Young People and Problem Drug Use: The Role of Attachment Theory and Family Background

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by

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Abstract

Attachment theory has been proposed as a potential framework from which to understand the variable effect of family of origin experiences on the problematic use of drugs in young people. The present study measured family experiences, attachment styles, hopelessness and drug use, drawing participants from both a drug treatment service and the general population of young people.

The findings indicated that the young people with drug use problems differed from the control group in that they emphasised the positive consequences of drug use and were more likely to leave school early. Furthermore, aspects of the family experience, close relationships, and attachment anxiety were associated with higher levels of drug use. However, there was an absence of a direct relationship between family of origin experiences and attachment style. The number of close relationships the young person had experienced was directly related to higher levels of drug use, greater attachment anxiety and particular family experiences.

It was concluded that, although attachment theory appears to be a promising framework from which to approach the influence of the family on subsequent drug use, the current research failed to identify a direct link between family experiences and measured attachment style. However, the role of romantic relationships appeared to be crucial for young people as they endeavour to create a secure close relationship. Lack of success in this domain of life may be viewed as either, a cause or a side effect of increased use of drugs. It is proposed that, irrespective of the causal instigator, poorer relationships and high levels of drug use will have an interacting effect. Therefore, close relationships are regarded as a legitimate target for therapeutic intervention when addressing the treatment needs of young people with drug use problems.
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Chapter 1
Literature Review

1.0 Introduction

The social context in which young people are currently developing includes an increasing availability of 'illegal' drugs ensuring that the majority will have some experience of being offered drugs (Parker, Aldridge, & Measham, 1998). Of this large number of people who have drugs available to them, a proportion will experiment with the use of drugs. A section of this group will go on to use drugs in a variety of competent ways whilst a small number will go on to use drugs in an incompetent or problem manner (Glynn, 1984). A growing body of literature is dedicated to the analysis of why some people appear to be more prone to developing problem drug use than others (Gilvarry, 2000; Lloyd, 1999; Weinberg, Rahdert, Colliver, & Glantz, 1998). This literature is often presented in terms of a balance between the number risk and protective factors that the young person is exposed to (Gilvarry, 2000). One of the primary risk and protective factors is the family environment (Lloyd, 1999). However, there appears to be a gap in this literature when it comes to explaining how the risk and protective factors express themselves in the behaviour of individuals.

A potential explanation for the role of the family in both risk and protective factors is introduced by utilising the concepts of attachment theory. Fraley and Waller (1998) suggested that the strength and appeal of attachment theory lies in its ethological roots, its psychodynamic flavour and its concepts of dynamic behavioural systems. It is, potentially, an attractive explanatory theory in that it is linked to emotion regulation. It is thought that problem drug use may be a dysfunctional way of coping with emotional distress owing to the individual's inability to access emotional support either internally or externally owing to an unpredictable or neglected family background (Hofler & Kooyman, 1996).

Therefore, the focus of this paper is the use of illicit drugs by young people. The aims of the study were to detect how young people with drug problems might differ from their peers in a series of domains, including drug use, close relationships
from an attachment theory perspective, family background, and hopelessness regarding the future.

1.1 Social Context of Young Peoples Drug Use

Parker et al. (1998) reported that an increasing number of young people were using illicit substances in the pursuit of pleasure, which they conceptualised as the gradual societal normalisation of recreational drug use. The authors focused the normalisation argument mainly on cannabis, which they reported to be viewed by many young people as a fairly safe drug. Ecstasy, amphetamines and LSD were reported to occupy the middle ground and be linked with more equivocal definitions and a clearer costs-benefits analysis determining their use among young people. Hard drugs, such as heroin and cocaine were excluded from the normalisation thesis as these were associated in the reports of the young people with 'junkie' stereotypes and not with ideas of normalisation. The authors suggested that the process of illicit drug use normalisation had come about as a result of rapid social change, which has made growing up 'feel' far less secure and more uncertain for longer. The act of drug use was therefore argued to be both about risk taking and using 'time out' to self medicate the impact of the stresses and strains of both successes and failures of modern times.

In contrast to the normalisation argument (Parker et al., 1998), there is a school of thought in the U.S. and some other countries which casts all illicit drug use as problematic and a cause for concern (Gilvarry, 2000, Parker et al., 1998). This contrast reflects tension in the moral context which is created by the prevailing attitudes of society toward drugs and drug taking and changes at various moments in history (Durkheim cited in Dean, 1990). Gossop (1996) noted that the committed drug user is often seen as outside of society, but is in fact part of it, however standing in clear conflict with the prevailing moral values. The contrast ends when the 'hard drugs' of heroin and cocaine are referred to, as there appears to be a common agreement that such substances are damaging (Parker et al., 1998).
1.2 Problem Drug Use

1.2.1 Incidence

Glynn (1984) observed that drug use is available to all adolescents, is acted out by some, and that this use becomes problematic only for a subset of that number. Parker et al. (1998) reported that in a UK sample of young people, by age 18 almost all had been offered illicit drugs and six out of ten had tried an illicit drug. Hurrelmann (1990) studied a sample of German adolescents who reported that drugs, including alcohol, were a significant problem for 4% and a minor problem for 5% with the others having no problem. This has parallels to the limited UK information, which has estimated substance misuse at between 3 and 11% in young people aged 15-17 (HAS, 1996; Gilvarry, 2000). The Department of Health (1999) statistics for the first six months of 1998 demonstrated that 14% (3348) of the people recorded on the National Drug Misuse Database were under 20 years old.

1.2.2 Definitions

Problem drug use is defined as use that results in significant problems in domains of daily activity such as physical health, personal finance, social, legal and psychological (Advisory Council on the Misuse of Drugs, 1988). This definition is in line with the DSM IV criteria for substance abuse (A.P.A., 1994). The DSM IV criteria for substance dependence and the HAS (1996) criteria for substance misuse add specific items related to drug-specific physical effects such as a withdrawal syndrome. Gilvarry (2000) noted that concern has been expressed about the clinical validity of DSM criteria of abuse and dependence in adolescents. It is suggested that researchers need to take account of poly-drug use, the heterogeneity of youth drug use, as well as the changing patterns across time and cultures (Oetting, 1992).

1.2.3 'Addiction'

May (1997) charted the moral and social developments that have led to the term 'addict' being commonly used to refer to people who experience problems with substance use. Gossop (1996) argued that the sick role assigned to 'addicts' has
allowed treatment to be given, however the price for this is that it perpetuates the myth of the 'addict' as a helpless and passive victim. Davies (1997a) offered a re-framing of the concept of addiction, viewing it not as something that happens to people but rather a set of functional cognitions made necessary by the attributions of those whose primary purpose it is to remove blame and responsibility in a climate of moral censure. The alternative view he presented is of a system where drug taking is seen as positive and done by people who make individual decisions, and take drugs competently or incompetently.

1.2.4 The Role of Opiates in Problem Drug Use

The Department of Health (1999) statistics for the first six months of 1998 demonstrated that the most common drugs of misuse for people presenting to treatment services were heroin and methadone. Egginton and Parker (2000) warned that young heroin users were initially very naïve and ill-informed about the subtle potency of the drug and had little idea of where a heroin career might take them. Hofler and Kooyman (1996) have spoken of the powerful emotional effects on the user of substances such as heroin. Stewart (1987), writing from a user perspective, supported the ideas of Hofler and Kooyman when she suggested that heroin blocked out all other needs and desires but its own. She went on to argue that the balance between use and abuse was often tipped when users found that the drug dulled emotional pain. Heroin was described as a shield for those who feel the pain of existence too deeply, a short-term solution to the life long reality that life is difficult. She believed that observers challenged the behaviour of drug use because the complex emotional struggle that underpinned it was beyond their understanding.

The statistics indicating the widespread use of heroin as a drug of misuse and the descriptions of powerful drug effects are supported by the scientific literature on opiate action. Benton (1988a) argued that the need for social bonding has been bred into humans by evolution. Benton along with Panksepp, Herman, Vilberg, Bishop, and DeEstinazi (1978) suggested that the most likely modulator of such social emotion and behaviour, including relationships, in neuro-chemical terms is the endogenous opioids. They supported this idea when they reported that opiates were
very effective in reducing social induced distress, i.e. attachment calling, in animals.
There is therefore evidence that relates the role of the opiate receptors in the brain to
the attachment function of soothing and the achievement of security when the
individual is placed in anxiety-provoking situations (Benton, 1988b). Kraemer (1985)
argued that differences in early experiences might affect the structure of the brain,
which in turn might lead to a vulnerability to specific drugs. The attachment system
was heavily implicated as a system that could be damaged and it was linked with the
opiate receptor network. The evidence reviewed has indicated that heroin, an opiate
drug of misuse, may be viewed as a drug that might have the ability to soothe fear in
humans and is linked to the modulation of social affect and social attachments (see
also section 1.7.3).

1.2.5 Explanations of Problem Drug Use

Engel (1977) debated ideas regarding the cause of problematic behaviour
between innate pre-dispositions (e.g. Clinical Genetics) and health in terms of
volition and moral choice (e.g. Healthy Living). This dichotomy is reflected in the
literature on problem drug use with a set of ideas developing the role of intra-personal
factors and another promoting a more integrative bio-psychosocial approach.
Newcomb (1995) argued that the individual, as a volitional creature, is the most
proximal cause of problem drug use within a general lifestyle choice, accounting for
why some adolescents choose to take drugs and others do not. In developing the
concept of a 'a willing host', Newcomb and Earlywine (1996) argued that aspects of
personality, cognition, affect, problem behaviours, bio-genetics and bonding were
possible individual factors that may lead to a susceptibility to problem drug use. They
proposed that individuals play an active role in exacerbating their symptoms, and a
parallel is drawn with disorders such as depression or anxiety where people may
maintain the problem by adopting self-defeating coping styles and cognitive
strategies (A.P.A., 1994). Ramm (1996) supported this view when he structured an
argument, which stated that volitional contravention of moral values played a central
role in certain types of emotional and mental disorders.
Peele and DeGrandpre (1998) proposed an alternative explanation, which proposed that the environment mitigates the use of drugs. It was argued that the use of drugs competes against other activities that have a high priority for the user (Lamb et al., 1991), hence problem drug use is thought to be more likely when the environment is impoverished. Davies (1997a) objected to the argument of Peele and DeGrandpre on the grounds that an operant conditioning view is insufficient in that it removes the mental world of the user. His revision suggested that each individual does not respond to a common environment, but rather they react to what they feel the implications and properties of that environment are. The problem drug user is therefore viewed as being unable to resist temptation, which has a moral significance rather than a medical one (Coggans & Davies, 1988). The cost of this explanation in terms of personal responsibility and voluntary action is that it implies that taking drugs is a reasonable adaptation to the world in which we live (Davies, 1997a). Davies (1997b) believed that a balanced fully functional lifestyle is likely to be more drug resistant than one which is chaotic and non-functional for the individual. Orford (1985a) viewed problematic drug-using behaviour in similar terms as a learned psychological process, perhaps an over-learned habit. The ultimate consequence of an impoverished context, especially when the individual has a perception of limited or no control over the context variables, may well be a sense of learned helplessness which will feed into the 'functionality' of the problem user role (Davies, 1997a; Gossop, 1996).

The above arguments have a common factor in that they imply that individual volition has a key part in the problematic use of drugs. The difference lies in the factors influencing the individual, internal (to an extent pre-determined) or external (to an extent constructed). May (1997) suggested that this represented a neglect of aspects of the bio-psychosocial spectrum which is essential to a comprehensive account. Gossop (1996) offered a convincing account of drug use giving equal weight to the components that are argued to mitigate the effect of the drug. These components included the pharmacology of the drug, the psychology of the user, and the social context in which it is taken.
1.2.6 Summary

Problem drug use affects a relatively small portion of the population. It is generally defined in terms of its effect both on the individual and on the capacity of that individual to conduct their social role. Models of addiction have been viewed as ascribing a sick role to 'addicts' in order to legitimise offering them treatment. The most recent explanations of problem drug use invoke a combination of internal and external factors in conjunction with the pharmacology of the drug in determining an individual's over-reliance on drug use. An association is noted between the function of the drug use for the individual and impoverished contexts, both internally and externally. An interest has therefore emerged in casting the contributing factors in problem drug use into categories that increase use, i.e. risk factors, or decrease use, i.e. protective factors.

1.3 Risk and Protective Factors in Problem Drug Use

The focus of this section is to concentrate on the factors that may influence an individual to use drugs incompetently alongside factors that may prevent their use from shifting from competent to incompetent. A clear distinction can be made between the development of drug use and the development of problem use. Lloyd (1998) maintained that the risk factors for problem drug use have a distinct aetiology from those associated with non-problem drug use. Power, Jones, Kearns, and Ward (1996) characterised risk as multi-dimensional and that individual choices must be seated in the social context, norms and mores of any particular group or social network. Gilvarry (2000) argued that there is little evidence concerning the relative importance of different risk factors in the aetiology of drug misuse, especially as many of the risks for adolescent drug misuse also predict other adolescent problem behaviours. Lloyd reviewed the risk literature and divided it into a number of domains giving the central focus to the family factors.

1.3.1 Family Risk Factors

The family is the primary social network of the young person and not surprisingly assumes a central position mediating between environments and providing continuity
through the developmental stages to adulthood (Glynn, 1984). Family dynamics comprise many of the risk factors for the development of problem drug use. Some of the more prominent risk factors are listed:

- **Parental & Sibling Drug Use:** a relationship has been demonstrated between a parental history of substance abuse and greater risk for subsequent members (Hill, Thomson-Ross, Mudd, & Blow, 1996; Nurco, Blatchley, Hanlon, O'Grady, & McCarren, 1998; Orford & Velleman, 1990; Swaim, 1991). Sheehan, Oppenheimer, and Taylor (1988) found in a sample of 150 opiate users that 41% reported parents with a history of drug or alcohol problems. Brown (1989) researched a sample of teenagers with substance abusing parents and compared those who had substance abuse problems with those who did not abuse substances. The findings reported that both groups had comparable levels of life stress, however there were some qualitative differences in the stressors. The stress of the non-abusing group was seen to be related to factors that were independent of their control and more chronic, whereas stress for the abusing groups was related to their own addictive behaviour. Gabel et al. (1998) pointed to the importance of maternal substance use problems as they regarded the mother as often the last line of defence.

- **Family Disruption:** Sheehan et al. (1988) found that 63% of their sample had been brought up with both parents to age 16 years while 17% had one parent and 3% were adopted or had resided in a children's home. Living with a stepparent had a higher risk association and the loss of a parent by death was indicated as a significant risk (Sweeting & West, 1995).

- **Parent-Child Relationships:** Velleman et al. (cited in Lloyd, 1998) indicated that low levels of parent-child communication, poorly defined and communicated expectations of behaviour, excessive and severe discipline, and high levels of negative family interaction were associated with increased risk. Levine and Singer (1988) suggested similar association in that lack of family support, family fun, discussion and interaction were implicated as risks. An insecure attachment relationship, experience of abuse, lack of emotional expression, poor parental management, over/under involved, and having punitive parents were found to be
risks by a series of researchers (Allen, Hauser, & Borman-Spurrell, 1996; Sayre, 1995; Stanton, 1980; Swaim, 1991). Yeh and Hedgespeth (1995) found that substance-using adolescents rated their families as dysfunctional in all major areas of life and the parents of these adolescents viewed them as dysfunctional in all areas of family functioning. Ratti, Humphrey and Lyons (1996) suggested that such hostile interpersonal behaviour originated from the parents, and that externalising problems of the child might be an effort to act out the hostility.

- Child Abuse: Wisely (cited in Lloyd, 1998) found that five of their 24 young heroin users had been sexually abused prior to their heroin use. Griffiths (1998) in her study of intravenous drug mis-users in Cornwall, revealed that 59% of a sample of 111 reported some form of abuse as a child with 25% disclosing sexual abuse. Fergusson and Horwood (1997) also noted a relationship between drug use and child sexual abuse before the age of 16. Styron, Janoff, and Bulman (1997) reported that adults who reported abuse, verbal, physical or sexual, also reported less security in childhood, less security in adult relationships and an increased use of destructive behaviour.

A factor omitted from the family section of the Lloyd (1998) review was that of genetic risk. Kendler, Karkowski, Corey, Prescott, and Neale (1999) in a study of genetic factors in drug misuse revealed that substance misuse was associated with a set of genes that became activated once the substance use had started and predisposed the individual to problems. Two major problems exist for the generalisation of this work: they had a female sample; and the numbers were not great enough to have an analysis for cocaine or heroin abuse. In effect therefore, the study did not tackle factors for the most serious substance misuse which might typically include these substances and also did not consider that males are often over represented in heroin misusing groups. Rutter, Silberg, O'Connor, and Simonoff (1999) argued that present knowledge could only support tentative suggestions for the role of genetics on drug use in young people.
1.3.2 Additional Risk Factors

In addition to the family there is evidence for a series of other risk factors which will be summarised under the following headings.

Environment: The literature has demonstrated an association between 'school failure' and problem drug use (Hawkins, Catalano, & Miller, 1992; Levine & Singer, 1988; Sheehan et al., 1988; Swaim, 1991). However, there is some evidence that anti-social behaviour may pre-date the poor school performance (Hawkins et al., 1992).

Peer Influences: Swaim (1991) placed the contact with a drug using peer group as the central mediating factor that mitigated whether or not the myriad of other risk factors that are implicated in substance abuse will be expressed. In contrast to this, Coggans and McKellar (1994) and Kandel (1985) have suggested that the literature estimates of peer influence are inflated since they have failed to take account of prior similarity which is one of the factors mitigating the formation of friendship groups. Glantz and Pickens (1992) have also argued that peer influences appear to be less significant than previously thought in predicting substance abuse. This leads to the question of causality and Lloyd (1998) pointed out that highly sophisticated research was required to separate the influences of peers. It has been asserted that a firm family foundation is necessary for the young person's increasing exploration of being independent from the family and the move to relying on peers, forming new attachments to close friends and romantic partners (Hurrelmann, 1990; Kandel, 1985). Woodward and Ferguson (1999) found that children who experienced peer problems were at higher risk of later externalising problems in adolescence. They suggested that it was a poor family experience that influenced both peer failure and later externalisation of problems. Aseltine, Gore, and Colten (1994) argued that persistent family turmoil encouraged the fostering of peer relations as an adaptive response to stress. However, if this stress is carried into the peer group it was thought to overburden the normal developmental process.

Conduct Problems: The HAS (1996) report revealed that the 'level of conduct disorder in children is a powerful predictor of drug use in the future and that substance abuse in the absence of conduct problems is rare.' Swaim (1991) argued for a 'difficult child syndrome' featuring hyperactivity and antisocial personality traits as
a risk factor. Brook et al. (1998) concurred when they found that features of early childhood personality such as aggression and disruptive behaviour influenced later drug use. It has, however, been pointed out that although many substance abusers have experienced conduct problems, the converse is not true (Glantz, 1992). Gilvarry (2000) suggested that psychosocial disorder acts as a potent risk factor for substance abuse and that substance abuse potentiates existing disorder.

**Mental Disorder:** Gilvarry (2000) reviewed evidence of the co-morbidity of drug abuse and a range of mental disorders, including anxiety, depression, suicide, ADHD and conduct disorder and indicated the view that the balance of the literature evidence suggests that many pre-date the substance abuse. This is however equivocal. The National Treatment study (NTORS) (Gossop, Marsden, & Stewart, 1998) revealed that, in a sample of problem drug users in treatment, anxiety and depression were often reported, often at severe levels, with 14% of the sample having received community psychiatric treatment. Brook et al. (1998) reported that there was no evidence of anxiety, depression and conduct disorder influencing drug use once the drug use had been initiated.

**Social Deprivation:** Lloyd (1998) suggested that there is common agreement amongst researchers that problem drug users tended to be found in higher numbers in areas of social deprivation. However, Hawkins et al. (1992) concluded that it is only when poverty is extreme and occurs in conjunction with childhood behaviour problems that it is associated with a risk of drug abuse.

**Age of Onset and Frequency of Use:** Egginton and Parker (2000) found that in a sample of young problem drug users, early smoking, drinking and drug experimentation were associated with the use of heroin at age fifteen. This was earlier than previous estimates of the initiation of heroin use (Sheehan et al., 1988).

