concentrate on experiences of recovery after cessation of drug use. However the 12 steps (e.g., Narcotics Anonymous, 1982) followed by these groups (if not always followed by individual members), explicitly recommend the exploration and resolution of past events and behaviours. The 'fourth step' suggests that members should make a "searching and fearless moral inventory" of themselves. The 'fifth step' then suggests that this inventory be shared with a trusted other, "we admitted to God, to ourselves, and to another human being the exact nature of our wrongs". The 'eighth step' states, "we made a list of all persons we had harmed, and became willing to make amends to them all"; and the subsequent 'ninth step' suggests making "direct amends to such people wherever possible, except when to do so would injure them or others" (Narcotics Anonymous, 1982, p 15). During the course of earlier research (Christo & Sutton, 1994), this author has noted that NA members frequently sate that they would put themselves at the top of the list of people they had harmed by their drug use.
Conclusions

Subjective experiences of drug using may thus be seen as being the "traumatic events" in this PTSD conceptualisation. However, future research should look for the presence of PTSD like symptoms in the few recovering addicts without a history of rape, molestation, physical attack, combat, threat with a weapon, childhood neglect or physical abuse (events most likely to cause "true" PTSD, Kessler et al., 1995).

The value of the PSDSS position is that therapeutic approaches, developed for the treatment of PTSD (e.g., emotional processing [Foa & Kozak, 1986] or eye movement desensitization [Shapiro et al., 1994]), could be adopted to augment recovery among abstinent drug users. Instruments designed to measure PTSD symptoms (e.g., the Davidson Trauma Scale [Davidson et al., 1997] or Impact of Events Scale [Horowitz et al., 1979]) can be easily adapted to inform and evaluate that recovery process. Existing substance misuse treatment approaches can be reinterpreted within the theoretical structures of emotional / cognitive processing (Foa et al., 1989; Creamer, Burgess & Pattison, 1992; Hunt, 1997).

It is acknowledged that non-specific "criteria D" PTSD symptoms (like anger, anxiety, concentration problems and sleep disorder) may have been caused by attenuated physiologic rebound, toxic residuals, or expression of preexisting symptoms unmasked by cessation of use. However, it is unlikely that protracted withdrawal symptoms are due solely to these processes. Future research may attempt to isolate these physiological, historical, and psychological elements when exploring recovery phenomena. There is also likely to be a pleasurable component (e.g., relief) in cases of compulsive self-injurious behaviour and future research into recovery from this condition may also derive benefit from a PTSD conceptualisation.

It is acknowledged that the DSM-IV has a category for "Substance Induced Anxiety Disorder", wherein "prominent anxiety, panic attacks, or obsessions or compulsions predominate in the clinical picture". However, this condition is only expected to last for about one month after the cessation of acute withdrawal. Kessler et al. (1995) have found a median of three years as a reported time for remission among treated PTSD sufferers, this time period is more in keeping with that found by Christo and Sutton (1994), and proposed by developmental models of recovery from chronic substance misuse (e.g., Gorski & Miller,
1979). None the less, Satel et al. (1993) decided against including the phenomenon of protracted withdrawal in the DSM-IV, partly due to methodological limitations of available research and partly due to ambiguous definitions of the concept itself. They suggested that future efforts to identify signs and symptoms of protracted withdrawal should carefully define the parameters of the syndrome. This study may hopefully add some further theoretical structure to the psychological study of post drug use recovery.

Future research could look more closely at the content of drug related intrusive thoughts and dreams, it has been shown here that not all such cognitions are simple manifestations of cue elicited "craving", positive outcome expectancies, or a desire to use drugs. The finding that substance related dreams are common among abstinent smokers, drinkers and drug users (see review in Christo & Franey, 1996), raises interesting questions about the 'spontaneity' of these intrusive cognitions which seem to be occurring in the absence of any obvious cue. Powerful memories of pleasurable drug effects are inextricably linked with unpleasant memories of withdrawals, chronic approach-avoidance conflicts, dissonance, deceit, betrayal (of self and significant others), and failure; as well as many other damaging subjective aspects commonly experienced by drug users before having to resort to treatment for their drug use.
References


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Psychiatry, 148, 10-20.


Appendix 1: Questionnaire (drugs version)
Dear respondent

This survey has nothing to do with any facilities or groups you may be attending and you are not obliged to complete it. However, should you decide to do so it will provide a lot of useful information about the recovery process which will be of use to others. Your co-operation would be greatly appreciated, your name is not required so you can be assured of complete personal confidentiality / anonymity. Please complete all sections.