### 1.3.3 Protective Factors

For the purpose of the present review, protective factors have been grouped into three domains: family; peers; and education (Smith, Lizotte, Thornberry, & Krohn, 1995). The family factors are focused around the bi-directional attachment of child and parent. Peer factors involve the selection of peers with conventional values and
parental approval of the peer group. Education factors include competence, commitment, attachment to teachers, and parents' expectations (Coombs & Landsverk, 1988; Sweeting & West, 1995). Hawkins et al. (1992) suggested that the following factors, which encompass the three domains of family, peers and education, are protective:

- Good parental education
- Parental non use of substances
- Authoritative parenting
- Psychologically stable parents, especially the mother
- A good parent-child bond
- Good school performance
- Expecting to attend college
- Non substance-using peer group
- A later onset of drug use

Many of these factors tackle the domains of risk outlined above and are supported by research evidence such as:

- Young people living with both parents are at less risk for drug problems and more likely to engage in hobbies and reading for pleasure (Miller, 1997);
- Family support and competence in both personal and peer circles reduces the likelihood of drug use problems (Wills, Vaccaro, & McNamara, 1992).

Gilvarry (2000), Lloyd (1998), Mundin, Plunkett, and Christie (1998), and Weinberg et al. (1998) have provided extensive literature reviews of the risk factors associated with problem drug use and reviewed the protective factors also. Protective factors are not necessarily the absence of risk factors but rather are characteristics that may moderate the risk of misuse and enhance resiliency in the individual (Newcomb & Felix-Ortiz, 1992).

1.3.4 Risk Vs Protective Factors

Caution has been urged against the over zealous use of risk factors for predicting future drug consumption as it is pointed out that many people escape drug
problems despite being in a high-risk group (Newcomb, 1995; Smith et al., 1995). Smith et al. reported that of those young people who had been exposed to five risk factors, 60% were not involved in either delinquency or drug use. The reason for this was believed to be due to the effect of a series of protective factors that counterbalance the risk. It is therefore necessary to examine each individual case with regard to their developmental history (Bryant, 1993; Orford, 1985b).

Brook, Brook, Gordon, Whiteman, and Cohen (1990) identified two mechanisms by which protective factors reduce risk for drug use. The first was a 'risk/protective' mechanism by which exposure to risk factors was moderated by the presence of protective factors, an example being a strong attachment to parents' moderating exposure to drug-using peers. The second was a 'protective/protective' mechanism where one protective factor potentiated the effect of another. However, these mechanisms were focused on initial drug-using decisions and not on the movement from normative drug use to problem drug use and were therefore limited in this respect.

Lloyd (1998) argued that the key feature of the risk literature was that it was interconnected and that many of the risk factors for adolescent drug misuse also predicted other adolescent psychosocial problems (Fergusson & Horwood, 1997; Hawkins et al., 1992). One of the key domains of risk and protective factors is the family environment. It has been argued that the family problems often pre-date and may possibly be causative of some of the other risk factors such as conduct problems (Lloyd, 1998; Shedler & Block, 1990).

1.3.5 Summary

The trend in the literature surrounding the issue of drug use and problem drug use is increasingly to divide factors into risk and protective categories (Gilvarry, 2000). Most domains of life including family, peers, and education are implicated in both poles of the analysis with a central focus on the family domain. It has been noted that there is a similar risk/protective factor analysis for a number of mental disorders such as conduct disorder, depression and anxiety and that many of the pre-disposing factors overlap with the substance abuse analysis (Gilvarry, 2000; Hawkins et al.,
The missing piece from the risk/protective factor analysis appears to be a theoretical perspective, which might explain how the balance of factors is expressed in individual behaviour.

1.4 The Role of the Family Network in Adolescence

The primary context for the majority of young people during adolescence will be a 'family' network. It is essential that the nature and consequences of problem drug use are not divorced from this context in which they take place (Davies, 1997a). Rao, Daley, and Hammen (2000) have reported that the occurrence of new onset substance use problems is high during the developmental transition to adulthood. Skolnick (1986) nominated adolescence as the 'critical period' for predicting future socio-emotional functioning. Aseltine et al. (1994) agreed when they stated that the quality of the relationship with parents was shown to have an impact on late adolescent functioning and the development of subsequent disorders. Family relationships are therefore viewed as an important part of the young persons emotional and social world and act as a 'home port' (Hurrelmann, 1990). It is from this foundation that the young person increases his/her exploration of being independent from the family and relies increasingly on peers forming additional attachments to close friends and romantic partners (Bowlby, 1988; Hurrelmann, 1990). The family network processes have been argued to be a buffer from adverse effects of socio-economic and neighbourhood factors on the adolescent. Therefore the family can be seen as central to maintaining low levels of anti-social behaviour such as incompetent drug use (Scheer & Unger, 1998).

In industrialised countries, the age at which young people enter a vocation has steadily shifted to a higher age with an increasing emphasis on education (Hurrelmann, 1990). This places young people in a social position between childhood and adulthood, which effectively means they do not have the personal autonomy of an adult (Dean, 1990). This can be contrasted with the downward shift in the age at which young people begin to adopt adult leisure pursuits such as music, fashion, conversation and sexual relations (Dean, 1990). This extended period of adolescence is a time when young people face the developmental task of differentiating
themselves from parents and family and forging independent identities. This involves experimenting with values and beliefs, exploring new roles, personal boundaries and testing limits (Shedler & Block, 1990). Shedler and Block viewed adolescents not as passive recipients of 'environmental influences' but rather as individuals already appreciably formed psychologically who are actively evoking, actively seeking, and actively forging the circumstances that will suit them and that will then, in an adventitious way, 'impinge' on them.

Gilvarry (2000) argued that substance use and abuse develops during the transitional phase of adolescence (Coombs & Landsverk, 1988). When this developmental stage goes wrong and the delicate balance between parental and peer influence is upset (Burge, Hammen, & Davila et al., 1997), a range of premature transitions to adulthood have been associated with increased drug and alcohol use (Bachman, Johnston, & O'Malley, 1984; Gilvarry, 2000). Griffiths (1999) viewed the management of this transition as crucial when she pointed out the effect of maturity on drug use and suggested that the risk of drug misuse tends to reduce as the life cycle progresses. Gonzales (1988) argued that the aim of development is the confidence that emerges when the adolescent is able to integrate their self-perceptions and the feedback they receive from others with their known past. The central difficulty for the young adult drug abuser is the way in which the chemical use both interferes with and confuses the normal developmental process by limiting the exploration of alternative roles and perspectives (Gonzales, 1988; Stewart, 1987).

1.4.1 Summary

The important role of the family in aiding the adolescent through the developmental stage has been asserted. Failures in negotiating this stage of development have been linked to the increased risk of problematic drug use, which in turn may inhibit developmental progress.
1.5 The Role of Attachment Theory in Explaining the Effects of Family Risk and Protective Factors

Young people's reports of parental social support, warmth and trust in the relationship are increasingly seen to be a reflection of a schemata or knowledge structure that has its antecedents in attachment experiences within the family socialisation environment (Pierce, Sarason, Sarason, Joseph, & Henderson, 1996). Weinfield, Sroufe, Egeland, and Carlson (1999) found 'anxious attachment' to be a risk factor, that is not in itself pathological but the initiation of a pathway that, if uncorrected, will increase the likelihood of pathological conditions. Whereas secure attachment was viewed as a protective factor, not a guarantee of mental health but a probabilistic factor in the developmental construction. Bowlby (1988) argued that attachment theory regards the capacity to make intimate emotional bonds to particular individuals as a principal feature of effective personality functioning and mental health. Bowlby suggested that the key to understanding parent-child interactions in determining mental health is the role of free communication, both emotional and cognitive. When the care giving in childhood is not consistent, responsive and nurturing, this will manifest itself later in life as constricted emotional development, hostile or helpless behaviour (Cook, 1991). Bowlby argued that at birth, the infant has an array of pathways open and the one along which they proceed would be determined at every moment by the interaction of the individual with the environment. This environment will contain both risk and protective factors and how these are handled will potentially be influenced by the coping, which the individual has derived from the emotional bonds that have been forged and their ability to replicate these in adult life.

Hofler and Kooyman (1996) suggested that the process of addiction might be regarded as a delayed maladaptive attachment transition in young adults. It was argued that young individuals who have experienced the lack of a 'secure base' and an unsatisfying attachment, characterised by lack of bonding, physical and emotional closeness, will feel unlovable. This negative image of self in relation to others will create difficulties in their ability to maintain stable emotional relationships, to comfort themselves and to achieve relaxation. It is at this stage that the attraction of a
psychoactive drug is powerful, as the effect on the nervous system will be far beyond any attachment experience they may have had (Charnaud, 1999). Shedler and Block (1990) reported similar findings from a longitudinal study. Direct observations of mother–child interactions revealed that those who subsequently emerged in the frequent drug user group had poorer maternal parenting. They characterised frequent users of drugs as alienated, low in impulse control, distressed and using drugs to compensate for a lack of meaningful human relationships and as an outlet for emotional distress. Mothersead, Kivlighan, and Wynkoop (1998) tested a theory of Brown (1988) who argued that mental representations of parent-child attachment mediate the relationship between parental alcohol use and the development of interpersonal problems. The quality of the attachment to parents was found to determine competence in interpersonal relationships and hence influence levels of interpersonal distress such as intimacy problems and being over controlling in adolescence and adult life with no evidence of a direct relationship between family functioning and interpersonal distress. Allen et al. (1996) found that users of hard drugs were more likely to derogate and lack idealisation regarding their attachment experiences. However, they found no relationship between drug use patterns and attachment categories.

Leighton (1997) has suggested that in the more severe cases, individuals may have learned to use drugs for two purposes. One, for intra-psychic purposes such as, to self soothe, reduce anxiety, feel confident, feel powerful, to quieten inhibiting or critical voices, to relieve boredom, to feel pleasure. Two, for relational purposes such as to allow closeness or affection, to allow sexual contact, to distance self, to feel superior, to punish others and to dissociate. Leighton argued that the drugs are so effective in producing a mood change that the individual abandons less damaging ways of managing painful or difficult situations. The chemically dependent individual is therefore seen as procedurally restricted (i.e. problematic interpersonal and self-management procedures) to begin with because of their family environment background but becomes increasingly so owing to the reliance on chemicals to cope with strong affect. Allen, Aber, and Leadbeater (1990) have suggested that adolescents who engaged in 'deviant behaviour' might have models of themselves as
less competent, less in control and less likely to achieve desired outcomes in social relationships (Rice, 1990). Shedler and Block (1990) suggested that frequent drug users have difficulties with meaningful personal relationships that contribute to them feeling troubled and inadequate. It is therefore suggested that drugs are to used to 'numb out' the feelings creating a vicious cycle (Hofler & Kooymen, 1996). Walsh (1992) concurred with these ideas when it was found that the least attached participants were the most likely to use drugs and engage in earlier sexual activity. Fonagy et al. (1995) has suggested that when caught in a vicious cycle, people negate the capacity to reflect on their mental states, however it is this process that could extract them from the cycle. These ideas fit well with a conceptualisation of psychological problems as a deviation from normal development in an effort toward adaptation (Rosenstein, & Horowitz, 1996).

Griffiths (1998) recognised that a proportion of drug misusers will have been abused and that they may well be using substances as a means of dealing with the painful affects that are associated with mistreatment as a child. This evidence from Griffiths (1998) links with a growing number of commentators who have connected a history of childhood trauma to a group of adult psychopathologies such as post traumatic stress disorder, substance misuse and personality disorders (Holmes, 1999; Leighton, 1997; Wanigaratne, 1999; Wilson, 1999). A common theme of these papers is that substance misuse is viewed as an attempt at coping.

Leighton (1997) argued that the above descriptions, whilst typical of the most severe cases, might not be accurate for all drug misusers. He described two further levels that could be characterised by a less severely damaging upbringing: proneness to genetic vulnerabilities and influences of drug using culture. These people are damaged by 'addiction' but often recover fairly easily with fewer problems (Charnaud, 1999).

1.5.1 Summary

The reviewed work indicates that attachment theory may well have a role in explaining the family influence on the meaning of particular events for the young person. The key areas appear to be interpersonal relations and affect regulation.
Attachment theory may well be able to explain how the family risk and protective factors indicated in problem drug use have a variable effect on different individuals.

1.6 Attachment Theory

John Bowlby developed attachment theory out of the object-relations tradition in psychoanalysis drawing on work from the fields of evolution theory, ethology, control theory and cognitive psychology (Bowlby, 1988). The work challenged the prevailing view of childcare that had been derived from psychoanalysis that the child required only basic needs such as food to thrive (Cassidy, 1999). The new proposal argued that the child required above these basics, a caregiver that could be relied upon to maintain security and to whom the infant could bond emotionally. This bond was seen as the basis of healthy development that continued into adulthood and influenced the personality of the individual (Bowlby, 1988). Leiman (1995) agreed with the principles of attachment theory but raised an objection to the reductionist thinking that imported concepts and explanatory models from biology in order to account for attachment, he preferred a purely psychological explanation. He proposed an alternative developmental theory based on the principles of sign mediation. Skolnick (1986) also raised an objection to attachment theory when she accused Bowlby of being overly deterministic in his view of early attachment and the predictions this made for future development.

Holmes (1993) summarised the main features of attachment theory and this offers a framework around which to highlight the key principles that Bowlby presented.

1.6.1 Evolutionary Perspective

Attachment behaviour is presented as one of a class of biologically rooted behaviours such as sexual activity and feeding. These behaviours were argued to be partly pre-programmed because leaving their development solely to the variations of individual learning would be biological folly (Bowlby, 1988).
1.6.2 Proximity Seeking

Bowlby (1988) stated that to describe someone as 'attached' meant that the individual is strongly disposed to seek proximity to and contact with that individual and to do so especially in certain specified conditions. Bowlby likened attachment behaviour to that which emerges when an individual is afraid. A fear response ensues because there is an increase of risk, in a similar way the human species is disposed to respond to separation from a potentially care-giving figure for the same reason. It is this high emotion which is aimed at dissuading attachment figures from carrying out threats to leave that can easily become dysfunctional. It has been suggested by Charnaud (1999) that a drug may act as an attachment object in the absence of any coherent internal model of emotional security. This argument draws its influence from the wider ideas of object relation theory of which attachment theory might be regarded as one version (Griffiths, 1999).

1.6.3 Secure Base

Bowlby (1988) described the secure base role as one of being available, ready to respond when called upon to encourage and perhaps to assist but only to intervene when absolutely necessary. The child or adolescent could use the secure base from which to make sorties into the world and then return in the knowledge that emotional and physical nourishment, comfort and reassurance would be on hand if required. He went on to say that an urgent desire for love and care is natural when a person is anxious or distressed. Bowlby believed that this might reduce in intensity as the individual aged, yet it was never to be viewed as 'infantile' or 'regressive' behaviour.

1.6.4 Separation Emotion

Bowlby (1988) described a key feature of attachment as the intensity of emotion that accompanies it. The level of emotion is moderated by the qualities of the relationship with the attachment figure. Relationships with a sexual partner, relationships with parents, and relationships with offspring may elicit anger if they are threatened. Each of these is shot through with emotion and to a degree whole
emotional life of a person is determined by the state of these long-term relationships (Bowlby, 1988).

Maintaining the availability of an attachment figure remains the set goal of the attachment system and thus it continues to determine the individual's feelings of security and insecurity across the life span. (Kobak, 1999). Kobak argued that threats to the availability of an attachment figure are often the source of many child and family problems that are encountered by clinicians. Especially when emotions no longer serve as signals that facilitate understanding and communication, instead they become symptoms that appear puzzling and problematic (Kobak, 1999).

Holmes (1999) viewed early experiences as having an impact on how individuals achieve a state of emotional calmness, 'self soothing', in the face of anxiety-provoking events, both internal and external. He argued that the absence of this capacity in individuals with anxious attachments has implications for the problem use of drugs. Peele (1985) viewed addiction as an extreme attachment to an experience that is acutely harmful to the individual but which the addict feels compelled to repeat again and again because he feels it is essential to his/her life. The most powerful addictors are therefore things that increase positive emotion or decrease negative emotion or both. This is not then limited to chemical enhancement but any behaviour or person that can fulfil this purpose e.g. gambling, sex, intense relationships (Orford, 1985a).

### 1.6.5 Internal Working Models

Crowell and Treboux (1995) described working models as cognitive/affective constructs, which develop in the course of behavioural interactions between an infant/child and its parents. Bretherton (1985) argued that a model involves postulates about child role and parent role in relationships, in other words it is a model of the attachment relationship. When the models of self and other become distinct, they represent obverse sides of the same relationship and cannot be understood without reference to each other. Crowell and Treboux (1995) suggested that a model contains information regarding how close relationships operate and how they are used in daily life and in stressful circumstances. They are the basis for action in many situations.
and are in principle open to revision as a function of significant attachment-related experiences.

Crowell and Treboux (1995), in personal communication with Waters, argued that internal working models were important to attachment theory for four reasons:

1. The mental representation of attachment served to explain the effects of early experience on later behaviour and development. Weinfield et al. (1999) supported this idea when they argued that affective regulation and behavioural reciprocity learned in the early attachment relationship should be expected to exert its influence on a child's later development in the context of beliefs about the self and interpersonal relationships.

2. The model provided a mechanism by which the individuals' subjective view and experience could influence behaviour and development. Crittenden (1995) argued in favour of this proposal when she suggested that the distortion or falsification of cognitive and affect information which is used to construe life might result in a vulnerability to psychological problems. The ability to integrate the two types of information in a working model is learned through childhood in order to help the child understand the links between their own affect and other people's behaviour. Bretherton and Munholland (1999) suggested that the internal modelling of self and other in a relationship regulated an individual's relationship adaptation through interpretative/attributional processes that are at the same time reality-reflecting and reality-creating, not only for the individual him/her self but for the relationship partners as well. Fonagy et al. (1995) also argued that those who have a disturbance in the capacity to represent emotions and cognitions in self and other, a capacity they term 'reflective self', may be seen as characteristic of those individuals who are most vulnerable to the stresses of the social world.

3. The working model concept provided an explanation of how attachment responses acted as an appraisal system and guide to behaviour for an individual. Bretherton (1985) suggested that repeated interactions and experiences with attachment figures was presumed to act as a filter for later
experiences in relationships excluding certain information from awareness in adaptation to attachment figures who are unresponsive and/or inconsistent.

The mental representations provided a way of understanding attachment as a tie that binds people across time and space. Whitaker, Beach, Etherton, Wakefield, and Anderson (1999) found support for the assumption that internal working models are mental constructs that guide attachment-related perceptions, affect and behaviour, thus guiding expectations about relationships. They argued that multiple models existed, however, and the most accessible model dominated. They suggested that for relationship judgements, it is the model of self that is dominant. Whitaker et al. concluded that such dominance gave rise to the personality-like appearance of attachment style and reported attachment over time.

1.6.6 Summary

The basic components of attachment theory have been reviewed with a focus on the role of emotion when key relationships are threatened and the concept of a working model of relationships which is argued to be the mechanism by which early experience has an effect on later functioning.

1.7 Attachment in Adulthood

1.7.1 Presence of Attachment in Adults

Brennan and Shaver (1995) defined adult attachment as an orientation to relationships thought to be determined by childhood relationships with parents and subsequent experiences with important attachment figures. Hazan and Zeifman (1999) reviewed the evidence for the existence of an attachment system in adulthood and concluded that attachment is an integral component of pair bonds. They defined attachment bonds as containing four defining features: 'proximity maintenance', 'separation distress', 'safe haven', and 'secure base'. These features were almost exclusively found in two kinds of adult social relationships, with parents and romantic partners. These functions were readily observable in infant-caregiver
interactions and were hypothesised to be linked to protection, however what was less apparent was how attachment may contribute to adult survival. Crowell, Fraley, and Shaver (1999) offered two central aspects of attachment theory that were key to understanding attachment in adulthood. First, the attachment system is active in adults and second, there are individual differences in adult attachment behaviour that have their foundations in attachment experiences and are embodied in attachment representations. Hazan and Zeifman (1999) argued for the presence of the attachment system at work in adulthood when they identified a specific pattern of separation anxiety in adults which was activated when relationships with partners were threatened or ceased. This was not paralleled in the demise of other relationships. Such disruptions were linked to a wide range of physical and psychological ills, including impaired immune function and substance abuse. Weiss (1991) also argued that the behavioural elements of attachment in adult life should be similar to those in infancy. It was suggested that adults do show a desire for proximity to an attachment figure when stressed, increased comfort in the presence of the attachment figure, and anxiety when the attachment figure is inaccessible. Crowell and Treboux (1995) have suggested that the major difference between child and adult attachment is the reciprocal nature of the attachment relationship.

1.7.2 Transition from Child Attachment to Adult Attachment

Weiss (1991) pointed out that the transition from parental attachment to romantic attachment proceeds in fits and starts, beginning with the first attempts to establish a pair bond with a first boy/girl friend. This fosters feelings of security, just as a parent might, and helps to maintain an inner state of wellbeing. Failure to achieve this results in loneliness, which may be most painful. The transformation of attachment is complete when an adult attachment figure is chosen. Hazan and Shaver (1994) suggested that the functions of adult attachment are achieved in a developmental progression through adolescence. Early adolescence is characterised by proximity seeking in close relationships. Seeking the partner as a safe haven in times of need or emergency, and then the use of the partner as a secure base in late adolescence follows this.
Hazan and Zeifman (1999) found that the process whereby partners assumed primary attachment status over parents began in adolescence around the ages of 15-17 years. They argued that the process of transition was built into the parent-child attachment relationship as this is based on providing security for social exploration. The endpoint of this transition is the increase of time spent in the company of peers and an increasing reliance on peers as havens of safety, thereby paving the way for attachment formation with romantic partners. Allen and Land (1999) similarly argued that the central function of adolescent attachment relationships with parents might be to provide an emotional secure base. From this base the adolescent can explore the wide range of emotional states that arise when he or she is learning to live as a relatively autonomous adult. Adolescent emotional dysregulation may frequently appear in the form of 'emotional crises' in which the adolescent feels he/she cannot cope. Developing the capacity to regulate such affect without distortions, even in regard to highly charged issues, may well enhance the ability to form and sustain future relationships and ultimately to nurture offspring of their own. Therefore, Allen and Land concluded that the last task for parents to achieve is the support of their adolescents capacity to cope with the affect engendered in learning to live independently of parental care-giving. Trinke and Bartholomew (1997) concluded that young adult undergraduates possessed attachments to multiple figures. They found that participants ranked romantic partners most highly as attachment figures followed by mothers, fathers, siblings, and best friends. It was suggested that when a romantic attachment is formed, the previous attachment order remains unchanged but is displaced by the partner assuming primary attachment status.

1.7.3 Function of Adult Attachment

Hazan and Zeifman (1999) argued that the protective function of attachment is not limited to physical strength, even in infancy. They put forward the idea that despite increasing capacities for self-reliance and self-protection, adults may still benefit from having someone who is deeply committed to and invested in their welfare, looking out for them and reliably available to help if needed (Oatley, 2000). Oatley (2000) has suggested that attachment is based upon the emotion of anxiety, as
this is linked to its protective function. Hazan and Zeifman (1999) suggested that pair bonds, facilitated by attachment, are responsible for reproductive advantages. They not only contribute to the survival of offspring but also leave those offspring better equipped to attract and retain mates of their own. Hazan and Zeifman offered as an example parents who divorce and whose children in turn are more likely to adopt mating patterns that emphasise quantity over quality such as precocious sexual interest, more negative attitudes to potential mates and less interest in long term relationships.

Hazan and Zeifman (1999) structured an argument that suggested attachments are mediated by the endogenous opioid system. The function of these opioids is described as alleviating anxiety along with a powerful conditioning effect. Opioid conditioning is argued to be the expected result of repeated anxiety and/or tension alleviating interactions. Exchanges of this kind are a common feature of both infant-caregiver relationships and adult romantic relationships. Hazan and Zeifman suggested that each time a parent comforts a crying infant they become associated with the alleviation of distress. Romantic partners, similarly, through repeated comforting exchanges, including the release of tension associated with sexual climax, associate their partners with stress reduction and calming (Field & Reite, 1985). Relationships, therefore, that develop into attachment bonds are argued to be those in which heightened physiological arousal is repeatedly attenuated by the same person and in the context of close bodily contact. As such, attachment may involve the conditioning of an individual's opioid system to the stimulus of a specific other. The transition from an arousal enhancing to arousal moderating effect of the partner's presence signals clear-cut (adult) attachment. The 'flip side' of this ability to calm each other reflects the presence of another attachment component, separation anxiety. Hazan and Zeifman (1999) therefore stated that attachment pair bonds are not simply alliances built on altruism but rather involve profound psychological and physiological interdependence, such that the absence or loss of a partner can literally be life threatening. However, an implication of the ideas of Hazan and Zeifman is that any stimuli paired with opiate drugs might become associated with their calming
effects and be strongly preferred; such preferences are reported to be extremely
difficult to extinguish.

1.7.4 Influence of Early Attachment on Later Development

Weinfield et al. (1999) suggested that there are four possible explanations for
why early attachment relationships influence later development: First, it is possible
that the experiences within the early attachment relationship influence the developing
brain. Second, the early attachment relationship may serve as a foundation for
learning affect regulation. Third, that a process of behavioural regulation and
behavioural synchrony influences subsequent development. Fourth, the representation
of what the child comes to expect from the world is carried via an internal working
model.

Bowlby (1988) argued, as did Shedler and Block (1990), that patterns of
parental deprivation are one of the primary causes of later disturbances. Bowlby
argued that adverse childhood experiences act on the individual in at least two ways.
First, they make the individual more vulnerable to later adverse experiences. Second,
they make it more likely that he/she will meet with further adverse experiences. The
earlier events might well be beyond the control of the individual, however, the later
ones are likely to be the consequences of his/her own actions, actions that are derived
from those disturbances to the individual personality mitigated by the earlier
experiences (Cook, 1991). Skolnick (1986) presented research evidence, based on a
longitudinal study, that appeared to support the ideas of Bowlby suggesting that there
is a striking variety of pathways individuals can take across the life course. It was
concluded that the working models of self and others mediate between an objective
social reality and the individual responses to that reality. It is the product of this
interaction that was argued to determine whether the individual would suffer
difficulties rather than the presence of difficult relationships in childhood per se.

Crowell et al. (1999) suggested that individual differences in the organisation
of attachment emerge from care-giving interactions with attachment figures and
subsequently have numerous influences on adult attachment relationship dynamics
such as contributing to the failure of these relationships resulting in loneliness and
restlessness. Henry and Holmes (1998) found that individuals exposed to parental conflict and divorce were most at risk. They argued that such people were more likely to struggle romantically, have lower self-esteem, and be less confident in social situations. The compromised relationships with both parents suggested that they had fewer social supports to buffer the negative interpersonal events contributing to their vulnerability.

1.7.5 Individual Attachment Differences

Rholes, Simpson, and Stevens (1998) concluded that the behavioural features of secure and insecure attachment styles are most likely to be witnessed in situations that activate the attachment system and the individuals working models. Situations that might provoke activation of the attachment system were proposed to be fear-provoking situations; challenging situations; and conflictual interactions (Kobak & Duemmler cited in Rholes, Simpson, and Stevens, 1998).

Allen et al. (1996) found that in a sample of young adults, reports of hard drug use were not related to attachment categories, but the drug users derogated their attachment experiences. Rosenstein and Horowitz (1996) however, found that adolescents with substance abuse problems were shown to be twice as likely to fall into avoidant attachment categories as non substance abusing patients, however substance abuse was not as strong a predictor of avoidant attachment as conduct disorder. Rosenstein & Horowitz cautioned that attachment organisation did not equate to a psychiatric diagnosis. It was argued that environmental and constitutional factors such as family history of psychopathology, trauma, unfavourable socio-economic conditions coupled with insecurity of attachment to contribute to the ultimate emergence of a psychiatric disturbance.

Levitt, Silver, and Franco (1996) concluded that a history of difficult attachment may pre-dispose individuals to involvement in troubled relationships and limit their ability to cope effectively with them. They found that using substances to cope was associated with the male gender, having avoidant relationship style, and having low self-esteem. Henderson (1982) suggested that the crucial property of social relationships is how adequate they are perceived to be when individuals are
under adversity. In this process of perception, Henderson implicated a role for attachment in influencing how the world will be construed, suggesting that people with less functional attachment experiences may have less confidence in their relationships ability to cope with adversity. Burge et al. (1997) reported evidence of a link between the content of attachment cognition and symptomatology. The strongest predictor of the broadest range of symptomatology, including substance misuse, was attachment cognition about romantic partners. They found that women who think of others as dependable and close and who communicate with and trust their parents and peers are less likely to exhibit a variety of symptomatology. However, no specific relationships were demonstrated between particular attachment cognition and particular symptoms. They suggested that insecure attachment cognition plays a role by leading to a particular vulnerability to interpersonal stress and a tendency to create interpersonal distress leading to a cycle that creates difficulties in seeking and accepting help.

Allen, Moore, Kuperminc, and Bell (1998) found that secure attachment organisation broadly influenced psychosocial functioning by the presence of a capacity for internal organisation of affect and cognition surrounding attachment experiences. It was suggested that insecure organisation may reflect a pattern of repeated yet unproductive attention to (and expression of) internal signs of distress. Such styles might be interpreted as attachment behaviours that implicitly seek comfort from others, or maybe a substance, and may become hyper-activated in some people. Mikulincer and Florian (1998) argued that attachment style may be regarded as a valid predictor of the way in which people cope with stressful events. They suggested that secure attachment is an inner resource that may help an adult to positively appraise stressful experiences and to cope with these constructively while the insecure person is viewed as at risk of poor coping and maladjustment. Hesse (1999) argued that a central factor in differential outcomes is believed to involve differences in both the quantity and quality of and the capacity to regulate and integrate emotion. Fraley, Davis, and Shaver (1998) stated that individuals organise their interpersonal behaviour in a way that minimises attachment-related issues. This defensive strategy is reflected in the ways they regulate their attention,
behaviour and emotions. Feeney (1999) concurred and developed an argument that individual differences in attachment style are thought to reflect experiences of regulating distress with caregivers. Through these experiences an individual learns strategies for organising emotional experience and handling negative feelings, and these strategies come to be applied to other distressing situations. Therefore, partners have a moderating effect on the other's arousal (Field, & Riete, 1985). Secure individuals, having experienced responsive care giving, are expected to handle negative feelings in a relatively constructive manner by acknowledging distress and turning to others for support. Avoidant individuals are likely to restrict the acknowledgement and expression of negative feelings, having learned self-reliance as a way of reducing conflict with rejecting or insensitive caregivers. Ambivalent individuals are expected to show heightened awareness and expression of negative feelings, learned as a way of maintaining contact with inconsistent caregivers.

Feeney (1998) and Sroufe (1996) have argued that attachment theory is primarily a theory of dyadic affect regulation, rather than a trait-like construct that influences behaviour in all settings. Feeney found a link between male attachment security and their coping strategy when they were faced with threats to romantic relationships. Coping by confrontation appeared to be the most adaptive and was associated with attachment security whereas escape was associated with destructive behaviours such as reliance on alcohol or drugs and attachment insecurity. Magai (1999) suggested that adults might engage in addictive behaviours to regulate affect, either to reduce negative or enhance positive. Magai also argued that the effect of addictive behaviours had negative consequences for attachment relations.

1.7.6 Two Traditions of Adult Attachment

In conceptualising adult attachment, two traditions of research have developed with differing viewpoints and approaches to the measurement of attachment. One school is focused on the work of Main and her colleagues while the other is based on the work of Hazan and Shaver (1987). A brief description of each approach is offered.
Main and colleagues who developed the Adult Attachment Interview (AAI) (George, Kaplan, & Main cited in Bartholomew, & Shaver, 1998) represent one school of research. This research focused on the possibility that adult "states of mind with respect to attachment" (i.e. adults' current representations of their childhood relationships with parents) affected parenting behaviour, which in turn influenced the attachment patterns of the parents' children. Kobak (1999) argued that the focus on the mental processes might provide an account of how attachment strategies in infancy may become internalised aspects of the individual's personality. The school utilised the AAI which is a semi-structured interview protocol focusing on an individual's description of salient early attachment experiences and the effects of these experiences on current personality and functioning. The administration and scoring of the measure requires comprehensive training, especially in examining the transcript for features of attachment (Hesse, 1999). Main and colleagues found that an association existed between the parents' attachment scoring from the transcript and their child's attachment pattern derived from the strange situation. Researchers who fall into this tradition tended to think psychodynamically, be interested in clinical problems, preferred interview measures and behavioural observations over questionnaires, studied relatively small groups of subjects and focused their attention on parent-child relationships (Bartholomew & Shaver, 1998).

The second school of research was pursued by Hazan and Shaver (1987) who reasoned that most chronically lonely young adults were unsuccessfully seeking a secure romantic attachment, and that orientations to romantic relationships might be an outgrowth of previous attachment experiences. They devised a simple self-report questionnaire based on the patterns of childhood attachment proposed by Ainsworth, Blehar, Waters, and Wall (1978). The measure asks people to think back over their most important relationships and decide which of the three types is the most self-descriptive. A few studies have correlated this measure with retrospective reports of childhood experiences with parents, however, the bulk of the research in this tradition has focused on the influence of attachment patterns on personal adjustment and adult relationships (Bartholomew & Shaver, 1998). Researchers in this tradition have postulated that an interpersonal mediating process, rather than intra-psychic one, is
responsible for the continuity of attachment throughout development (Stein, Jacobs, Ferguson, Allen, & Fonagy, 1998). Hazan and Shaver were personality/social psychologists and were joined by researchers who tended to think in terms of personality traits and social interactions, were interested in normal subject populations, preferred simple questionnaire measures, studied relatively large samples and focused on adult social relationships (Bartholomew & Shaver, 1998). Hesse (1999) has pointed out that self-report inventories have not been demonstrated to have a relationship to the subject's strange situation response in infancy as the AAI has done.

Bartholomew (1990) reviewed the literature from both traditions and concluded that the two approaches differed in a number of ways. It was argued that the two approaches reflected differing conceptualisations of adult attachment and that they focused on different domains, one retrospective and the other more recent experiences. Building on both traditions Bartholomew proposed an expanded model of adult attachment that included two forms of avoidance (see Figure 1). This model is currently the most influential in the personality/social literature tradition of attachment (Klohnen & John, 1998). Bartholomew and Horowitz (1991) described four prototypical attachment patterns defined in terms of two dimensions: positivity of a person's model of self; and positivity of a person's model of the other. The self-model indicates the degree to which a person has internalised a sense of his/her self worth, therefore is linked to the level of anxiety regarding others' approval. The other model indicates the degree to which others are generally expected to be available and supportive, therefore linked to the tendency to seek out or avoid closeness to others. The prototypical patterns are:

- Secure individuals have an internalised sense of self worth and are comfortable with intimacy in close relationships.

- Preoccupied individuals anxiously seek to gain acceptance and validation from others, seeming to persist in the belief that they could attain safety if they could only get others to respond appropriately to them.
• Fearful individuals highly dependant on others acceptance and affirmation but because of negative expectation they avoid intimacy to avert the pain of loss or rejection.
• Dismissing individuals avoid closeness because of negative expectations but maintain a sense of self worth by defensively denying the value of close relationships.

Figure 1 The Two-Dimensional, Four-Category Model of Attachment (Bartholomew, 1990; Bartholomew & Horowitz 1991).

Positive Model of Other

<table>
<thead>
<tr>
<th>Positive Model of Self</th>
<th>Secure</th>
<th>Pre-occupied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Model of Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dismissing</td>
<td></td>
<td>Fearful</td>
</tr>
</tbody>
</table>

Negative Model of Other

Three of these patterns, i.e. secure, preoccupied and dismissing are conceptually similar to the AAI attachment categories and three, i.e. secure, preoccupied and fearful are conceptually similar to Hazan and Shaver's attachment categories (Bartholomew & Shaver, 1998). Bartholomew and Shaver found that adult attachment measures differed in terms of domain (family or romantic relationship),
method (interview or self-report, dimensionality (categories or dimensions), and categorisation systems. However, when appropriate comparisons were made then considerable evidence existed for a convergence across various measures of adult attachment. The results of their work suggested both, that there may be a single representational system underlying responses to attachment measures and also that an individuals domain-specific attachment patterns can be substantially different.

Brennan, Clark, and Shaver (1998) have developed a new measure of adult attachment that utilises the two dimensional structure of the Bartholomew and Horowitz (1991) model. The model of 'self' is characterised in terms of attachment anxiety and the model of 'other' as attachment avoidance. This development reflects a change in focus in attachment measurement in the close relationship tradition from category assessment to assessment in terms of dimensions (Fraley & Waller, 1998).

1.7.7 Summary

Evidence has been reviewed which has asserted the presence of the attachment system in adults and the function of the attachment system in maintaining relationships. A primary function of the attachment system in adults appears to be the regulation of emotion, and specifically how the close relationships of an adult are utilised in the process of emotion regulation. The influences of early development on adult attachment have been acknowledged and the impact of subsequent individual differences of attachment in adults. A brief review of the two traditions that have developed in adult attachment ended with a focus on the two dimensional model of adolescent and adult attachment proposed by Bartholomew and Horowitz (1991) and the recent further development of the dimensions by Brennan et al. (1998).

1.8 Rationale & Clinical Implications of the Research

The current research was carried out in the context of an NHS Trust Community Drug Service. The Service had expressed an interest in learning more about the role of the family for young people experiencing problems with drug use. The main aims of the study therefore were to determine:
• Whether young people who have a problem with drug use are associated with a particular attachment organization.
• Whether young problem drug users have had different family background experiences than young people who do not have drug use problems.
• Whether young people who experience problems with their drug use feel less hopeful about their ability to influence their future lifestyle than young people who do not have problems with drug use.

The potential benefits to healthcare from this research were in the potential establishment of the emotional life of the young person as a central factor in the problematic use of drugs. This was explored from an attachment theory perspective, which may potentially provide a concept by which the family experiences of young people can impact upon the young person's ability to establish and maintain supportive close relationships within their peer group. The establishment of such a link would potentially offer treatment services a rationale for developing interventions that address the family life, the interpersonal skills, and the underlying emotional constructs of young people.

1.9 Research Hypotheses

1.9.1 Hypothesis One

This hypothesis concerned the attitudes of the young people to drug use. The specific hypothesis proposed that:

1 The key words, describing drug use, gathered from the problem group will have a significantly different category allocation from those of the control group thus reflecting differing attitudes to drug use.

1.9.2 Hypothesis Two

These hypotheses concerned the belief that evidence would be revealed in support of a specific pattern of attachment in close relationships for young people who have problems with drug use. The specific hypotheses proposed that:
1 The problem group will differ significantly from the control group on the dimensional measure of attachment avoidance in that they will have higher levels of attachment avoidance.

2 High scores on the attachment avoidance dimension will be positively correlated with the high scores on the measures of 'lifetime drug use', 'current drug use', and the index of 'drug-related problems' across all the young people.

3 The problem group will differ significantly from the control group on the dimensional measure of attachment anxiety in that they will have higher levels of anxiety.

4 High scores on the attachment anxiety dimension will be positively correlated with the high scores on the measures of the lifetime use of drugs, current drug use, and the index of drug-related problems across all the young people.

1.9.4 Hypothesis Three

These hypotheses concerned the role of feelings of hopelessness in problem drug use based on the premise that those people who experienced the most problems might feel more hopeless. The specific hypotheses proposed that:

1 The problem group will score significantly higher levels of hopelessness than the control group.

2 High scores on the hopelessness measure will be positively correlated with the high scores on the measures of the 'lifetime drug use', 'current drug use', and the index of 'drug-related problems' across all the young people.
1.9.5 Hypothesis Four

These hypotheses concerned the belief that family background experiences might differ for the young people who were experiencing problems with their drug use. The specific hypotheses proposed that:

1. The problem group would differ significantly from the control group on the measure of overall family functioning in the respect that the problem group would have a poorer index of family functioning.

2. Low scores for overall family functioning will be negatively correlated with high scores on measures of the 'lifetime drug use', 'current drug use', and the index of 'drug-related problems' across all the young people.

3. The problem group will have poorer family functioning indexes on the sub-scale measures indicated in the risk literature. These are: 'family stress', 'parental coalition', 'mother and father acceptance', 'mother and father educational involvement', 'mother and father substance abuse', 'mother and father responsiveness' and 'mother and father psychological adjustment' than the control group.

4. Low scores for the family functioning sub-scales of: 'family stress', 'parental coalition', 'mother and father acceptance', 'mother and father educational involvement', 'mother and father substance abuse', 'mother and father responsiveness' and 'mother and father psychological adjustment' will be individually negatively correlated with the measure of 'lifetime drug use' across all the young people.