Age: _____ Sex: M _____ F _____ Occupation (if any): ______________________________

What were your drugs of choice?

When you were using:  

<table>
<thead>
<tr>
<th>Question</th>
<th>Never / almost never</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always / nearly always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Did you think your use of the drug(s) was out of control?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Did the prospect of missing a ‘fix’ (or dose) or not ‘chasing’ make you anxious or worried?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Did you worry about your use of the drug(s)?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Did you wish you could stop?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. How difficult did you find it to stop, or go without the drug(s)?</td>
<td>Not difficult</td>
<td>Quite difficult</td>
<td>Very difficult</td>
<td>Impossible</td>
</tr>
</tbody>
</table>

For how long were you using regularly?  

__________ years _________ months

How long is your current drug free period?  

__________ years _________ months _________ days

For how long have you been drug free in total? (please include past abstinent periods)  

__________ years _________ months

What types of support (if any) are you using to help you in recovery? (e.g., NA, AA, therapeutic community, extended care, halfway house, counselling, group therapy, acupuncture, religion, homeopathy etc., etc...)  

Did any of these events ever happen to you? please ring appropriate number(s)

1. You had direct combat experience in a war
2. You were involved in a life-threatening accident
3. You were involved in a fire, flood, or natural disaster
4. You witnessed someone being badly injured or killed
5. You were raped (someone had sexual intercourse with you when you did not want to by threatening you or using some degree of force)
6. You were sexually molested (someone touched or felt your genitals when you did not want them to)
7. You were seriously physically attacked or assaulted
8. You were physically abused as a child
9. You were seriously neglected as a child
10. You were threatened with a weapon, held captive, or kidnapped
11. You suffered a great shock because one of the events on this list happened to someone close to you
12. Other (any other terrible experience that most people never go through, please describe it if you can)

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
### Self-Completion Questionnaire

A number of statements which people have used to describe themselves are given below. Read each statement and then put a ring around the appropriate number to the right of the statement to indicate how you generally feel. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe how you generally feel.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Almost always</th>
<th>Often</th>
<th>Sometimes</th>
<th>Almost never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel pleasant</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I feel that I am a person of worth, at least on an equal basis with others</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I am quick tempered</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I feel nervous and restless</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I feel satisfied with myself</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. I wish I could be as happy as others seem to be</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. I feel like a failure</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. I have a fiery temper</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. I feel that I have a number of good qualities</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. I feel rested</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. I am &quot;calm, cool, and collected&quot;</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. I am a hotheaded person</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. All in all I am inclined to feel that I am a failure</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. I feel that difficulties are piling up so that I cannot overcome them</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. I worry too much over something that really doesn’t matter</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. I get angry when I am slowed down by others’ mistakes</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. I am able to do things as well as most other people</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. I am happy</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. I feel annoyed when I am not given recognition for doing good work</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. I feel I do not have much to be proud of</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. I fly off the handle</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. I have disturbing thoughts</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. I take a positive attitude toward myself</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. I lack self-confidence</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. I feel secure</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26. When I get angry, I say nasty things</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. I make decisions easily</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. I feel inadequate</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. I am content</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. On the whole, I am satisfied with myself</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. Some unimportant thought runs through my mind and bothers me</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32. It makes me furious when I am criticised in front of others</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33. I take disappointments so keenly that I can’t put them out of my mind</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34. When I get frustrated, I feel like hitting someone</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35. I wish I could have more respect for myself</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36. I am a steady person</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37. I certainly feel useless at times</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38. I feel infuriated when I do a good job and get a poor evaluation</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39. I get in a state of tension or turmoil as I</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>think over my recent concerns and interests</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40. At times I think I am no good at all</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Each of the following questions asks you about a specific symptom. For each question, consider how often in the last week the symptom troubled you and how severe it was. On the two spaces beside each question, write a number from 0 - 4 to indicate the frequency and severity of the symptom.

<table>
<thead>
<tr>
<th>FREQUENCY</th>
<th>SEVERITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 = Not At All</td>
<td>0 = Not At All Distressing</td>
</tr>
<tr>
<td>1 = Once Only</td>
<td>1 = Minimally Distressing</td>
</tr>
<tr>
<td>2 = 2-3 Times</td>
<td>2 = Moderately Distressing</td>
</tr>
<tr>
<td>3 = 4-6 Times</td>
<td>3 = Markedly Distressing</td>
</tr>
<tr>
<td>4 = Every Day</td>
<td>4 = Extremely Distressing</td>
</tr>
</tbody>
</table>

Regarding your past drug use....