1.9.6 Hypothesis Five

This hypothesis concerned the proposal that an association would exist between the sub-scales of the family background measure that, based on the
literature, might be expected to have an impact upon the attachment dimensions. The specific hypothesis proposed that:

1. The lower scores for the family background sub-scales indicated in the attachment literature will be associated with the higher scores on the attachment dimensions of avoidance and anxiety. These were considered to be; 'mother and father responsiveness', 'mother and father acceptance', 'mother and father physical abuse', 'expression of affect', 'parental coalition' and 'family stress'. 
Chapter 2
Method

2.1 Design
A mixed design of comparisons between groups and a correlation component within the group was utilized within a cross-sectional research strategy. The cross-sectional nature of the study meant that issues of causality were not addressed and associations were carefully interpreted. A number of authors have referred to the fundamental fallacy of thinking in terms of linear causality when two elements are found together (Bryman & Cramer, 1999; Davies, 1997a; Deren, 1986; Glynn, 1984; Howell, 1992; Stanton, 1980).

2.2 Participants
The total sample comprised 52 participants aged 16-20 years old with a mean age of 18.42 (SD = 1.24) years drawn from two groups. The first group was a problem sample drawn from young people attending treatment services regarding problem drug use. The second group was a non-problem sample of young people from the general population, which served as a control group.

The problem sample included 22 participants, with a mean age of 18.68 (SD = 1.09) years, who were receiving treatment for problem drug use [i.e. use which is harmful, dependent, or part of a wider spectrum of problematic or harmful behaviour (HAS, 1996)] from specialist drug services. All of the young people seen by the treatment service qualified for a DSM IV (A.P.A., 1994) diagnosis of substance dependency.

The non-problem control sample included 30 participants, with a mean age of 18.23 (SD = 1.33) years, who were non-problem users [i.e. experimental & recreational] or non-users of illicit drugs. Information regarding gender, work and ethnicity for both groups is contained in Table 1.

Potential participants for the problem group were excluded from the current study if they had received therapeutic intervention that specifically addressed family or relationship issues or if they were judged, by their case manager, to be too
disturbed to be approached. Potential participants for the non-problem control group were excluded from the study if they indicated that they had current contact with drug treatment services.

Table 1  Basic Demographic Information for the Problem and Control Groups.

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Sub-Category</th>
<th>Problem</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>77.3% (n=17)</td>
<td>53.3% (n=16)</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>22.7% (n=5)</td>
<td>46.7% (n=14)</td>
</tr>
<tr>
<td>Work</td>
<td>Employed</td>
<td>31.8% (n=7)</td>
<td>13.3% (n=5)</td>
</tr>
<tr>
<td></td>
<td>Benefits</td>
<td>63.6% (n=14)</td>
<td>16.7% (n=4)</td>
</tr>
<tr>
<td></td>
<td>Education</td>
<td>4.5% (n=1)</td>
<td>70% (n=21)</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>White</td>
<td>95.5% (n=21)</td>
<td>80% (n=24)</td>
</tr>
<tr>
<td></td>
<td>Asian</td>
<td>16.7% (n=5)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>African</td>
<td>3.3% (n=1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dual</td>
<td>4.5% (n=1)</td>
<td></td>
</tr>
</tbody>
</table>

A total of 37 potential participants met the criteria for inclusion in the problem group from the current caseload or new referrals to the specialist Drug Service. Four people declined to take part and four people were judged by their case managers to be unable to participate for reasons that included imprisonment, hospitalization and acute distress. Seven people failed to attend a series of arranged appointments and therefore were not interviewed. In total, 53 (66%) arranged appointments were not attended. This was indicative of the fact that to secure an interview, on average, 3-4 appointments were made with each participant and also the high rate of non-attendance within the service. In the control group, no participants were excluded and none refused consent after the study was explained. However four participants who had given consent failed to return their questionnaires.
2.3 Measures

2.3.1 Choice of Attachment Measure

Constructs such as attachment have been found to be extraordinarily difficult to assess (Crowell et al., 1999; Stein et al., 1998; Weinfield et al., 1999). Developments in the measurement of adult attachment were a response to critics who have stated that the categorical approach lacked the ability to adequately represent individual variation of attachment systems within social groups (Leiman, 1997; Rosenstein & Horowitz, 1996). Fraley and Waller (1998) argued that a dimensional approach maximised measurement precision and validity. Brennan et al. (1998) focused on the dimensions of self, i.e. anxiety about abandonment, and other, i.e. avoidance of closeness, which became the basis for what is argued to be a much more powerful and reliable measure of attachment. Brennan et al. (1998) concluded that the increased precision demonstrated for the new multi-item dimensional measures gives cause to be optimistic that new developments in the social / personality tradition of the attachment literature may result in a greater convergence with the AAI interview tradition (Crowell et al., 1999; Stein et al., 1998).

Brennan et al. (1998) believed that attachment interviews, such as the AAI, are powerful and perhaps uniquely revealing but impractical for many researchers. Self-report was said to be subject to response biases, reliant on research participants honesty and self insight, which are probably limited, but especially so when fears and defences might limit awareness of attachment patterns (Crowell & Treboux, 1995). However, self-report measures have been found to be unrelated to measures of verbal intelligence (Treboux cited in Crowell et al., 1999), and with measures of social desirability (Fraley et al., 1998). Crowell et al. (1999) argued that, despite criticisms, self-report measures are appropriate for investigating individual differences in adult attachment. They believed that adults are able to self-report valuable information about their emotional experiences and behaviour. They also suggested that close relationship measures of attachment had the ability to tap theoretically meaningful variables among individuals who are not currently involved in relationships.
The new dimensional measure of attachment was chosen on the basis that it appeared to be the best measure available at the time of the study with the benefits of the measure outweighing the limitations.

2.3.2 Background Information Questionnaire [BIQ, Appendix A]

This was a brief measure designed specifically to gather information regarding accommodation, whether they lived with family or independently, school leaving age and current occupational status.

2.3.3 Drug Use Questionnaire [DUQ, Appendix B]

This was a questionnaire devised by modifying a measure that had been used in the drug service for audit purposes. It consisted of a self-report questionnaire regarding drug use and experiences. Although self-report measures for drug use are vulnerable to under/over reporting, the findings of a number of studies indicate that such data have high validity (Shedler & Block, 1990; Weiss et al., 1998). The measure yielded five indices of drug use:

- Index of lifetime use of legally available drugs (i.e. alcohol & tobacco).
- Index of lifetime use of controlled/illicit drugs.
- Index of current, last month, use of legally available drugs (i.e. alcohol & tobacco).
- Index of current, last month, use of controlled/illicit drugs.
- Index of problems experienced because of illicit drug use.

2.3.4 Attitudes to the Experience of Drug Use [Appendix B]

This was a qualitative measure that asked each participant to generate five words which characterized their attitudes to drug use based on their experiences of drug use. A similar strategy was used in the Adult Attachment Interview (Main & Goldwyn cited in Hesse, 1999) when participants were asked to generate five words regarding their experiences of childhood.
2.3.5 *Experiences of Close Relationships Questionnaire* [ECRQ, Appendix C] (Brennan, Clark, & Shaver, 1998)

The ECRQ is a 36-item self-report measure that assesses attachment style in close (romantic) relationships. The measure was adapted for the present research in consultation with the original author. The adaptation was limited to the term 'boy/girl friend' replacing references to 'partners' in order to increase understanding. The measure yielded two scale scores: one for Anxiety and one for Avoidance along with an Attachment category. The categories are based on the Bartholomew and Horowitz (1991) system, which utilized secure, fearful, preoccupied and dismissing. The 36 items represent two 18-item scales, which were constructed from a pool of 323 items drawn from all extant self-report adult attachment measures (Brennan et al., 1998). The chosen items were the ones that had the highest absolute valuation correlation with one of the two higher order factors, namely Avoidance and Anxiety. The two scales were reported to be almost uncorrelated (r = .11) whilst each correlates very strongly with the parent factor (r = .95 in both cases). A seven-point response scale was used for each item, ranging from total agreement to total disagreement. The undergraduate student sample from which the initial data were derived had a median age of 18 years. The allocation of attachment categories was based upon the factors from this population data (Brennan et al., 1998). The two 18 item scales have demonstrated high internal consistency and having been based on a large and comprehensive item pool, may be more precise than previous scales (Fraley & Waller, 1998). The two dimensions remained analogous to the ones first reported by Ainsworth and colleagues (Ainsworth et al., 1978) and were argued to be the foundations of all attachment research. The research to provide additional reliability and validity data is ongoing, and published data is not yet available (K. Brennan, personal communication, May 5, 2000).

2.3.6 *Beck Hopelessness Scale* [BHS] (Beck & Steer, 1993)

The BHS is a 20-item self-report instrument that assesses the degree to which an individual holds negative expectations towards his/her future. The underlying assumption is that Hopelessness can be objectively measured by defining it as a
system of cognitive schemas with a common denominator of negative expectations (Beck & Steer, 1993). The scale has been used extensively with adolescents, and has been shown to have high internal consistency (KR-20 coefficient alpha = .93) and a relatively high correlation with clinical ratings of hopelessness (r = .74) in a population of 294 hospital patients with recent suicide attempts (Beck, Weissman, Lester, & Trexler, 1974).

2.3.7 Family Background Questionnaire [FBQ] (Melchert & Sayger, 1998)

The FBQ is a 179-item instrument that includes 22 sub-scales designed to measure family variables that the research literature has suggested have a significant influence on family functioning and psychosocial development. It also includes a total scale designed to measure the overall level of family of origin functioning and is comprised of items from each of the sub-scales (except for chores). The instrument was used with permission from the original author and linguistically adapted for UK participants by the current researcher under instructions from the original author. This was limited to replacing American terms such as 'grade school' and 'high school' for 'junior' and 'secondary school'. The measure enquired about the memories of family of origin experiences before the age of 16 years. A five-point response scale was used for all of the items in the instrument. The reported internal consistency of the FBQ using the Cronbach alpha procedure was .98 for the total scale, and the co-efficients for the sub-scales ranged from .76 to .96, with 47% of the co-efficients at least .90. The reported test-retest reliability was .96 over a two-week interval, and reliability co-efficients for the sub-scales ranged from .59 to .93, with 27% of the sub-scales having co-efficients of above .90. The sample from which these reliability and validity indicators were derived included a sub-sample of people in treatment for chemical dependency (Melchert & Sayger, 1998).

In the original Melchert and Sayger study, three licensed psychologists with research and clinical experience had been used to assess content-related validity. They unanimously agreed with the appropriateness of all the FBQ items for measuring family functioning. A principle component analysis resulted in a 20 factor solution
that supported the comprehensive scale structure of the instrument (Melchert & Sayger, 1998).

2.4 Procedure

The problem of drug use as an illegal activity might produce barriers for access to participants, this consideration influenced the procedures described. The differences in procedure for the control group were put in place to address this dilemma. Approaches had to be devised for dealing with confidentiality (Murray & Perry, 1987), intoxication (Davies, 1997b) and the tendency of young problem drug users to drop in and out of the services thus losing contact (Unell, 1998). The local National Health Service ethics committee granted ethical approval for this study.

The problem group was recruited from the current treatment cases of a Community Drug Service. The researcher initially identified all the young people within the target age group from the drug service client database. The identified case manager for each client was then approached in order to seek their permission and co-operation regarding the potential inclusion of their client in the study. If the case manager did not raise an objection to the potential participation of their client, arrangements were made for the researcher to be introduced to the client by the case manager. Those eligible for the study received an explanation of the nature of the study from the researcher, including a printed information sheet (Appendix D) for those who stated that they could read, and were reassured that refusal would not affect their treatment. If the client agreed to participate they were asked to give their written consent and an interview was arranged with the researcher.

Consenting participants for the problem group had the measures presented by the researcher in a structured interview lasting approximately one hour. The researcher presented the measures in the order that they are described in section 2.3. The participant had, when relevant, a large format version of the response scales for each measure to assist him/her with their responses whilst the researcher recorded their responses. Participants were offered additional appointments if they were unable to complete the measures at the first interview owing to difficulties such as intoxication and loss of concentration. If a participant had concerns arising from any
aspect of the interview, he/she had the opportunity to address these with their case manager who provided on-going support. The problem group participants were not paid for their participation.

The control group was drawn from the general population of 16-20 year olds. Specific areas were targeted for recruitment in an attempt to have volunteers who were representative of both genders and a range of ages and social circumstances. They volunteered by responding to information regarding the study (i.e. leaflets & posters offering a CD voucher reward). Where this information was displayed on the premises of a particular responsible organization (e.g. supported living project, youth group, college, university and young offenders attendance centre), the researcher gained prior approval from the individual in charge. Interested individuals were given the study information sheet (Appendix E) by the researcher and invited to ask questions if they were unsure about any aspect of the study. If the respondents expressed continued interest in participating they were asked to give written consent by the researcher. All volunteers were given information about local drug services and youth counselling services in order that, if their participation in the study raised any issues for themselves or their friends, they would be able to access the appropriate service. Those volunteers who indicated that they were unable to complete the measures owing to literacy or other difficulties were offered appropriate assistance from the researcher, either individually or as part of a small group. Whenever it was possible, the self-report measures were completed by the volunteer without assistance and returned by post in a sealed envelope to the researcher once completed. All volunteers were presented the measures in a folder, arranged in the order that they are described in section 2.3, and asked to complete the measures in the order they were given to them. The return of the completed measures prompted the issuing of a £5 CD voucher to the volunteer. The participants return envelopes were coded with a participant number in order to identify the recipient of the CD voucher. The coded envelopes and the returned measures were separated on opening and the envelopes destroyed. Once returned, no coding remained that could identify the participant who had completed the measures.
2.5 Data Analysis

Prior to the study, referral rates to the county Drug service indicated that a reasonable number to expect in the time frame allowed would be twenty-five problem drug using participants within the targeted age group. Power calculations indicated that with this number the effect size, i.e. the difference between the means of the two groups, would have to be approximately one standard deviation in order to achieve a high power ratio of 0.8. Early indications from the drug use measures indicated that such an effect was not unreasonable. However, these measures were specifically related to the selection of the participants and therefore the most likely to produce a large effect size. The measures of close relationships, family background, and hopelessness would not typically be expected to generate an effect size of a similar magnitude. Therefore, it was necessary to be aware of the potential reduction in power associated with these measures when used with a relatively limited sample size.

The data produced by the described measures was entered into the statistical computer package SPSS for Windows version 10. The final data set was examined for data input errors and utilization of the proper indicator for missing data points. Following this initial process, each of the variables was explored in order to establish whether or not the data set met the assumptions for parametric statistical analysis (Howell, 1992).

The main measures produced ordinal data, ordering responses in increasing values. This did not meet the interval requirements of each unit being equivalent (Howell, 1992). However, in psychological literature a precedent has been set for handling the summed ratings as interval data (Brennan et al., 1998; Melchert & Sayger, 1998) so long as the other parametric assumptions are not violated (Bryman & Cramer, 1999).

The Levene test was used to explore the comparative variance of each group on a particular variable whilst the Kolmogorov-Smirnov test was utilized in order to explore the assumption of normal distribution for each variable within the experimental groupings. The results of these tests provided evidence of significant departures from the assumptions of normal distribution and homogeneity of variance.
for approximately half of the critical variables. Although parametric tests are considered robust with modest departures from the assumptions, this is considered to be less so when the groups are unequal (Howell, 1992). Therefore in conjunction with a statistician the decision was made to regard the data set as unsuitable for parametric analysis and to use alternative non-parametric statistics, thus accepting the more conservative position and reduced power of these distribution free tests (Howell, 1992).

The following tests were used in the analysis of the data set:

- Mann Whitney *U* tests to examine hypothesized group differences.
- Spearman's rank order correlation coefficient to examine hypothesized associations.
- Chi Square tests of independence to examine the differences between variables that were made up of nominal data.
- Fisher's exact tests to examine independence between nominal variables with only two levels when one or more of the expected frequencies was below 5.

The significance value was set at *p* < 0.05 throughout the analysis, with appropriate value corrections when multiple statistical tests were carried out. In testing hypotheses where a direction was specified, one-tailed tests were used and in more exploratory analysis two-tailed tests were used.
Chapter 3
Results

3.0 Preliminary Analysis

3.0.1 Demographics

A number of demographic variables were included in the data collection in order to establish the comparative nature of the samples. Appendix F shows a full list of the variables recorded for each participant.

The analysis of the demographic variables was by the Mann Whitney test except for the categorical variables, when the Chi square test was used. This analysis revealed that there was no evidence of a significant difference between the two groups for 'age', 'age of parental separation', 'number of siblings', 'number of older siblings', 'type of accommodation', 'who the participants lived with', 'ethnicity', 'gender and socio-economic status'. In respect of 'accommodation types', the majority of participants lived in houses with a minority in each group occupying flats, student hostels, supported living and one problem participant being homeless. The majority of the participants lived with their families with the remainder sharing with friends and/or partners.

There was evidence of a significant difference between the two groups for the variables 'age left school' ($U = 120, p = .002$), 'occupation' ($\chi^2 = 23.39, df = 2, p = .000$) and the 'number of people lived with' ($U = 181.5, p = .005$). The problem group had left school earlier at a mean age of 15.6 years ($SD = 1.26, Mdn = 16$) compared with the control group leaving age of 16.8 years ($SD = 1.14, Mdn = 16$). This reflected the fact that a proportion (42%, $n = 9$) of the problem group had either been excluded from school or ceased attending before the official leaving age. In terms of occupation, the problem group was less likely to attend college and more likely to be obtaining unemployment or sickness benefits. The number of people with whom the participants lived was greater for the control group, mainly owing to the small proportion of participants who lived in student hostels. The variable 'age left school' was negatively correlated with the drug use and problem measures. This analysis
provided evidence of a significant relationship between a low school leaving age and high amounts of 'lifetime drug use' \( (r_s = -0.436, p = .003) \), 'current drug use' \( (r_s = -0.339, p = .024) \) and a higher index of 'drug-related problems' \( (r_s = -0.447, p = .002) \).

3.0.2 Measures of Drug Use

Table 2 demonstrates that there was evidence of a significant difference between the two groups for the measures of 'lifetime drug use', 'current drug use' and 'drug-related problems' as determined by the Mann Whitney test. The problem group indicated that they had used more drugs over a longer period than the controls, that they had used more drugs in the last month than the controls and that they had experienced a greater number of drug-related problems than the control group. Analysis of the problem group's drug using measures also revealed that the length of time a problem group member had been in treatment had no significant effect on their reports of drug use.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>( M )</th>
<th>( SD )</th>
<th>( Mdn )</th>
<th>( U )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifetime drug use</td>
<td>Problem</td>
<td>58.73</td>
<td>12.97</td>
<td>60</td>
<td>25.5</td>
<td>.000***</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>21</td>
<td>15.30</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current drug use</td>
<td>Problem</td>
<td>21.82</td>
<td>6.93</td>
<td>22.5</td>
<td>36</td>
<td>.000***</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>5.83</td>
<td>6.57</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drug-related problems</td>
<td>Problem</td>
<td>18.59</td>
<td>3.19</td>
<td>19</td>
<td>.000</td>
<td>.000***</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>6.77</td>
<td>2.06</td>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**p < .001.

There was also evidence of a significant difference between the problem group and the control group on the measures of alcohol consumption and smoking, both 'lifetime use' and 'current use'. These findings are displayed in Table 3.
Table 3  
*Alcohol and Smoking Consumption Measures*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>M</th>
<th>SD</th>
<th>Mdn</th>
<th>U</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifetime use</td>
<td>Problem</td>
<td>21.27</td>
<td>1.28</td>
<td>21</td>
<td>101</td>
<td>.000***</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>16.37</td>
<td>5.16</td>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current use</td>
<td>Problem</td>
<td>13</td>
<td>1.54</td>
<td>13.5</td>
<td>118</td>
<td>.000***</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>7.4</td>
<td>4.80</td>
<td>6.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

***p < .001.

A breakdown of reported substance use is presented in Table 4. It was only on the 'current use' of nitrates and alcohol that the control group had greater use than the problem group. For every other substance category the problem group had higher use, both 'lifetime use' and 'current use'. The most notable of these differences was the much higher use of opiates and stimulant drugs in the problem group.

Table 4  
*Breakdown of Substance Use*

<table>
<thead>
<tr>
<th>Substance Class</th>
<th>Lifetime Use %</th>
<th>Current Use %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Problem Group</td>
<td>Control Group</td>
</tr>
<tr>
<td>Alcohol</td>
<td>100 (n=22)</td>
<td>96.7 (n=29)</td>
</tr>
<tr>
<td>Tobacco</td>
<td>100 (n=22)</td>
<td>70 (n=21)</td>
</tr>
<tr>
<td>Cannabinoids</td>
<td>100 (n=22)</td>
<td>56.7 (n=17)</td>
</tr>
<tr>
<td>Opiates</td>
<td>100 (n=22)</td>
<td>6.7 (n=2)</td>
</tr>
<tr>
<td>Stimulants</td>
<td>100 (n=22)</td>
<td>36.7 (n=11)</td>
</tr>
<tr>
<td>Hallucinogens</td>
<td>81.8 (n=18)</td>
<td>40 (n=12)</td>
</tr>
<tr>
<td>Sedatives</td>
<td>86.4 (n=19)</td>
<td>6.7 (n=2)</td>
</tr>
<tr>
<td>Sedatives</td>
<td>36.4 (n=8)</td>
<td>10 (n=3)</td>
</tr>
<tr>
<td>Nitrites</td>
<td>81.8 (n=18)</td>
<td>33.3 (n=10)</td>
</tr>
<tr>
<td>Others</td>
<td>13.6 (n=3)</td>
<td>6.7 (n=2)</td>
</tr>
</tbody>
</table>
The analysis of the scores from the measures of 'lifetime drug use', 'current use' and 'drug-related problems' was expected to find that the measures were positively correlated. Using a Spearman rank correlation coefficient there was evidence of a significant positive correlation between the measures of drug use, the results of the one-tailed analysis are displayed in Table 5. A p value correction was made to account for multiple testing (p = .016). These findings indicated that a high level of lifetime drug use, a high level of current drug use and a high level of drug-related problems were all strongly associated with each other.

Table 5: Intercorrelations between Measures of Drug Use and Problems

<table>
<thead>
<tr>
<th>Measure</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants (n = 52)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Lifetime drug use</td>
<td>-</td>
<td>.892***</td>
<td>.808***</td>
</tr>
<tr>
<td>2. Current drug use</td>
<td></td>
<td>-</td>
<td>.762***</td>
</tr>
<tr>
<td>3. Drug-related problems</td>
<td></td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>

***p < .001

3.1 Hypothesis One

It was predicted that the descriptive key words gathered from the problem group would differ significantly in character from those of the control group. This information was first analysed in order to establish potential categorical groupings. The process identified two over-arching categories. The categories were defined as:

- Attributions - these were words that offered generalisations or opinions that were not necessarily based on actual experience. They did not require the participant to have explicit knowledge, yet these assumptions or judgements in the form of
general beliefs might well guide behaviour. This category was divided into attributions that were positive, negative or neutral in tone.

- Consequences - these words indicated outcomes, either pleasant or unpleasant results of prior actions on the part of the individual participant. Again these words were divided into positive, negative or neutral consequences.

Two psychologists, the researcher, a clinical psychologist and a research sociologist, allocated the words presented by the problem group and the control group to the categories independently of each other. This process yielded a 70.7% level of agreement for the problem group's words and a 66.4% level of agreement for the control group. The three researchers then met in order to discuss the words that were subject to disagreement in order to remove inconsistencies in allocation along with checking the decisions against the agreed definitions. This process allowed a consensus level of agreement to be reached for the problem group the control group words. The final allocations to categories are tabulated below (Table 6) along with examples from each of the categories (Table 7).

The analysis excluded the category of neutral consequences, as this was too small to meet the prerequisites for the chi square test. The analysis indicated evidence of a significantly different pattern of allocations for the problem group's words when compared with the control group words ($\chi^2 = 37.9; df = 4; p = .000$). The problem group had higher frequencies of both positive and negative consequences whereas the control group had higher frequencies of both positive and negative attributions.
Table 6  Key Word Frequencies.

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency of Words %</th>
<th>Problem Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Attributions</td>
<td>3.7</td>
<td>16.8</td>
<td></td>
</tr>
<tr>
<td>Neutral Attributions</td>
<td>8.2</td>
<td>11.2</td>
<td></td>
</tr>
<tr>
<td>Negative Attributions</td>
<td>25.7</td>
<td>42.6</td>
<td></td>
</tr>
<tr>
<td>Positive Consequences</td>
<td>32.1</td>
<td>21.7</td>
<td></td>
</tr>
<tr>
<td>Neutral Consequences</td>
<td>0.9</td>
<td>1.4</td>
<td></td>
</tr>
<tr>
<td>Negative Consequences</td>
<td>29.3</td>
<td>6.3</td>
<td></td>
</tr>
</tbody>
</table>

Table 7  Key Word Examples

<table>
<thead>
<tr>
<th>Category</th>
<th>Problem Group Examples</th>
<th>Control Group Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>Sociable, Big Attraction, Enjoyable</td>
<td>Sociable, Enjoyable, Fun</td>
</tr>
<tr>
<td>A(n)</td>
<td>Experimental, Curiosity, Adventurous</td>
<td>Controlled, Recreational, Social</td>
</tr>
<tr>
<td>A-</td>
<td>Controlling, Chore, Rubbish</td>
<td>Stupid, Harmful, Expensive, Dangerous</td>
</tr>
<tr>
<td>C+</td>
<td>Buzz, Feel Warm Inside, Relaxes me, Happy</td>
<td>Frees Emotion, Relaxing, Laugh, Good Time</td>
</tr>
<tr>
<td>C(n)</td>
<td>Plays Games with me</td>
<td>Analyse Things, Living in the Edge</td>
</tr>
<tr>
<td>C-</td>
<td>Damages Health, Gives Depression, Got into Trouble</td>
<td>Bad for me, Not self under influence, Horrible Comedown, Frustration</td>
</tr>
</tbody>
</table>

Key: A = Attributions; C = Consequences; + = Positive; (n) = Neutral; - = Negative
3.2 Hypothesis Two

3.2.1 Between Group Comparison of Attachment Avoidance

This hypothesis predicted that the problem group would differ significantly from the control group on the dimension of 'attachment avoidance'. The mean for the problem group was 2.69 (SD = 0.81, Mdn = 2.53) and the mean for the control group was 2.96 (SD = 0.92, Mdn = 3.14). The Mann Whitney test revealed no evidence of a significant difference between the two groups (U = 279, p = .344). It was noted that the control group had higher levels of 'attachment avoidance' than the problem group, however this difference was not significant.

3.2.2 Within Group Correlation of Attachment Avoidance and Drug Use and Problem Measures

It was proposed that the high scores for 'attachment avoidance' would be correlated with high scores on the measures of 'lifetime drug use', 'current drug use' and 'drug-related problems'. The Spearman correlation revealed no evidence of significant positive correlations between 'attachment avoidance' and the drug use measures. The results are displayed in Table 8 and it is to be noted that the correlations were negative, contrary to the hypothesis. This finding indicated that there was no association between 'attachment avoidance' and any of the drug use indicators.

Table 8 Correlation between Attachment Avoidance and Drug Use and Problem Measures

<table>
<thead>
<tr>
<th>Variable</th>
<th>Lifetime Drug Use</th>
<th>Current Drug Use</th>
<th>Drug-Related Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>rs</td>
<td>p</td>
<td>rs</td>
</tr>
<tr>
<td>Participants n = 52</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attachment Avoidance</td>
<td>-.193</td>
<td>.085</td>
<td>-.132</td>
</tr>
</tbody>
</table>
3.2.3 *Between Group Comparison of Attachment Anxiety*

It was predicted that the problem group would differ significantly from the control group on the measure of 'attachment anxiety'. The mean for the problem group was 3.96 ($SD = 0.81, Mdn = 3.69$) and the mean for the control group was 3.48 ($SD = 0.95, Mdn = 3.39$). A Mann Whitney test revealed no evidence of a significant difference between the two groups ($U = 235, p = .078$). Therefore, although the problem group reported higher levels of 'attachment anxiety', this was not significantly higher than the controls.

3.2.4 *Within Group Correlation of Attachment Anxiety and Drug Use and Problem Measures*

It was proposed that high scores for anxiety would be correlated with the high scores on the measures of 'lifetime drug use', 'current drug use' and 'drug-related problems'. As shown in Table 9, the Spearman correlation analysis revealed evidence of a significant positive correlation between 'attachment anxiety' and the measure of current drug use. The correlation analysis showed no evidence of a significant association between 'attachment anxiety' and 'lifetime drug use' and 'drug-related' problems. These findings indicated that higher levels of 'attachment anxiety' were significantly associated with higher levels of current drug use. It was, however, noted that the association between 'attachment anxiety' and 'lifetime drug use' was approaching significance.
Table 9  Correlation between Attachment Anxiety and Drug Use and Problem Measures

<table>
<thead>
<tr>
<th>Variable</th>
<th>Lifetime Drug Use</th>
<th>Current Drug Use</th>
<th>Drug-Related Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>rs</td>
<td>p</td>
<td>rs</td>
</tr>
<tr>
<td>Attachment Anxiety</td>
<td>.226</td>
<td>.054</td>
<td>.236</td>
</tr>
<tr>
<td>*p &lt; .05</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.3 Hypothesis Three

3.3.1 Between Group Comparison of Hopelessness

It was predicted that the problem group would have hopelessness scores that were significantly higher than the control group. The mean for the problem group was 5.05 (SD = 4.11, Mdn = 3.5) and the mean for the control group was 4.73 (SD = 4.35, Mdn = 4). A Mann Whitney test revealed no evidence of a significant difference between the two groups (U = 325.5, p = 0.933). Problem drug users, therefore, did not express greater levels of hopelessness than control participants did when assessed by the Beck Hopelessness Scale (Beck & Steer, 1993).

3.3.2 Within Group Correlation of Hopelessness and Drug Use and Problem Measures

This hypothesis proposed that the high scores for hopelessness would be correlated with the high scores on the measures of 'lifetime drug use', 'current drug use', and 'drug-related problems'. As shown in Table 10, the Spearman correlation analysis revealed no evidence of significant positive correlations between hopelessness and the drug use measures. Therefore, across all participants hopelessness was not associated with drug use or drug-related problems.
Table 10  Correlation between Hopelessness and Drug Use and Problem Measures

<table>
<thead>
<tr>
<th>Variable</th>
<th>Lifetime Drug Use</th>
<th>Current Drug Use</th>
<th>Drug-Related Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>rs</td>
<td>p</td>
<td>rs</td>
</tr>
<tr>
<td>Hopelessness</td>
<td>.133</td>
<td>.133</td>
<td>.195</td>
</tr>
</tbody>
</table>

3.4 Hypothesis Four

3.4.1 Between Group Comparison of Total Family Functioning

It was suggested that the problem group would have significantly poorer scores of 'total family functioning' than the control group. The mean 'total family functioning' score for the problem group was 3.66 (SD = .78, Mdn = 3.94) and the mean for the control group was 3.96 (SD = .43, Mdn = 4.06). A Mann Whitney test revealed no evidence of a significant difference being revealed between the two groups on this measure of family functioning (U = 275, p = .444). The problem group did have lower scores on 'family functioning', however these did not reach significance from the control group.

3.4.2 Within Group Correlation of Total Family Functioning and Drug Use and Problem Measures

Low scores for 'total family functioning', i.e. poorer functioning, were predicted to be correlated with high scores on the measures of drug use and problems. A Spearman correlation analysis revealed evidence of a significant negative correlation with the variables of 'lifetime drug use' (rs = -.318, p = .012) and 'current drug use' (rs = -.316, p = .012). The correlation with drug-related problems was also negative in direction but without evidence of significance (rs = -.189, p = .092). Poorer family functioning was, therefore, found to be associated with an increased use of drugs, both currently and in the whole lifetime.
3.4.3 *Between Group Comparisons for Hypothesised Family Background Sub-Scales*

It was expected that the problem group would have significantly lower scores than the control group on specified sub-scales of the total family functioning measure. A series of Mann Whitney tests was used with a modified p value to account for the multiple tests \( (p = .004) \). This analysis revealed no evidence of significant differences for any of the specified sub-scales using the adjusted p value. The variables of 'father responsiveness', 'father acceptance', 'father educational involvement', 'maternal substance abuse' and 'parental coalition' demonstrated p values at or below .05. The variable of 'family stress' was approaching the modified significance cut-off value. Therefore, the problem group did not report poorer experiences than the control group on the specified sub-scales. The means, standard deviations and probability values for the specified sub-scale comparisons are displayed in Table 11.
### Table 11  Between Group Comparisons for Hypothesised Family Background Sub-scales

<table>
<thead>
<tr>
<th>Sub-Scale</th>
<th>Problem Group</th>
<th>Control Group</th>
<th>U</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>Mn</td>
<td>M</td>
</tr>
<tr>
<td>Father responsiveness</td>
<td>3.26</td>
<td>1.24</td>
<td>3.53</td>
<td>4.05</td>
</tr>
<tr>
<td>Mother responsiveness</td>
<td>3.92</td>
<td>0.98</td>
<td>4.31</td>
<td>4.10</td>
</tr>
<tr>
<td>Father acceptance</td>
<td>3.48</td>
<td>1.01</td>
<td>3.82</td>
<td>4.13</td>
</tr>
<tr>
<td>Mother acceptance</td>
<td>3.86</td>
<td>0.87</td>
<td>4.09</td>
<td>4.13</td>
</tr>
<tr>
<td>Father educational</td>
<td>3.27</td>
<td>1.21</td>
<td>3.55</td>
<td>4.02</td>
</tr>
<tr>
<td>Mother educational</td>
<td>3.65</td>
<td>1.05</td>
<td>3.67</td>
<td>3.99</td>
</tr>
<tr>
<td>involvement</td>
<td>3.48</td>
<td>1.27</td>
<td>3.9</td>
<td>3.92</td>
</tr>
<tr>
<td>Mother substance abuse</td>
<td>3.96</td>
<td>1.26</td>
<td>4.4</td>
<td>4.58</td>
</tr>
<tr>
<td>Father Psychological</td>
<td>3.95</td>
<td>0.83</td>
<td>4.2</td>
<td>4.35</td>
</tr>
<tr>
<td>Adjustment</td>
<td>4.11</td>
<td>0.75</td>
<td>4.3</td>
<td>4.39</td>
</tr>
<tr>
<td>Parental Coalition</td>
<td>3.59</td>
<td>0.98</td>
<td>3.8</td>
<td>4.18</td>
</tr>
<tr>
<td>Family stress</td>
<td>4.17</td>
<td>0.83</td>
<td>4.36</td>
<td>4.67</td>
</tr>
</tbody>
</table>

Modified Significance value, p < .004

3.4.4  Within Group Correlation of Specified Family Functioning Sub-scales and Drug Use and Problem Measures

This hypothesis proposed that the specified sub-scales of the family function test would be individually correlated with the measure of 'lifetime drug use'. The Spearman correlation analysis (see Table 10) revealed that, of the specified sub-scales, 'father educational involvement', 'mother psychological adjustment', 'parental coalition' and 'family stress' demonstrated evidence of a significant correlation with...
'lifetime drug use'. This analysis demonstrated that poorer reports of specific aspects of family functioning were associated with increased lifetime drug use.

Table 12 **Correlation Analysis between Family Background Sub-scales and Lifetime Drug Use**

<table>
<thead>
<tr>
<th>N</th>
<th>Sub-scale</th>
<th>rs</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Father responsiveness</td>
<td>-.346</td>
<td>.009</td>
</tr>
<tr>
<td>47</td>
<td>Mother responsiveness</td>
<td>-.205</td>
<td>.075</td>
</tr>
<tr>
<td></td>
<td>Father acceptance</td>
<td>-.352</td>
<td>.008</td>
</tr>
<tr>
<td>47</td>
<td>Mother acceptance</td>
<td>-.185</td>
<td>.097</td>
</tr>
<tr>
<td>51</td>
<td>Father educational involvement</td>
<td>-.502</td>
<td>.000**</td>
</tr>
<tr>
<td>47</td>
<td>Mother educational involvement</td>
<td>-.352</td>
<td>.006</td>
</tr>
<tr>
<td>51</td>
<td>Father substance abuse</td>
<td>-.297</td>
<td>.024</td>
</tr>
<tr>
<td>45</td>
<td>Mother substance abuse</td>
<td>-.294</td>
<td>.022</td>
</tr>
<tr>
<td>47</td>
<td>Father Psychological Adjustment</td>
<td>-.347</td>
<td>.008</td>
</tr>
<tr>
<td>48</td>
<td>Mother Psychological Adjustment</td>
<td>-.401</td>
<td>.002**</td>
</tr>
<tr>
<td>51</td>
<td>Parental Coalition</td>
<td>-.421</td>
<td>.002**</td>
</tr>
<tr>
<td>46</td>
<td>Family stress</td>
<td>-.424</td>
<td>.001**</td>
</tr>
<tr>
<td>51</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**denotes significance at modified value, p < .004

3.4.5 **Additional Family Background Variables**

The family background scale (FBQ) contained a number of indexes pertaining to variables that were not included in the sub-scale analysis. A chi square test revealed no evidence of a significant difference between the problem and control groups on the index of whether the parents in the family were biological, step or single parents ($\chi^2 = .173, df = 2, p = .917$). The variable that indicated whether or not sexual abuse had taken place also failed to demonstrate any evidence of a significant difference between the two groups using the Fishers exact test ($p = .214$). The index
of 'educational level' also failed to reveal any evidence of significant differences between the two groups when subjected to a Mann Whitney test, with similar proportions of each group falling into each educational level ($U = 258.5, p = .262$). It was demonstrated using a Fishers exact test that there was evidence that the problem group had a significantly higher incidence of disabilities during development, examples being asthma, eczema, epilepsy, joint defects and heart problems ($p = .027$).

Mann Whitney tests demonstrated that the two variables with the strongest evidence of a significant difference between the two groups, in this additional cluster, were the families' reported level of religiousness and the number of boy/girl friends the participant had had. The problem group had a median index of 1 (i.e. not religious) for family religiousness which was significantly lower ($U = 203, p = .031$) than the control group median of 2 (i.e. a little religious). The problem group also had a higher median number of boy/girl friends (4 i.e. 4 - 7 boy/girl friends) which proved significant ($U = 201.5, p = .025$) when compared to the control group median (3 i.e. 2-3 boy/girl friends). The boy/girl friend variable also demonstrated evidence of significant Spearman correlations with the main drug use and problem variables (see Table 13). The association of number of relationships with the drug use and problem measures was the strongest of all the scales from the family background measure.