1. Have you ever had painful images, memories, or thoughts of it? ........................................  .

2. Have you ever had distressing dreams of it? .................................................................  .

3. Have you felt as though it was recurring? Was it as though you were reliving it? ..........  .

4. Have you been upset by something that reminded you of it? ...........................................  .

5. Have you been physically upset by reminders of it? (This includes sweating, trembling, heart racing, shortness of breath, nausea or diarrhoea.)  .

6. Have you been avoiding any thoughts or feelings about it? ............................................  .

7. Have you been avoiding doing things or going into situations that remind you of it? ..........  .

8. Have you found yourself unable to recall important aspects of it? .................................  .

More generally....

9. Have you had difficulty enjoying things? .................................................................  .

10. Have you felt distant or cut off from other people? ....................................................  .

11. Have you been unable to have sad or loving feelings? ...................................................  .

12. Have you found it hard to imagine having a long life span and fulfilling your goals? ..........  .

13. Have you had trouble falling asleep or staying asleep? ............................................  .

14. Have you been irritable or had outbursts of anger? ....................................................  .

15. Have you had difficulty concentrating? .................................................................  .

16. Have you felt on edge, been easily distracted or had to stay "on guard"? ........................  .

17. Have you been jumpy or easily startled? .................................................................  .
# Impact of Events

Below is a list of comments made about drug use. Please check each item indicating how frequently these comments were true for you during the past seven days. If they did not occur during that time, please ring the "not at all" column.

<table>
<thead>
<tr>
<th></th>
<th>Often</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I thought about it when I didn’t mean to</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2.</td>
<td>I avoided letting myself get upset</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3.</td>
<td>I tried to remove it from memory</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4.</td>
<td>I had trouble falling asleep or staying asleep because of pictures or thoughts about it that came into my mind</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5.</td>
<td>I had waves of strong feelings about it</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6.</td>
<td>I had dreams about it</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7.</td>
<td>I stayed away from reminders of it</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8.</td>
<td>I felt as if it hadn’t happened or wasn’t real</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9.</td>
<td>I tried not to talk about it</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10.</td>
<td>Pictures about it popped into my mind</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11.</td>
<td>Other things kept making me think about it</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12.</td>
<td>I was aware that I still had a lot of feelings about it, but I didn’t deal with them</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>13.</td>
<td>I tried not to think about it</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>14.</td>
<td>Any reminder brought back feelings about it</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>15.</td>
<td>My feelings about it were kind of numb</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>16.</td>
<td>Have the things reported above lasted for more than 1 month?</td>
<td>yes</td>
<td>no</td>
<td></td>
</tr>
</tbody>
</table>

17. Do the above things cause clinically significant distress? none 0 1 2 3 4

19. Do the above things cause impairment in social areas of functioning? none 0 1 2 3 4

20. Do the above things cause impairment in occupational areas of functioning? none 0 1 2 3 4

21. Has your drug use ever involved actual or threatened death or serious injury, or a threat to the physical integrity of yourself or others? yes no

22. Have you ever responded to drug using with intense fear, helplessness, or horror? yes no

Thank you very much for your time and effort, it is much appreciated.
Appendix 2: Subject information and consent
The Recovery Study

Dear potential volunteer

As a person seeking recovery, you are in a position to increase the knowledge currently available to addicts, doctors and psychologists about the difficulties people encounter when they stop using drugs. With your help we might be able to learn a little more about the recovery process and so design better and more helpful support methods for those who will be following in your footsteps.

What do you have to do?

You would be required to fill out a single questionnaire which will ask about your drug use, past events, current feelings and thoughts. It is not difficult or complicated, but it is four pages long and it would take about half an hour to do. You may find it quite interesting and it may get you thinking about things you have not considered before; please remember to make use of your key worker should you wish to talk about any of the questions afterwards. Please try not to miss out any of the questions as that would make subsequent analysis very difficult.

Is it confidential?

This survey is independent of any facilities or groups you may be attending and you are not obliged to complete it. Your name is not required so you can be assured of complete personal confidentiality / anonymity. Any results made public will only be general statistics. If you do not want treatment staff to see your responses, then you may put the questionnaire in a sealed envelope and only I will see its contents. If you are unhappy about anything to do with the survey you can stop anytime you wish and it will not affect your treatment in any way.

Thank you for your help, and best wishes from George Christo

George Christo
Appendix 3: letter to recruitment sites
The project has three aims:
1) To continue to draw attention to the needs of individuals in early recovery.
2) To provide a new theoretical framework for the study and treatment of individuals in early recovery.
3) To use that framework to draw upon the considerable treatment expertise developed for recovery from another condition (Post Traumatic Stress Disorder, PTSD).