These findings demonstrated that the problem group was no more likely to have had a step-parent, have been sexually abused, have a lower educational level than the control participants. However, the problem group was found to have a higher incidence of disability, to have lower family religiousness and to have had more boy/girl friend relationships than the controls.
Table 13  
*Relationship between Number of Boy/Girl Friends and Drug Use and Problem Measures*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Lifetime Drug Use</th>
<th>Current Drug Use</th>
<th>Drug-Related Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boy / Girl Friends</td>
<td>$r_s = .502$</td>
<td>.000*</td>
<td>$r_s = .524$</td>
</tr>
</tbody>
</table>

Participants $n = 51$

*p < .05

3.5  Hypothesis Five

3.5.1  *Associations between the Attachment Dimensions and Specified Sub-scales of the Family Background Measure*

Lower scores on specified sub-scales of the family background measure were hypothesised to be associated with higher scores on the dimensions of attachment. A Spearman correlation revealed that there was no evidence of significant associations between either of the attachment dimensions and the specified family background sub-scale measures (see Table 14). A p value correction was made during this analysis to account for multiple testing ($p = .005$). Before the p value correction, higher 'attachment avoidance' appeared to be associated with 'father physical abuse', and higher 'attachment anxiety' appeared to be associated with 'father acceptance' and 'parental coalition'. However, these findings were not robust enough to maintain significance once a correction for multiple testing had been made. This analysis demonstrated that the aspects of family functioning measured in this study were not significantly associated with either of the dimensions of attachment.
Table 14  Correlation Analysis between Attachment Dimensions and Family Background Sub-scales

<table>
<thead>
<tr>
<th>N</th>
<th>Sub-scales</th>
<th>Attachment Avoidance</th>
<th>Attachment Anxiety</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>r_s</td>
<td>p</td>
</tr>
<tr>
<td>47</td>
<td>Father responsiveness</td>
<td>-.36</td>
<td>.810</td>
</tr>
<tr>
<td>51</td>
<td>Mother responsiveness</td>
<td>.014</td>
<td>.922</td>
</tr>
<tr>
<td>47</td>
<td>Father acceptance</td>
<td>-.022</td>
<td>.884</td>
</tr>
<tr>
<td>51</td>
<td>Mother acceptance</td>
<td>.016</td>
<td>.913</td>
</tr>
<tr>
<td>47</td>
<td>Father physical abuse</td>
<td>-.307</td>
<td>.036</td>
</tr>
<tr>
<td>50</td>
<td>Mother physical abuse</td>
<td>.000</td>
<td>.991</td>
</tr>
<tr>
<td>51</td>
<td>Expression of affect</td>
<td>-.118</td>
<td>.411</td>
</tr>
<tr>
<td>46</td>
<td>Parental Coalition</td>
<td>-.071</td>
<td>.641</td>
</tr>
<tr>
<td>51</td>
<td>Family stress</td>
<td>.034</td>
<td>.812</td>
</tr>
<tr>
<td>51</td>
<td>Physical neglect</td>
<td>-.115</td>
<td>.423</td>
</tr>
</tbody>
</table>

**denotes significance at modified value, p < .005

3.5.2  Associations Between the Boy/Girl Friend Index, the Attachment Dimensions and Family Background Sub-scales

While conducting the analyses it was observed that the variable that indicated the number of relationships the participant had experienced (boy/girlfriend) demonstrated evidence of both a significant difference between the two groups and also a significant relationship within the group with the measures of drug use and problems. As the measures of attachment anxiety and avoidance are theoretically linked to relationships it was decided to test for evidence of an association between the number of relationships and the attachment dimensions using the Spearman correlation. There was no evidence of any significant correlation with the dimension of 'attachment avoidance' (r_s = .044, p = .757). However, with regard to the dimension of anxiety, evidence was found for a significant relationship between high numbers of 'boy/girl friend' relationships and high 'attachment anxiety' scores (r_s = .442, p = .001).
A Spearman correlation analysis between the boy/girl friend index and the family background sub-scales revealed evidence of a significant association for the family variable of 'mother physical abuse' (see Table 15). The variables of 'physical neglect' and 'family stress' were approaching the modified significance value. It was noted that only 'family stress' was included in the family experiences that were associated with drug use.

These findings were of interest in that a higher frequency of 'boy/girl friend' relationships was strongly associated with the higher levels of drug use, higher attachment anxiety and more maternal physical abuse in the family experience.

Table 15  Correlation Analysis between Boy / Girl Friend Index and Family Background Sub-scales

<table>
<thead>
<tr>
<th>N</th>
<th>Sub-scales</th>
<th>$r_s$</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>47</td>
<td>Father responsiveness</td>
<td>-.037</td>
<td>.803</td>
</tr>
<tr>
<td>51</td>
<td>Mother responsiveness</td>
<td>.050</td>
<td>.726</td>
</tr>
<tr>
<td>47</td>
<td>Father acceptance</td>
<td>-.190</td>
<td>.200</td>
</tr>
<tr>
<td>51</td>
<td>Mother acceptance</td>
<td>-.072</td>
<td>.615</td>
</tr>
<tr>
<td>47</td>
<td>Father physical abuse</td>
<td>-.172</td>
<td>.247</td>
</tr>
<tr>
<td>50</td>
<td>Mother physical abuse</td>
<td>-.390</td>
<td>.005**</td>
</tr>
<tr>
<td>51</td>
<td>Expression of affect</td>
<td>.045</td>
<td>.751</td>
</tr>
<tr>
<td>46</td>
<td>Parental Coalition</td>
<td>-.301</td>
<td>.042</td>
</tr>
<tr>
<td>51</td>
<td>Family stress</td>
<td>-.342</td>
<td>.014</td>
</tr>
<tr>
<td>51</td>
<td>Physical neglect</td>
<td>-.380</td>
<td>.006</td>
</tr>
</tbody>
</table>

**denotes significance at modified value, p < .005
3.6 Summary of Results

The problem group did not differ significantly from the control group on the measures of: 'age', 'gender', 'ethnicity', 'socio-economic status', 'educational level', family background, attachment dimensions, and 'hopelessness'.

The problem group differed significantly from the control group in that they had:

- Left school earlier, were less likely to be attending college and more likely to be receiving benefits.
- A higher incidence of 'lifetime drug use', 'current drug use', and experienced a greater number of drug-related problems.
- A much higher use of opiate drugs.
- A higher incidence of developmental disabilities.
- Lower 'family religiousness'.
- More boy / girl friend relationships than the controls.

The problem group described their drug experiences in terms of positive consequences despite knowledge of the negative consequences. The control group, however, described their experiences in terms of negative attributions along with awareness of the positive consequences.

The study demonstrated that higher levels of drug use were significantly associated with:

- High 'attachment anxiety'
- Poorer global family functioning, specifically higher 'family stress', low 'father educational involvement', poorer maternal psychological adjustment, and a poorer 'parental coalition'.
- A higher number of boy / girl friend relationships.

The study found that higher drug use was not significantly associated with 'attachment avoidance' or 'hopelessness'.

The analysis demonstrated that the dimensions of attachment were not significantly associated with the measured aspects of family function. However, high 'attachment anxiety' was significantly associated with higher numbers of 'boy/girl friend' relationships.
Chapter 4
Discussion

4.0 Preliminary Analysis

4.0.1 Demographics

The problem group contained a male to female ratio of approximately 3:1, which was in line with the Department of Health’s statistical figures (1999) for the relevant age band of people presenting to drug treatment services. This ratio was also similar to that found in the U.K. National Treatment Outcome (NTORS) study looking at services for problem drug users (Gossop et al., 1998). It was however, less than the 5:1 male to female ratio found by Egginton and Parker (2000) in their study of young heroin users. The predominance of Caucasians in the problem group also paralleled research regarding problem drugs users (Egginton & Parker, 2000; Gossop et al., 1998). In terms of both gender and ethnicity the control group of the current study appeared to be more representative than the problem group of the local population including a male to female ratio of 1:1 and the proportion of people with African and Indian ethnic heritage. However, these differences were not significant. Sheehan et al. (1988) reported that a relationship existed between problem drug use and socio-economic status. This finding was not supported by the current study as the predominant socio-economic category for both groups was III with very small numbers in categories IV and V. This finding is supported by Hawkins et al. (1992) who argued that only when poverty is extreme and in conjunction with childhood behaviour problems does it link to problem drug use. Egginton and Parker (2000) have suggested that changing patterns of drug availability and use have removed the socio-economic divide that was observed in the 1980s.

A clear difference emerged between the two groups for the age at which the participants left school. In the problem group, 42% had left school before age 16 compared with 3% in the control group. Anasgasti and Denia (1986) and Swaim (1991) reported a link between poor school commitment and drug problems, Egginton and Parker (2000) also observed in their sample of young heroin users that
truancy and difficulties at school were a significant problem. The findings of Egginton and Parker (2000) and comments from the participants in the present research have indicated that periods of absence from school were often utilised for the procurement and use of drugs. The educational difficulties of the problem group were reflected in the finding that they were less likely than the controls to attend further education. Only 1% of the problem group attended further education and 65% were claiming benefits. This was a slightly lower figure than the 81% reported by Gossop et al. (1998), however that sample were older and more advanced in their drug-taking careers. Egginton and Parker (2000) reported that 67% of their sample of young drug users were on benefits, which paralleled this present finding. The demographic findings indicated that white males may be over-represented in the problem group, however the numbers in the study were not great and this may have contributed to the non-significant analysis, although they were broadly in line with other studies reported in the literature.

The key demographic findings were that the problem group had generally poorer school experiences than the controls, they were less likely to go to college and were more likely to be receiving benefits than the control participants. Causality, however, cannot be inferred given the design of the study. The later discussion will focus on the matter of the complex relationship between drug use and the study findings.

4.0.2 Measures of Drug Use

The measures of drug use indicated that the problem group had a significantly different pattern of drug use when compared to the controls. They had experienced a wider variety of substance classes and had used these for longer durations, indicating that they started their drug-taking careers earlier than the controls. They also had used more drugs in the last month at a greater frequency and by more dangerous administration procedures than the controls. This group therefore, appeared to be representative of the significant minority of young people who use drugs regularly (Parker et al., 1998). The primary illicit drug class for this group was the opiates, with 91% having used them in the last month and 100% having used them in their
lifetime, normally in the form of heroin. This figure was higher than the Department of Health statistics (1999) and is possibly a reflection of the sampling procedure in that all the problem users came from a Community Drug Service, which primarily attracted mis-users of opiate drugs. The index was however similar to the findings of Egginton and Parker (2000) who found that 78% of their sample of young heroin users were using regularly. This figure did not include other opiate-based drugs, which were assessed collectively in the current study. It may be that the use of opiate-based drugs is critical to the problem group in that opiates are argued to have a particularly potent effect linked to the comfort of distress (Benton, 1988b). Panksepp et al. (1978) has indicated that endogenous opioids are implicated in the processes of mediating social affect and social attachment thus playing a controlling role in social emotions and behaviours. Shedler and Block (1990) suggested that drugs numb out feelings of isolation and inadequacy for those people who lack deeper and more meaningful gratification such as relationships. This argument is in line with the biological evidence reviewed and may indicate an explanation for the selective use of opiates by the problem group. The chemical effects of the opiates may also help explain in part the number of problems associated with withdrawing opiates from regular users (Stewart, 1987).

Egginton and Parker (2000) have put forward the suggestion that heroin is increasingly available to young people, i.e. an estimated 5-20% of 15-year-olds have been offered heroin. The control group in this study was observed to be at the lower end of this estimate with 6.7% having used opiates at some time while the remainder had not tried opiate-based drugs. Egginton and Parker (2000) and Parker et al. (1998) have indicated that multiple drug use is a factor in problem presentation. This is supported by the current work which indicated that the problem group had high rates of both opiate and cannabinoid use with moderate stimulant use.

The most commonly tried illicit drug class in the control group was the cannabinoids with around half having tried it and using it regularly. This was in contrast to the problem group who had all tried it and the majority was still using in addition to the opiate drugs. Shedler and Block (1990) suggested that the use of cannabis per se cannot be regarded as deviant as this is seen to be concomitant with
the adolescent role of testing limits. However, they commented that such experimentation differs from problem use in that the individuals concerned do not need to compensate for a lack of meaningful relationships or have an outlet for emotional distress in drug use. The case for the normalisation of drug use presented by Parker et al. (1998) is broadly in line with the findings reported here for the control group in that cannabis, which is viewed by the normalisation concept as a safe drug, was reported to be the most used illicit drug. The middle rated drugs of hallucinogens and amphetamine were less used by the controls with only hallucinogens being used regularly. Only a minority of the controls used what the normalisation theory regards as the 'hard' drugs, i.e. heroin.

Gilvarry (2000) argued that the prevalence of drug use is not uniformly distributed throughout the youth population with some groups at greater risk of problems. On balance, the evidence presented here has suggested that those who come into contact with 'hard' drugs such as opiates are more at risk of problems relating to their drug use. Within this group a proportion will manage the use and a proportion will continue use and suffer additional problems in a variety of life domains. The accompanying factors to problem drug use will be discussed later, however for the moment it appears that the patterns of drug use in the problem and control groups were sufficiently different to suggest that the underlying reasons for drug-taking decisions may well differ.

The indices of lifetime drug use, current drug use, and drug-related problems demonstrated strong associations with each other. This indicated that there was a strong relationship between the number of drugs tried and the levels of current use, and that both of these measures were related to the experience of problems. Gilvarry (2000) remarked that substance abuse does not occur in isolation but as part of a cluster of other antecedent and concurrent developmental and environmental problems. She cast the journey of adolescence as one that had to be traversed and experienced with all its risks and opportunities. Egginton and Parker (2000) argued that problem drug use generates as well as sustains social exclusion. They indicated that the more complex problematic profiles included longer periods of drug use, injecting behaviour, and poly-drug use. They asserted that the journeys of such young
people from 14-18 years of age pushed them to being socially excluded even if they had led ordinary, comfortable and conventional lives prior to that point.

The current study has demonstrated a strong relationship between lifetime and current drug use and problems in a range of life domains. The literature surrounding this finding places problematic substance use as both cause and consequence of additional functioning problems. In light of the previous discussion about the role of opiates in moderating social emotion and distress it is likely that the causality issue will be very difficult to disentangle.

4.1 Hypothesis One - Key Words
The key words generated by the problem group to describe their drug use had a different distribution across the categories than those of the control group. The first point was that the problem users gave words that were more likely to be categorised as 'consequences' whereas the controls gave words that were more likely to be categorised as 'attributions'. The difference for this appeared to be the problem group's ready access to personal drug experiences, which allowed them to give consequences relating to personal experiences. The control group by contrast did not have such ready access to personal experience and therefore were more likely to make attributions that were based on the knowledge that can be amassed from friends, media and school education programs (Parker et al., 1998). It is of note, that within the problem group, the majority of the attributions were negative while in the consequence categories, although the positive and negative had similar frequencies, the positives were marginally ahead. Therefore the problem group pattern appeared to reflect an awareness of negative consequences and negative attributions coupled with a greater knowledge of the positive consequences of drug use. This appears to set up a conflict of motives, they are aware that drug use has negative effects but are also aware of the positive effects (Orford, 1985; Stewart, 1987). Many of the positive consequences, as indicated by the examples, have an emotional element, which is in line with the assertions of Shedler and Block (1990) that less emotional control is linked to drug use levels in adolescence. It is noticeable that the positive consequences of drug use have a multi-function quality (Orford, 1985). Drugs are
used both to relax and be confident, this relates to the suggestion of Stewart (1987) that drugs such as heroin have a multi-purpose function. The control group frequencies placed the majority of the key words in the 'attribution' categories, with the dominant category being negative. However, it is of note, that similarly to the problem group, there is a good proportion of control group words allocated to the positive consequence category and that these again have an emotional tone to them. This is in line with the suggestion of Parker et al. (1998) that young people use drugs 'normally' to 'self-medicate' against the impact of the stresses and strains of modern society.

Glantz and Pickens (1992) cast drug use as being related to cultural factors, availability, perceived tolerance, peer influences, and safety of drugs whilst drug abuse was viewed as occurring in the background of psychological and biological vulnerabilities. The current study cannot offer comment on the biological aspect of this assertion, however the key words did indicate that the problem group appeared to continue attending to the positive consequences of drug use in the face of an awareness of the negative aspects. Parker et al. (1998) commented that, while rational decision-making usually guides behaviour, it might not dominate hence the reason why a minority misuse drugs to their cost. The process of overriding rational decision-making may be part of the process of reducing options that occur with increased substance use. Excessive reliance on substances may lead to a reduction in the use of less damaging ways of managing difficult situations (Leighton, 1997) and limit the exploration of alternative roles and perspectives that is a 'normal' part of adolescent development (Gonzales, 1988). Holmes (1999) echoed Shedler and Block (1990) when he proposed that the lack of a capacity to self-soothe is a key deficit in clients who turn to drugs. It may be that an over reliance on the effect of drugs, or a perception of a lack of alternatives, influences problem users to override their awareness of the negatives that are associated with drug use. It is in this domain that the control group appeared to have somewhat more of a balance with the appreciation of the positive effects of drugs tempered by the negative attributions. Egginton and Parker (2000) stated that the process of increasing use was often punctuated by falling out with the family, the loss of non-using friends, the stigma of being a
'smack-head' and the re-alignment into networks and romantic relationships with other users. All of these featured in the key words of the problem users, but despite the reduced experiences, the drug use continued for the pursuit of the positive, emotionally loaded, consequences.

4.2 Hypothesis 2 - Attachment

4.2.1 & 4.2.2 Attachment Avoidance

This hypothesis suggested that there would be a difference between the problem and control group on the dimension of 'attachment avoidance' and also evidence of a relationship between 'attachment avoidance' and the drug use and problem measures. In the case of the expected difference, no evidence of a significant finding was revealed. In contrast to the specified hypothesis, the problem groups mean index of 'attachment avoidance' was lower than that for the control group. This was surprising in that the evidence available in the literature indicates that higher levels of emotional avoidance are more likely to be associated with problem drug use (Rosenstein & Horowitz, 1996). Chamaud (1999) suggested that problem drug users use chaotic behaviour including chaotic drug use as an avoidance strategy against underlying pain and despair in part owing to an inability to use, or having an absence of, close relationships with which to help deal with distress (Shedler & Block, 1990). Levitt, Silver, and Franco (1996) have argued that using substances to cope with troubled relationships was associated with an avoidant attachment style. Allen et al. (1996) have also reported that they found that substance users were inclined to be derogatory about their attachment experiences.

One potential explanation for the current finding is that avoidant individuals tend to minimise the role of negative emotion in their self-reports (Magai, 1999). This factor is then compounded by the fact that highly avoidant individuals are hard to engage in a relationship, even a treatment relationship, because of the chaos with which they surround themselves in order to maintain emotional avoidance (Chamaud, 1999). A possible reversal of this argument is that those seeking help for problematic drug use have in some way overcome their emotional avoidance to a degree by
making the move to seek a therapeutic relationship. An alternative explanation is to consider that a low avoidance score on the Bartholomew (1990) two-dimensional model indicates a view of others as generally accepting and responsive. In combination with low attachment anxiety this would result in a secure profile, whereas in conjunction with high attachment anxiety it would lead to a less secure profile, combining the sense of an unworthy self with a positive view of others (Bartholomew & Horowitz, 1991). The findings for attachment anxiety indicated only a trend towards a relationship with drug use. This finding may be supported by the literature that places the influence of close peers as a risk factor for problem drug use (Coggans & McKellar, 1994; Egginton & Parker, 2000; Hawkins et al., 1992) and the finding of Egginton and Parker (2000) that young people involved in problem drug use are often romantically involved with other drug users. It has to be remembered that the attachment measure is focusing on the close relationships of the young people in the study and therefore may indicate an over reliance on the influence of others in the absence of a positive view of the self. Such reliance would make peers quite influential in shaping the capacity of the young person for friendship and intimacy (Skolnick, 1986). In contrast, the slightly higher avoidance of the control group would indicate a suspicion of others as potentially unreliable. If combined with low attachment anxiety, indicating a positive self-view, this may well be seen as a functional way of approaching the exploration of the world. However, if combined with high attachment anxiety, reflecting a negative self view, it may well lead to the young person choosing to avoid close relationships for fear of rejection (Bartholomew and Horowitz, 1991).

The failure to support this hypothesis can be seen therefore, either as a failure to attract the most avoidant drug users into the study or as an indication that further research is required regarding how young people view those people closest to them in relation to their self-view and the impact that this has on their life functioning.

4.2.3 & 4.2.4 Attachment Anxiety

As part of the attachment hypothesis it was proposed that the problem group would report more 'attachment anxiety' than the control group. The analysis gave no
evidence that this was the case. However, the second part of the hypothesis contested that there would be a relationship between drug use, drug-related problems and the attachment anxiety index. This was not the case for the drug-related problem index, with the analysis revealing no evidence of a significant relationship. The analysis did, however, reveal a significant relationship between attachment anxiety and current drug use whilst the relationship with lifetime drug use, although approaching significance, was not significant. This finding of only a trend towards a relationship between attachment anxiety and drug use was surprising as the literature generally indicates that problem substance users will have features of avoidance in their attachment profile with low anxiety (Allen et al., 1996; Rosenstein & Horowitz, 1996). In the Bartholomew (1990) model, the dimension of anxiety is theorised to depict the model of the self with high anxiety indicating a poorer, less secure view of the self. The lack of a relationship with the drug-related problem index is of interest. This appeared to indicate that the attachment anxiety might be specifically influencing the level of drug use without appearing to be a factor in the more global measure of surrounding problems. If the level of attachment anxiety is impacting upon the level of drug use in some manner there are a number of possibilities as to its function.