There is no currently accepted diagnostic category for recovering individuals who continue to experience psychological discomfort beyond a few months of abstinence. It has been shown that heightened anxiety often persists for at least two years into recovery (Christo & Sutton, 1994). It would also appear that intrusive drug related thoughts (e.g., upsetting dreams, Christo & Franey, 1996) persist well beyond the acute withdrawal period. Heightened anxiety, intrusive thoughts, bad dreams, reactivity on exposure to reminders, and avoidance of reminders, are the classic symptoms of PTSD (see Christo in press; Christo under review). The main departure from accepted PTSD work is that I propose addictive drug/alcohol use is of itself a cumulatively traumatic event. As experienced workers in the field, we may not need a PTSD conceptualisation to tell us the obvious. However, general psychologists and psychiatrists may find it easier to understand "recovery" when it is described within a theoretical framework that they can understand. Also, there are some effective treatment techniques and evaluation instruments developed for PTSD which may usefully generalise to the addictive behaviours.

The ethics committee application has been approved and all that is now required is for some abstinent alcoholics to fill in a self-completion structured questionnaire (alcohol versions). Ideally we need to demonstrate PTSD-like intrusion, anxiety and avoidance continues in recovery beyond physical withdrawal, thus participants would need to be at least 4 weeks beyond detox. A good spread of abstinence time would ensure that we can demonstrate symptoms reduce with time. I suspect that intrusive thoughts may also be related to severity of past dependence and have incorporated a measure to that effect. If SAD scores are available, they may also be useful.

With best wishes,

George Christo
Appendix 4

The nature of drug related intrusive thoughts

Although this study was not intended to be a qualitative piece of research, the following subjects' comments were noted and included in order to illustrate what is encompassed by drug related intrusive thoughts as explored in this study.

The obvious intrusive thoughts well documented in the substance misuse literature are urges and cravings (e.g., Marlatt & Gordon, 1985). E.g., "I still miss it..." (#32); "...dream about drinking Scotch and Coke, the taste, the feeling, the whole lot, was enjoying it, I kept it to myself in my bedroom, when I woke up it seemed so real and it was not until I was 100% awake that I realized it hadn't happened" (#23); "feeling stressed at the moment, thoughts that alcohol will help, have something to calm me down" (#22); "heightened awareness of alcohol at social gatherings... sharing a meal and wishing I could enjoy wine too, missing the un-wind drink at the end of work pre-evening" (#6).

As noted by Dansky et al. (1996), multiple crime related events also feature as being inextricably linked to some substance dependent lifestyles. E.g., "I have been stabbed and cut eleven times and shot once, all drug related" (#8); "almost been hit by trains, almost run over by a police car, almost electrified on tube tracks..." (#39). However, such cases were a minority in this sample.

Far more common, but rarely acknowledged as being traumatic, were intrusions of self-doubt due to repeated experiences of failure to stop or control drug use. E.g., "I would give up every day and then fail, I'm glad I'm on antabuse (#32); "...loss of control, thinking 'am I going mad?', it twists your mind... I worry it will happen again, getting addicted, I might not get well, stay like this forever" (#41); "keep thinking 'can I keep this up?' I don't know if I can take this, is it worth it?" (#42).

Often related to memories of failed attempts to stop, were memories of acute withdrawals. E.g., "benzo withdrawals come in waves, unpleasant memories of ending up in psychiatric hospital" (#41); "total recall of the hospital ward, doctor, atmosphere and treatment in 1984, very bad vivid memories of the detox clinic, getting lost in the building and being in despair"
Also common, were pervasive ruminations and guilt about drug related losses. E.g., "I think of so many good chances that I blew, I had good jobs, I'm frustrated about the way my life has gone, keep thinking about the past ten years, it really got out of control, the consequences" (#37); "I lost two families and five kids" (#42); "feelings of bitterness, anger, regret, guilt, the waste of money, losing my driving licence, my job twice, my second relationship is 95% ruined and she's pregnant" (#22).

Memories of shameful past behaviour were another common theme. E.g., "whole chunks of memory come flooding back, of being drunk, very drunk and out of control, re-runs of the accidents, bad memories of bad social behaviour, being collected from the tube station by my husband after a call from L.U. staff, and unable to walk, being 'helped' on a bus by an angry conductor, friends getting me out of restaurants and into taxis in 1991, vivid memory of stealing drinks from bottles, glasses, fridges, side board, drinks cabinets in friends houses" (#6). "Times I've lost my temper with my family, become nasty, arrogant, vile and intolerant, partly memories and partly my family telling me afterwards, it was like Jeckle and Hyde" (#32). "It's hard to imagine it was really me" (#17).

Related to the above was the pervasive stress involved in hiding substance use from others. E.g., "...dreams of searching for places to hide evidence of drinking, pushing bottles into garden hedges, wrapping bottles in shopping bags to dump in park bins... Action replay of being 'found out' with bottles under the bed, in cupboards, unable to answer the door, speak on the phone, turn up to appointments or meetings" (#6).

The effect of the above intrusions is illustrated by subject #6: "I feel irritated to anger that these thoughts and memories won't leave me. I try to see them as 'positive' self-disciplines but resent the time and energy they take".

Comments from NA member:

In order to obtain some form of collateral validation, the above section was e-mailed to
a recovering addict who has been a member of NA for about 10 years. Her return comments were so interesting that they have been incorporated in their entirety in the following section. If allowances are made for the different jargon used by this person, then it would appear that the idea of "emotional reprocessing" of traumatic memories is well understood among the amateurs (i.e., NA members). Perhaps we professionals who work in the substance misuse field are merely 'rediscovering the wheel'.

"Having just read through the chunk you sent me I didn't have a response until the end (it all read as true). And my response is probably totally irrelevant to your thesis anyway - but I may as well report it. (I'll have a ponder over whether I can think of any other intrusive thoughts later).

It's the "I try to see them as positive self-disciplines" (#6) that I reacted to. No wonder the thoughts won't leave her - she's beating herself up - nothing ever heals through control, only through love. If, instead, one is helped to understand that such thoughts won't go away until a lesson has been learned then there really is a positive outcome. (The psyche, whatever a depressed newly clean addict might think, doesn't torture itself gratuitously - there's always a healing purpose). I reckon thoughts that keep intruding do so because the unconscious is aware that the conscious hasn't got it yet. Intrusive thoughts have a purpose - a healing purpose. But they are just a god damn nuisance until their purpose is understood. When this occurs they become useful. They are keys to what needs to be changed; behaviours, coping mechanisms, ways of relating to others, low self-esteem that needs boosting etc. But lots of people get stuck in the shame and guilt and don't go to the next level i.e., having husband have to pick one up roaring drunk from the tube station - if one doesn't get beyond the shame one won't ask the important questions about what this implies about the relationship with self and the husband, for example, the inability to ask for help before the shit hits the fan. Obviously this is just a bit of a quickly put together example but this applies with all the intrusive thoughts. They intrude because the real lessons haven't been extracted yet - the information such thoughts give us about our relationship with self and where it is weak and needs work. As long as intrusive thoughts are applied as sticks (self-discipline through shame and
guilt) they will continue. The way through is through self-forgiveness, self-acceptance and compassion - and when this is achieved then the person becomes truly useful in the world because they can give truly unconditional love, care, non-judgemental support to others. So there's my little, probably not very pertinent to your thesis, share up.

As far as whether you've missed any types of intrusive thoughts out, something occurs to me but I'm not sure if it's in the same bracket. What I often used to think is "well I sort of understand that I can't use any more but I'm damned if I want to be like straight society". I equated being clean with having to take on all of society's values; with becoming a straight sheep. This was intrusive in that it got in my way (was a kind of blind alley) in terms of finding self-fulfilment without drugs. I wanted the feeling of being a rebel that I got from using without using and I didn't see that this was possible. I got stuck in the horror of these thoughts telling me I had to be straight and normal in all areas (whatever straight and normal meant to me back then) and didn't move to the deeper level (until quite recently) of working out how I could keep my integrity and values as well as be clean.

And what about memories of going against ones values sexually? I guess this comes under shameful behaviour intrusive memories but I would have thought, especially with addicts, sexual shame inducing memories are particularly hard to deal with i.e., sleeping with people to get their drugs - or sleeping with people for money to get drugs - which might happen while in a primary relationship with someone else etc... etc...

And what about the early stage of being clean where one suffers from the delusion that one will never feel peaceful again without heroin (being specific here because I remember this personally). I guess this would only apply with downers. I remember so well being dogged by a voice telling me that I'd had all the inner peace I was ever going have when I was on H and I'd never be restful again. That was pretty damn intrusive and hard to handle - because I believed it for a long time being one of the poor sods that went straight into depression, more or less - no pink cloud first time around anyway (different
story now but years more experience to go on). Maybe this comes into missing using but it's a bit different because it's not missing the actual drug use so much as missing the emotional effect of the drug.

I can't think of anything else - various thoughts occur to me but they fit into one or other of the categories you have delineated."

Claire M.