Hofler and Kooyman (1996) suggested that for individuals who have insufficient relaxation owing to a lack of a satisfying attachment relationship, the power of a drug on the nervous system reached far beyond any attachment experience they may have had. Mikulincer and Florian (1998) offered support to this idea when they argued that attachment style was related to how the individual handled the stresses of daily life. Feeney (1999) put forward a more specific argument in that she asserted the importance of attachment anxiety regarding relationships. She stated that individuals high on the anxiety dimension often reported greater levels of relationship conflict. Feeney found that such people engaged in counterproductive ways of dealing with stress and conflict, which increased the likelihood of a feared outcome (Bowlby, 1988). The relationship conflict reported by Feeney may be both a cause of increased substance use or alternatively could be viewed as a consequence of excessive substance use (Stewart, 1987). Burge et al. (1997) reported that attachment
cognition about partners, parents and peers was related to a range of symptomatology. They argued that those individuals who communicated with trust in these close relationships were less likely to exhibit symptomatology such as substance misuse (Kobak 1999).

Owing to the cross-sectional design of the study, it was not possible to comment on aspects of causality. The finding of attachment anxiety being related to current drug use may be interpreted as either the result of drug use or as the cause of drug use.

4.3 Hypothesis 3 - Hopelessness

The U.K. National Treatment Outcome Study (Gossop et al., 1998) found that 62% of the sample of problem drug users reported feeling hopeless about the future. The current study hypothesised, therefore, that the problem group would differ from the control group on the measure of hopelessness. The analysis found no evidence to indicate such a difference and also no evidence of a significant relationship between the drug use and drug-related problem measures. The literature accompanying the Beck Hopelessness Scale suggested that the scores represent various degrees of hopelessness from minimal through mild, moderate to severe (Beck & Steer, 1993). When considered with reference to these levels: 48% of both the problem and control group were at the minimal level; 25% in the problem group and 39% in the control group were at the mild level; and 25% in the problem group and 13% in the control group were at the moderate to severe level. This breakdown indicated that there was a degree of hopelessness present across both groups. McLaughlin, Miller, and Warwick (1996) indicated that hopelessness was specifically linked to problems in the family, with friends and with boy/girlfriends in a sample of 12-16 year olds. Allison, Pearce, Martin, Miller, and Long (1995) who found that hopelessness partially mediated a link to suicide from perceived parental style, supported this finding. The current study found no evidence to link hopelessness to any of the key variables of drug use, family background and attachment dimensions, and hence no support for the studies reviewed above. This finding did raise the question as to how to interpret the hopelessness scores of just over 50% of both the problem and control group who
were indicated to have mild to severe hopelessness. The finding may suggest that a
degree of hopelessness is quite common in late adolescence or that a proportion of the
young people sampled was not particularly mindful about what the future held for
them. Further research will be necessary in order to interpret this finding.

4.4 Hypothesis 4 - Family Background

4.4.1 & 4.4.2 Total Family Background Index

The hypothesised difference between the problem and control groups on the
global Family Background Scale was not supported even though the problem group
had a poorer index of global family functioning. This finding was supported in part
by the work of Egginton and Parker (2000) who found that the profile of young
problem drug users has changed since the 1980s and that the majority no longer come
from damaged family backgrounds. When coupled with the socio-economic findings,
this lack of a difference in global family functioning may well be regarded as
supporting the contention that drug misuse might be viewed as a classless problem
(Egginton & Parker, 2000).

Skolnick (1986) has argued that poor family functioning does not always have
to result in the development of a disorder. However, the current analysis revealed that
poorer global family functioning was associated with higher levels of drug use. This
suggested that the distinction between problem and control group participants may be
somewhat arbitrary and that in the respect of family functioning, a continuum from
'no drug use' to 'high drug use' might be more appropriate. The finding of a
relationship between family functioning and drug use measures was in keeping with
the large body of work that places family functioning as a key risk factor for problem
drug use (Hawkins et al., 1992; Lloyd, 1998; Nurco et al., 1998; Scheer & Unger,
1998). It is of note that the relationship between family functioning and drug use did
not extend to the drug-related problem index. This may be due to this measure
tapping into a broader range of problem domains of which family functioning plays
only a part.
4.4.3 & 4.4.4 Family Background Sub-scales

The analysis of the sub-scales of the family background measure allowed greater precision in locating the potential areas of difficulty that might have an influence on the problem drug use of the young person. As with the global indicator of family functioning, there were no difference between the two groups on the sub-scale measures. However, it was noted that the measure of levels of stress in the family was approaching significance. It has been stated earlier, that it might be more appropriate to view the measures of drug use as a continuum rather than dividing the two groups, therefore the data was analysed for associations between lifetime drug use and family factors.

There was a strong association between higher drug use and poorer family experiences on four sub-scale measures: 'father educational involvement'; 'mother psychological adjustment'; 'family stress'; and 'conflict in the parental coalition'. Four other sub-scale measures demonstrated a trend towards significance but were cancelled out following significance value corrections. These were: 'father responsiveness'; 'father acceptance'; 'mother educational involvement'; and 'father psychological adjustment'. These findings indicated disturbance in the family rearing styles of the higher quantity drug users (Hofler & Kooyman, 1996) particularly implicating the parenting style of the father (Anasgasti & Denia, 1986; Brook et al., 1990; Brown, Myers, & Mott, 1990). The findings from the current study are supported by studies that have found children to be at increased risk of substance abuse if they were raised in a high conflict family (Mundin, Plunkett, & Christie, 1998) and exposed to a higher incidence of stressful life events (Brown, 1989). Brown also argued that having a substance abusing parent added even more stress to the family, however in this study parental substance abuse did not demonstrate a significant association. This is surprising given that increased maternal substance use is viewed by the literature as an important factor in predicting the severity of drug problems (Gabel et al., 1998; Hawkins et al., 1992; Lloyd, 1998; Sheehan et al., 1988; Swaim, 1991). The failure of the current study to support the finding of the effect of maternal substance use might have been due to the relatively small sample size. The finding of a relationship between parental psychological adjustment and
higher drug use replicated that of Griffiths (1998). Egginton and Parker (2000) found that education deteriorated during the teenage years for young people involved with higher levels of drug use. The findings of this study suggest that the low educational involvement of parents with their children may well be a factor in the development of educational problems.

The findings from the family background measure have indicated that a number of the family sub-scales were strongly associated with higher levels of drug use. Melchert (1998) argued that the variables may have an effect both independently and interactively with the other family factors, such as low father involvement being compounded by the mother experiencing difficulties as well. It is pertinent to raise the issue of causality, in that poorer family functioning may contribute to increased drug use or vice versa. However, the literature has indicated that many young people who become involved in high levels of drug use have demonstrated problem behaviour which pre-dates the drug use, and these problem behaviours are also potentially associated with poorer family functioning (Egginton & Parker, 2000; Gilvarry, 2000; Hawkins et al., 1992; Lloyd, 1998).

4.4.5 Additional Family Measures

The finding that the problem and control groups were similar in the nature of their family make-up and their educational abilities is contrary to the pattern noted by Sheehan (1988). However, it is in harmony with the findings of Egginton and Parker (2000) offering support to their argument that the demographic distinction of problem drug users is increasingly becoming blurred. Lloyd (1998) included child abuse as a risk factor for problem drug use, although this was not supported in the present study. The incidence of sexual abuse was found to be similar across both groups, although this may have been prone to under reporting owing to the sensitive nature of the question. The analysis of sexual abuse was also limited by the relatively small sample size.

Smith et al. (1995) argued that involvement in religious activity may act as a protective factor against problem drug use. The current finding that the level of family religiousness was higher in the control group and that reduced levels of family
religiousness were related to higher levels of drug use and drug-related problems supported this assertion.

Hazan and Zeifman (1999) argued that relationship disruption increases the susceptibility to a variety of problems including substance misuse. This related to the finding that the problem group had more boy/girl friend relationships than the controls and the higher number of relationships was positively correlated with higher levels of drug use. In light of this finding it was decided to explore the relationship variable further (see section 4.5.2).

4.5 Hypothesis Five

4.5.1 Associations between Attachment Dimensions and Family Background Sub-Scales

The current study found no association between the attachment dimensions and the sub-scales of the family background measure that theoretically might have been expected to have an impact on attachment. One of the aims of the research was to discover whether or not the theory of attachment might be utilised in understanding the variable effect of family experiences on the drug using careers of young people. The study has demonstrated that a cluster of family factors was directly related to higher levels of drug use and also a weak direct link from 'attachment anxiety' to current drug use. The family experiences involved deficits in the rearing style of fathers, maternal psychological problems, family stress and parental coalition. All of these factors might potentially have a detrimental effect on the important business of emotional communication between parents and children. These communications are regarded as vital for the construction of attachment working models of self and other (Bowlby, 1988). All of these factors might potentially reduce the availability of the parents to the child and thus generate attachment emotion, which is aimed at retaining the attachment relationship (Kobak, 1999). The suggestion of the literature is that such family background experiences should impact upon the attachment profile of young people (Burge et al., 1997; Mothersead et al., 1998). Despite these assertions
no associations were found in the current study to link family experiences to the attachment profile of young people in their close relationships.

A potential explanation for the lack of an association between the attachment dimensions and the family experiences may lie in the methods of measurement. The family history and attachment measures are considered to be in different domains. The family measure tapped behaviourally specific reports of family history, e.g. asking how many times a specific event occurred, whereas the attachment measure tapped into behaviour, cognition and emotion regarding close relationships. Crowell, Fraley, and Shaver (1999) have argued that it is not reasonable to expect a relationship between these measures owing to the difference in family/relationship domain. Brennan et al. (1998), Fraley and Waller (1998) and Stein et al., (1998) have argued that the dimensional approach to the measurement of attachment, as used in this study, allows more precision, and is more psychometrically sound. Brennan et al. (1998) also argued that this increased precision might improve upon the ability of such measures to demonstrate an association with the family domain (Crowell et al., 1999; Stein et al., 1998). It is unclear whether or not the domain argument implies that the attachment and family measures assess unrelated constructs or whether the attachment measure is deficient in some way (Kirkpatrick, 1998). The literature review of attachment theory appears to suggest that theorists think it unlikely that attachment in close relationships will be totally unrelated to family of origin experiences (Bowlby, 1988). However, it is plausible that the attachment measure is not tapping into a model that is directly influenced by family background experiences but is mediated by an individual perception of family background experiences in conjunction with experiences in other domains of life. Such an argument increases the need for further research that addresses the role of attachment beyond close relationships into the realm of other significant relationships. Also continued attention is required to the debate regarding how the complex concept of attachment is measured and how these measures are interpreted (Crowell et al., 1999; Kirkpatrick, 1998; Stein et al., 1998).
4.5.2 Additional Boy/Girl Friend Index Analysis

The association between the number of romantic relationships that a person had experienced and higher levels of drug use prompted further analysis of this variable to be undertaken. It was suspected that the relationship variable might be related to the attachment dimensions, as close relationships are the stated focus of the measure and potentially to the family sub-scales implicated for the attachment dimensions. This indeed proved to be the case with high attachment anxiety being strongly associated with greater numbers of relationships. Also a higher number of relationships was associated with family experience of maternal physical abuse. Of the remaining family experiences, there was trend towards significance for physical neglect and family stress. This linking of a greater number of close relationships with higher levels of drug use, higher attachment anxiety, and specific family experiences was an exciting finding for the current study.

The findings of the current study appear to be supported by the literature. Hazan and Zeifman (1999) noted that 15-17 year olds named boy/girl friends as their primary attachment figures. Trinke and Bartholomew (1997) stated that such relationships take precedence over other attachment relationships such as with mothers and fathers. However, if the young person comes from a background where the cluster of negative family factors has been present, the family dysfunction adversely effects the working model of the adolescent. Stein, Marton, Golombek, and Korenblum (1994) also reported that family life events that threatened the availability of significant attachment figures were linked to emotional disturbance in late adolescence. The compromised working model in turn is used by the adolescent to structure his/her new attachment relationships contributing to interpersonal distress by overloading the peer relationships with emotional needs (Aseltine et al., 1994; Burge et al., 1997; Motherseed et al., 1998; Ratti et al., 1996). Whitaker et al. (1999) specified that the working model of attachment most related to expectations of relationship satisfaction was the model of self. Stein et al. (1998) indicated that all measures of attachment locate it in relationships and the attachment emotions are elicited when the sense of safety and security breaks down. It was argued that the nature of individual's attachment is revealed by what use they make of relationships
when the attachment system is activated (Henderson, 1982). The current study found that young people with high levels of drug use have increased numbers of close relationships. This increased level of close relationships was related to an increased level of attachment anxiety or a negative model of the self as well as specific negative family experiences. These findings relate to the work of Shedler and Block (1990) which suggested that people who experience problems with their drug use are unable to invest in or derive pleasure from meaningful personal relationships. Wills et al. (1992) concurred when they asserted that the distress of problem drug users was in part down to poor competence in normative roles and relationships. Allen et al. (1990) made a suggestion that potentially closes the loop back to family background when they suggested that family behaviour might produce later problems in part by lowering adolescents' sense of competence and control in social relationships. Egginton and Parker (2000) found that in a sample of young problem drug users, many of them had started their sexual experiences early suggesting that they had begun an early transition to adult close relationships.

An alternative to the direction of causality implied thus far regarding the presence of a relationship between increased drug use, increased number of close relationships, attachment anxiety, and negative family experiences is that the drug using behaviours create the problems (Gossop et al., 1998). However, although the current findings support this to a degree, it is difficult to explain how some of the family experiences such as maternal physical abuse, and physical neglect might be influenced by the drug use of an adolescent family member. Hofler and Kooyman (1996) referred to problem drug use as a delayed maladaptive transition in young adults which is mediated by the drug having an effect which surpasses any attachment experience the individual has encountered. The key words of the problem group were generally supportive of this argument. However, it should be acknowledged that despite using similar words the control group participants indicated less drug use. This may be because the controls have escaped exposure to what is regarded as the most powerful of 'attachment' drugs, the opiates (Stewart, 1987) or because they have access to close relationships that meet their needs and remove some of the need for drugs (Shedler & Block, 1990).
4.6 Strengths of the Study

The strength of the research was that it investigated in detail the drug use histories, family histories and close relationship experiences of young people with and without a history of problem drug use. The research focused on young people during a specific developmental stage, namely late adolescence. This was done in order to reveal as much as possible about the factors that interact with drug use to influence a young person to use drugs to problem levels.

A key strength of the study was that the problem group was selected from a very small age range thus allowing a more intense focus on the selected sample. This was in conjunction with a control group selected from the same age range of the 'normal' population that was stratified in order that the two groups would be socio-economically similar. This focused sampling may well reduce the possibilities of generalisation, but the difficulty in recruiting large numbers of young problem drug users required that a focused design be used. The effect size for the drug use measures proved to be quite large, approximately two standard deviations. This ensured that along with the focused sampling, the power of the study could be considered to be within acceptable limits and a degree of confidence in the findings was not misguided.

A further factor in the strength of the study was the choice of measures. The adult attachment literature increasingly favours the use of dimensional measures, as used in this study, in place of the more traditional categorical measures. The driving factor behind this change is the preservation of individual differences (Bartholomew & Horowitz, 1991) and the fuller description of attachment patterns that the dimensional measures allow (Feeney, 1999). Hence where previous studies have had to rely on global categories, the use of the dimensional measures allowed a more in-depth analysis. The selection of the family history instrument was influenced by similar factors in that the individual sub-scales allowed more in-depth analysis that global family history instruments may not detect. The measure selected was based on a comprehensive family history literature review and incorporated all the variables that had the greatest empirical support within that literature and which the literature suggested could directly influence family functioning (Melchert & Sayger, 1998).
Therefore the family instrument used in the study was behaviourally specific, had a good capacity to record atypical experiences and the sub-scales covered a wide range of variables that may have potentially influenced the young person's development (Melchert, 1998).

A final strength of the research was the reliability of the data collection process. The presence of the researcher facilitated accurate data collection for all of the problem group and for members of the control group who indicated that they required help owing to difficulties such as poor reading ability. This combined with a thorough briefing for those control participants who completed measures independently reduced the amount of missing data to an absolute minimum. This prevented the study being unduly affected by high rates of attrition, which have been noted as a problem in studying drug using groups owing to young problem users having little confidence in adult authority figures (Egginton & Parker, 2000).

4.7 Limitations of the Study

The first limitation of the research was that the measures selected were relatively new, and the drug use measures were developed specifically for the study. This has implications for the long term reliability and validity of the measures because the necessary studies are still ongoing. However, Melchert and Sayger (1998) have subjected the Family Background Questionnaire to the most comprehensive examination of validity of a family of origin assessment known to date. Stein et al., (1998) argued that the dimensional approach to the measurement of attachment, as used in this study, allows more precision, and is more psychometrically sound. Melchert (1998), despite such evaluations warned that the complexity of the issues surrounding assessment requires that difficulties are acknowledged and the interpretation of data is cautiously done. These appear to be wise words in that no matter which measures are selected and used, limitations are always present and no approach is without critics. One such limitation regarding the drug use measures was that they collected information by drug class resulting in cocaine use not being able to be separated from other stimulant use.
The second limitation is again related to the measures in that all relied on the self-report of the participants. Self-report measures have been accused of being vulnerable to a variety of biases (Kirkpatrick, 1998). Crowell and Treboux (1995) argued that self-report measures of attachment are based on the assumption that individuals have access to conscious feelings and perceptions about their relationships. They further argued that individuals might be limited in their direct awareness of underlying representations and strategies (Crowell et al., 1999). Stein et al. (1998) suggested that the Adult Attachment Interview was a better method of assessment as it was claimed to be able to detect people who appeared less attentive to their attachment experiences. It has also been suggested that individuals with an avoidant attachment style would be less likely to reveal themselves in self-reports (Fraley et al., 1998). Brennan et al. (1998) reported that the interview versus self-report debate remained unresolved, however it was pointed out that whilst interviews might be uniquely revealing they are also impractical for many researchers. Brennan et al. also noted that interviews have biases of their own such as interviewer effects. Davies (1997b) concurred with this idea when he reported that the context of the interview and the presentation of the interviewer often influenced drug user reports. Melchert (1998) commented on the self-report debate from the perspective of family assessment. He argued that phenomenologically, self-report assumes it can reflect the internal subjective world of the individual, which can only be completely known by the individual. Melchert suggested that there might not be a meaningful, external, objective reality to which the reports could be compared. However, the results of his research suggested that memories assessed with self-report instruments corresponded to actual events to at least a significant degree but were not a precise estimate of accuracy. Again, it appears that whichever method is selected, interview or self report, it will be open to potential bias and criticism unless corroborated by other family members. In this study a combination of the two methods may have introduced potential biases from both. The common theme however, is that when assessing people it is not likely that they will yield information in a robotic manner uninfluenced by the nature of the question and the surroundings in which this takes place. Thus the research findings are limited by how successful the researcher was in
creating a comfortable environment for the revealing of participants thoughts, feelings and behaviours (Day & Robles, 1989; Power et al., 1996).

The third limitation is linked to a number of difficulties related to the sample selected for the research. The first aspect of this is the relatively small sample size. This was influenced by the relative low occurrence within the general population of problem drug users who seek treatment, especially young people. This limited size did not allow the analysis of the influence of factors such as sexual abuse, owing to low incidence in the two sampled groups. An aspect related to the limited sample size was the problems encountered in recruiting young people to the study. The problem drug users often were preoccupied with what they perceived to be far more urgent issues than taking part in a research study thus influencing the decision to, and the act of turning up to, take part in the study (Egginton & Parker, 2000; Gossop et al., 1998; Lloyd, 1998). The control group had to consider that the questions they were answering concerned an aspect of their lives, drug use, which is often related with misunderstanding and distrust from adult authority figures and may have discouraged them from participating.

A second aspect is that the generalisation of the study is limited because of the strict sampling criteria. This can be seen as both a strength and a limitation, however, as one of the primary aims of the study, influenced by clinical service needs, was to focus on young problem drug users, this was not a severe limitation. The service in which the research was carried out was a prescribing service and as such, attracted mainly people with problems that focused on opiate drugs. It could be argued that it would have been desirable to have a range of drug types, however the findings have noted the poly-drug use of the problem group. The narrow focus on primarily opiate users has been supported in recent months, by increased media focus on the needs of young people regarding drug issues, especially around drugs such as heroin. In terms of the problem group, no control was made for the quality of treatment offered, for prior episodes of treatment and contact with other agencies. In retrospect these might have been included as variables in the study. In considering the control group, it might have been preferable to have a non-drug using group and a non-problem drug using group rather than mixing the two. This was because some of the controls
reported using regular amounts of drugs and may have been avoiding any problems this caused thus potentially confounding the group allocation.

A third aspect, which is also related to the narrow focus of the study, is the limited scope of the measures. Since the focus was on attachment in close relationships, the study did not consider the wider role of attachment style to parents and friends (Trinke & Bartholomew, 1997; Kirkpatrick, 1998) which may differ from the close relationship style. In addition to this, the current study focused upon the role of attachment emotion in close relationships. It appears from the findings that a broader analysis of the role of differing emotions other than attachment might be warranted. Further research might adapt the strategies used in the current study to consider the wider realm of relationships and emotions.

A fourth aspect of the study design that limited the findings was the cross-sectional nature. This was unavoidable given the time remit for the study, however it has been noted within the literature that it is not possible to infer causal directions from cross-sectional research. However, findings may be strengthened by relating them to previous literature that may give an indication of the likely causal direction of factors that are found to have a relationship (Allison et al., 1995).

A fourth limitation concerned the measures, specifically the debate over whether or not the attachment measure of close relationships is measuring current relationships i.e. a state measure (Crowell & Treboux, 1995; Stein et al., 1998) or whether it is measuring enduring features of the approach to relationships i.e. a trait measure (K. Brennan, personal communication, May 5, 2000). An opinion could have been formulated regarding this question had the study gathered more information from the participants regarding their current relationships. Bretherton and Munholland (1999) asserted that adult attachment measures appeared to access a general working model of how to enter into and behave in a relationship. Kobak (1999) concurred that measures of attachment are generally focused on underlying models, however he argued that methodologies should be extended to studying models as part of the attachment system as it functions in current relationships. The debate remains unresolved and hence cautions against the over zealous interpretation of the attachment findings (Crowell et al., 1999).
A final limitation of the study concerned the data analysis. It might be considered that in accounting for the possibility of making a Type I error by using non-parametric statistics and correcting significance values, the chance of a Type II error was increased. Howell (1992) has cautioned that with a small sample size the chance of a Type I error is small. However, the sample sizes in the current study were small to moderate, they were also unequal, they produced mainly ordinal data and a proportion of the variables demonstrated problems with variance and distribution. The position adopted may be criticised as overly conservative, however it appears this position is adequately justified.

4.8 Clinical Implications & Future Research

4.8.1 Clinical Implications

The primary application of the findings of this research is to support the assertion of Shedler and Block (1990) that interventions aimed at reducing experimentation among young people may meet with limited success and that it is likely to be more useful to help people avoid drug 'abuse' rather than 'use'. The findings of this study have most relevance in the domain of factors that influence 'normal' experimental or recreational drug use to become problematic. The analysis of drugs used identified the role of opiate drugs in the problem group when compared with the control group. The key words revealed that the positive consequences of drug use for each group were clustered around emotional factors such as relaxation and the blocking of difficult feelings. This finding implied that the more a young person assigns an emotional regulation function to the drug, the more vulnerable they are to problem drug use (Stewart, 1987). The literature indicated that opiates have a chemical effect that can assist in the modulation of emotions in humans adding strength to this argument (Benton, 1988b; Hofler & Kooyman, 1996). Stewart (1987) commented that people who have poor relationships and a poor view of the self who also choose to cope by using drugs often elicit a cruel response from society. Some authors have viewed the drug using behaviour as dysfunctional attachment behaviour, however this is often reinforced by societal responses rather than understood for its
emotional function (Charnaud, 1999; Kobak, 1999). The clinical implication of this finding is that the young person needs to reclaim access to genuine affect or they will continue pursuing the compensatory activity of drug use (Crittenden, 1995). Treatment services will be required to encourage an interpersonal context that will allow this to take place (Crittenden, 1995) and which is strong enough to withstand the interpersonal distress that might accompany the process (Dozier, Cue, & Barnett, 1994). The findings also indicated that a host of family functioning factors and close relationship attachment anxiety were directly related to drug use and also via the number of close relationships the young person had experienced. Irrespective of the causal direction, it is likely that problem drug use and interpersonal factors have a bi-directional association whereby each can make the other worse in a vicious cycle (Brown, 1989; Leighton, 1997). Equally so from an intervention viewpoint, if the two factors can influence each other detrimentally, it is theoretically possible that they could influence each other positively. Therefore interventions aimed at boosting the interpersonal skills and social networks of the young substance user may well reduce their reliance on drugs (Shedler & Block, 1990). This implication is supported by indications from the literature that family therapy is an effective intervention for substance use problems in young people (Joanning, Quinn, & Mullen, 1992; Stanton & Standish, 1997). From an attachment perspective, improving the interpersonal relationships of the young problem user will have a direct influence on their ability to maintain attachment relationships and hence, theoretically, have to rely less on the attachment functions of the drug. Also using the theory of attachment within assessment would indicate potential areas of difficulty in the relationship emotion domain (Dozier et al., 1994) that might otherwise cause the treatment relationship to fail. Such a failure might increase a problem drug user’s experience and perceptions of a poor view of self (Bartholomew & Horowitz, 1991). Therefore the key implications of the findings of this study are that services should pay attention to the interacting factors of the emotional role of drug use. This will include the relationship between a poor family experience, a difficult interpersonal relationship history and a poor attachment model of the self in order to reduce the reliance on powerful drugs in favour of more functional interpersonal relations (Myers, Brown, & Mott, 1993).
4.8.2 Future Research

Egginton and Parker (2000) argued that the current focus on risk factors for problem drug use might have to be widened owing to the perception of the breakdown in the correlation between problem drug use and socio-economic status and family life. The findings of this research supported the lack of a socio-economic split but suggested that the link to a difficult family life is maintained. The implication for future research may be to focus on distressed families and consider longitudinal studies of how that distress is managed and the relationship of that distress to the increasing availability of substances. Future qualitative research with such high-risk families might help to address the complex interacting nature of some of the variables identified in the current study (Lloyd, 1998; Parker et al., 1998).

Future research should also consider the poly-drug nature of problem drug use (Gilvarry, 2000) and pay attention to the functional use of specific substances for specific purposes. Examples might include different drug use to relax, to be confident, and for energy, etc (Magai, 1999). Consideration of the role that drug users ascribe to different substances could give an insight into the different emotions that underpin the selection of a particular drug, which may then become over relied upon.

It has already been discussed that the focus on close relationships could be considered restrictive (Trinke & Bartholomew, 1997; Stein et al., 1998). Therefore, future research might address the multiple relationships that form the interpersonal world of the young person including partners, parents and friends. From the current research it appeared that one of the critical factors worthy of further research may be the reciprocal nature of these relationships (Crowell & Treboux, 1995; Kobak, 1999; Yeh & Hedgespeth, 1995) as this links into examining how distressed people make use of their close relationships (Stein et al., 1998). The achievement of such a program of research would require the use of multiple methods of assessment across multiple domains of the individual life and preferably be across time in a longitudinal framework (Crowell et al., 1999). One question that could be addressed in a program of research such as this regards the influence of family relationships on later relationships (Feeney, 1999; Simpson & Rholes, 1998, Stein et al., 1998). The current study implied that the interpersonal world of the family may well influence later
relationship success. Further investigation of the complex issues surrounding how certain experiences link to how people learn to conduct close relationships would be of value. This could then be related to what function the role of a substance can play in both compensating for, and being a causal factor in, the breakdown of close relationships.

A final suggestion for future research concerns the gender split in people presenting for problems with substance use. A program of research might consider the differential effects of certain experiences on each gender and how this impacts into relationship styles and responses to stress (Feeney, 1998). In order to do this developments may have to be made to the complex task of measuring affect and behaviour (Feeney, 1998; Simpson & Rholes, 1998) during adolescence and young adulthood. Within this question there is a role for considering further the function of attachment in adolescence for both males and females and how the fulfilment of this function might influence later development (Allen & Land, 1999). The current study also found that variables associated with fathers were strongly implicated, therefore the further investigation of the impact of father experiences upon both males and females may well be merited. O'Koon (1997) has suggested that attachment to the mother and attachment to the father is specifically associated with different outcomes. This suggestion of variable effects of parental attachments according to gender might be considered in future research along with the variable effect of the young person's gender.

4.9 Conclusions

The current study found that participants described the positive consequences of drug use in generally emotional terms, and for the problem group this outweighed the negative consequences and was linked to a differing pattern of the use of opiate drugs.

The current study also found remarkably few differences between the problem and control groups. The main distinguishing factor between the two groups was the use of opiates. They also differed in the realms of education, disabilities and close
relationships. These findings suggested that the two groups were similar in many ways.

A second layer of analysis determined that drug use, when seen as a continuum from none to large amounts, was associated with a greater number of romantic relationships, negative family experiences, and attachment anxiety.

In considering the proposal that attachment anxiety might be influenced by family experiences, no evidence was found to support this. This was of concern as attachment theory has predicted that the close relationships of young people should be affected by adverse family experiences. However, when the number of close relationships a young person had experienced was considered, this was strongly associated with high drug use, attachment anxiety, and specific family experiences. Therefore, this suggests that the interpersonal domain of the young person might be a potential way in which family experience can influence later functioning. The attachment concept indicated this might be due to a negative model of the self.

The current study was unable to determine the direction of causality, but considered that it was likely that the interpersonal factors and drug use had a bidirectional relationship. It appeared therefore that family background experiences have a direct influence on drug use and upon the number of relationships. The question as to how family experiences have a direct impact upon drug use remained unresolved. However, the nature of the family experiences that linked to drug use might suggest that the young person uses drugs as an emotional escape as indicated in the descriptive key words.

The three most strongly implicated factors in the study; choice of drug, attitudes to use and close relationships were all potentially emotion-focused. The excessive use of drugs might be regarded as less functional for meeting emotional needs as it removes the need for other people. Oatley (2000) proposed that emotions enable us to do things together and provide an outlining framework for the structure of relationships. If a drug satisfies all emotional needs, then the need to co-operate with a partner is reduced. Oatley (2000) viewed attachment as important throughout life and to be linked with trust, as broken attachments lead to lack of trust. In line with this view, it has been proposed that relationships are crucial for dealing with
distressing emotion in humans (Shedler & Block, 1990; Walsh, 1992). However, particular drugs are also thought to be very good at this task, potentially even better than people (Stewart, 1987; Hofler & Kooyman, 1996). Stewart (1987) argued that opiate use opens the door to the happy childhood state where all is right with the world and the user is safe. Therefore, the experience of powerful drugs may not require a vulnerable participant to impress, however, whenever the drug is discovered by a vulnerable person the emotional effect of the drug may be received more willingly. Whenever the reliance on drugs for emotional purposes occurs it is likely that this may cause and be caused by distress from interpersonal relationships with partners, family, and friends. How one of the participants described the beginning of his problem use is pertinent to this argument. When he split up with his girlfriend after two years, this reportedly shattered his confidence and security and heroin became a problem. The drug reportedly gave him confidence to face his ex-girlfriend, appearing to meet his emotional needs, but reducing his chances of winning her back by dominating his life.

The theory of attachment appears therefore to have a role in explaining how some family experiences are carried forward and expressed in the behaviour of late adolescents through their close relationships. The theory also might be regarded as a promising prospect, in conjunction with biological evidence, for explaining why opiate drugs have such a powerful impact upon people, especially when they have a history of interpersonal distress. Further work is required regarding the production of measures that might be able to capture accurately the attachment, and other emotional processes, which allow the products of developmental family experiences to be carried forward in the behaviour of the young people. The examination of dyadic roles in a range of relationships such as family, partners and peers, appears to be an area that may well yield valuable discoveries.
References


Appendix A

Background Information Questionnaire

Instructions: Please answer the questions below as best you can and try not to miss any out. If a question does not apply to you then please write N/A.

1. Where do you live? House Flat Care Home Hostel
   (please circle)
   Homeless Other ________________________

2. Who do you live with?

   Number of people ________________________

   What is your relationship to these people (examples are family or friends):

3. If you are still at school please tick here: □

   If you have left school at what age did you leave: ________________________

   If you have a Job or are at College please tell us what you do: ________________________

   If you receive benefits please tick here: □
**SUBSTANCE USE QUESTIONNAIRE 1**

Your Date of Birth ___________________________ Date form filled in ___________________________

*Instructions*: Please put a number in the *Ever Used* column for each of the substances listed. To all those you answer yes, please put a number in the other boxes on the same line to show how often you have used this substance, how many times you have used and your usual way of taking the drug.

<table>
<thead>
<tr>
<th>Substance Profile</th>
<th>Ever Used</th>
<th>How Often</th>
<th>How many times in the last month</th>
<th>Most used way of taking the drug in the last month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scoring</td>
<td>1. Yes</td>
<td>1. Once or twice</td>
<td>1. No use</td>
<td>1. Oral</td>
</tr>
<tr>
<td></td>
<td>2. No</td>
<td>2. Less than 6 months</td>
<td>2. Once a week</td>
<td>2. Smoked</td>
</tr>
<tr>
<td></td>
<td>3. Don't Know</td>
<td>3. 7 months - 1 year</td>
<td>3. Two or more a week</td>
<td>3. Sniffed/ Snorted</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. 2-5 years</td>
<td>4. Once a day</td>
<td>4. Injected</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. 6-10 years</td>
<td>5. 2-3 times a day</td>
<td>5. Any other way</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6. More than 10 years</td>
<td>6. 4 or more times a day</td>
<td>6. ***********</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7. Not Applicable to me</td>
<td>7. Not Applicable to me</td>
<td>7. Not applicable to me</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8. Don't know</td>
<td>8. Don't know</td>
<td>8. Don't know</td>
</tr>
</tbody>
</table>

**Alcohol**

**Tobacco**

**Cannabis**: Hashish, Ganja, Marijuana

**Opiates**: Heroin, Methadone, DF118, etc.

**Cocaine**: Crack, Coca leaves

**Stimulants**: Amphetamine, PCP, Base, etc.

**Hallucinogens**: LSD, Ecstasy, Magic Mushrooms, etc.

**Sedatives**: Benzodiazepines e.g. Temazepam, Diazepam, Barbiturates

**Solvents**: Glue, Aerosols

**Others**:

Appendix B
SUBSTANCE USE QUESTIONNAIRE 2

Experience of Drug Use

Instructions: Please could you put in the spaces below five words or phrases, which you feel describe your experience of drug use (Examples might be Enjoyable, Stupid, Bad for me, Keep me going). Please try to think of words that relate to your own individual experiences.

1. ___________________________________________________
2. ___________________________________________________
3. ___________________________________________________
4. ___________________________________________________
5. ___________________________________________________

Problems Related to Drug Use

Instructions: Please indicate below the level of problems you have had in the following areas of your life because of your drug use. Please use the scale printed below.

<table>
<thead>
<tr>
<th>Serious Problems</th>
<th>No Problems</th>
<th>Some Problems</th>
<th>Many Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Life</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Money</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Health</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Legal</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Psychological</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Experiences in Close Relationships
(Brennan, Clark & Shaver 1998)

Instructions: The following statements concern how you feel in relationships with a boy/girl friend. We are interested in what you normally experience in your relationships, not just what is happening in a current relationship. Please say how much you agree or disagree with each statement by writing a number in the space provided. Please use the following rating scale:

<table>
<thead>
<tr>
<th>Disagree</th>
<th>Neutral/Mixed</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
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1. I prefer not to show a boy/girl friend how I feel deep down.
2. I worry about being abandoned.
3. I am very comfortable being close to boy/girl friends.
4. I worry a lot about my relationships.
5. Just when my boy/girl friend starts to get close to me I find myself pulling away.
6. I worry that boy/girl friends won't care about me as much as I care about them.
7. I get uncomfortable when a boy/girl friend wants to be very close.
8. I worry a fair amount about losing my boy/girl friend.
9. I don't feel comfortable opening up to boy/girl friends.
10. I often wish that my boy/girl friends feelings for me were as strong as my feelings for him/her.
11. I want to get close to my boy/girl friend, but I keep pulling back.
12. I often want to merge completely with boy/girl friends, and this sometimes scares them away.
13. I am nervous when boy/girl friends get too close to me.
15. I feel comfortable sharing my private thoughts and feelings with my boy/girl friend.
16. My desire to be very close sometimes scares people away.
17. I try to avoid getting too close to my boy/girl friend.
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18. I need a lot of reassurance that I am loved by my boy/girl friend.

19. I find it relatively easy to get close to my boy/girl friend.

20. Sometimes I feel that I force my boy/girl friends to show more feeling, more commitment.

21. I find it difficult to allow myself to depend on boy/girl friends.

22. I do not often worry about being abandoned.

23. I prefer not to be too close to boy/girl friends.

24. If I can't get my boy/girl friend to show interest in me, I get upset or angry.

25. I tell my boy/girl friend just about everything.

26. I find that my boy/girl friends don't want to get as close as I would like.

27. I usually discuss my problems and concerns with my boy/girl friend.

28. When I'm not involved in a relationship, I feel somewhat anxious and insecure.

29. I feel comfortable depending on boy/girl friends.

30. I get frustrated when my boy/girl friend is not around as much as I would like.

31. I don't mind asking boy/girl friends for comfort, advice, or help.

32. I get frustrated if boy/girl friends are not available when I need them.

33. It helps to turn to my boy/girl friend in times of need.

34. When boy/girl friends disapprove of me, I feel really bad about myself.

35. I turn to my boy/girl friend for many things, including comfort and reassurance.

36. I resent it when my boy/girl friend spends time away from me.
PARTICIPANT INFORMATION SHEET

Young People and Problem Drug Use:
The Role of Attachment Theory and Family Experiences

Investigators: Mark Bowers & Dr M Christie.

1. **What is the purpose of the study?**
We want to find out more about how young people, who have a problem with their drug use, choose the people they have close relationships with. We are particularly interested in whether or not this is linked to relationships and events that happened in the family, or care, during childhood.

2. **What will be involved if I agree to take part in the study?**
If you agree to help I would like to meet with you. You will be asked questions about how you choose people for your close relationships, about your family, or care, background and about your drug use. This should take about an hour and can be done in two parts if you wish. If you should find any of the questions distressing you will be able to discuss this with your drug service worker.

3. **Will the information obtained in the study be confidential?**
The information you give will be kept confidential. You will not be identified in any published work, or conferences, related to this study. Your participation in the study will be recorded in your drug service notes; this will not include any information about your answers.

4. **What if I am harmed by the study?**
Medical research is covered for mishaps in the same way as for patients undergoing treatment in the NHS i.e. compensation is only available if negligence occurs.

5. **What happens if I do not wish to participate in this study or wish to withdraw from this study?**
If you do not wish to participate in this study or if you wish to withdraw from the study you may do so without justifying your decision and your future treatment will not be affected.

6. **What are the benefits of this study?**
Information from this study will help to show how young people who have drug use problems choose those people who are close to them and if this choice is linked to their family, or care, experience of relationships. Understanding more about the ways in which young people choose their relationships may help the development of better assessments and treatments for young people with drug problems.

7. **Who is supporting this study?**
Leicestershire & Rutland Healthcare NHS Trust, Leicester University, Centre for Applied Psychology (Clinical Section) and the Leicestershire Drug Action Team support this study.
VOLUNTEER INFORMATION SHEET

Young People and Problem Drug Use: The Role of Attachment Theory and Family Experiences.

Investigators: Mark Bowers & Dr M Christie.

1. What is the purpose of the study?
We want to find out more about how young people, who have a problem with their drug use, choose the people they have close relationships with. We are particularly interested in whether or not this is linked to relationships and events that happened in the family, or care, during childhood.

2. Why do we need volunteers?
It is essential for this study that we gather information as to the experience of close relationships from young people who do not have a problem with drug use.

3. What will be involved if I agree to take part in the study?
If you agree to help you will be asked to complete some questionnaires, anonymously, about how you choose people for your close relationships, about your family, or care, background and about your drug use (if any) and return them in the envelope provided. This should take about an hour of your time. You will receive a £5 CD voucher to thank you for giving your time.

4. Will the information obtained in the study be confidential?
The information from the questionnaires will be kept confidential. You will not be identified in any published work, or conferences, related to this study.

5. What if I am harmed by the study?
Medical research is covered for mishaps in the same way as for patients undergoing treatment in the NHS i.e. compensation is only available if negligence occurs.

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Appendix F

Demographic Variables Recorded

- Age of the participant
- Age at which parents separated (if applicable)
- Age at which participant left school
- Number of people whom the participant lived with
- Number of siblings
- Number of older siblings
- Type of accommodation the participant lived in
- Who the participant lived with
- The occupation of the participant
- Ethnicity of the participant
- Gender of the participant
- Socio-economic status of the participant's family of origin