

**ROMANTIC ATTACHMENT STYLE
& PARENTING IN
DRUG DEPENDENT MOTHERS**

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**D. Clin. Psy.
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ABSTRACT

A structured questionnaire was used to interview 64 drug using mothers about their levels of past and current drug use, depression, criminal behaviour, memories of their own parents, and in particular, romantic attachment style as measured by Hazan and Shaver's measure. The aim was to compare those mothers who had experienced some form of parenting breakdown, as measured by their having lost a child into social services' care, with those who had managed to combine drug use with being good enough parents.

Women who had lost a child into social services' care were not found to differ from the other women for the majority of factors looked at. However, they were found to be less secure and more avoidant regarding their romantic attachment style. Romantic attachment was then explored further, and found to correlate with a number of the other variables looked at. The more secure participants were in education for longer, had lower depression levels, a shorter history of daily heroin use, and had been in prison fewer times. The use of a romantic attachment style or other adult attachment measure with drug users is then considered from a clinical perspective, with particular reference to helping to identify those most likely to experience parenting difficulties at an early stage in treatment.

CHAPTER ONE : INTRODUCTION

OVERVIEW

This chapter will outline the current research relevant to parenting amongst drug users, and factors which might play a role in influencing this. It will start by looking at the assessment of parenting in the general population. The following section then will consider factors specific to drug users which may affect their ability to parent. The chapter will focus on the central concept of parenting breakdown in drug using mothers.

The chapter then moves on to look at attachment theory as a possible framework for considering differences in parenting within the drug using population, and outlines the various measures used in attachment research. Following an overview of the current research on attachment and drug use, the final section considers the overall area of women and drug use, and then states the questions the current research sets out to explore.

DRUG USE AND PARENTING

First, brief consideration is given to what factors influence parenting in general, before considering those problems specific to those who abuse drugs.

What constitutes 'adequate parenting' ?

Reder & Lucey (1995) consider the themes underlying parenting and the assessment of parenting. The model they describe is an interactional one, in which the parent and the child characteristics cannot be considered in isolation of each other. It is the interactions

between the parent(s) and child which leads to the development of recurrent relational patterns.

Each of us has an innate ability to parent, but the form which this takes depends on one's own personal experience (Bowlby, 1988). The transition from 'child of ones own parents', to 'parent of ones own child', can lead to the reawakening of issues about ones own childhood and upbringing (Pines, 1993). These may need to be recognised and reworked if the new parent-child relationship is to achieve its full potential.

Of particular significance, and of relevance to this research, is the development of an attachment between parent and child (Bowlby, 1980). The provision of a secure emotional base in infancy, leads to the later development of self-esteem, empathy for others, and a capacity for autonomous functioning (Steele, 1980). When these attachment processes break down, the child may be left with unresolved dependency issues which carry over into adulthood and adult relationships, including the relationship between the adult and their own child(ren).

The case of child abuse and maltreatment is perhaps the most researched in terms of parenting breakdown. This research (eg Belsky, 1984; Quinton & Rutter, 1988; Reder et al, 1993) concludes that child abuse results from an interplay of a number of factors, namely conflictual relationship patterns, vulnerable children, and external stressors such as unemployment and lack of support. These factors interplay, so that it is impossible to identify any one as the most important. Thus a parent may have carried over unresolved

issues from their childhood, which then adversely affects their own romantic relationships and the relationship with their children, which is all made worse by social stress. The child's characteristics may trigger these early conflicts in the parent, and may also be a focus for the parent's frustrations.

Three main areas must be considered therefore, when looking at parenting breakdown.

Parental characteristics:

Adults who themselves experienced psychological deprivation or abuse as children, are likely to then experience difficulties around control and care as parents themselves. They are likely to develop excessively dependent, but ambivalent relationships, and often demand emotional comfort from their children, putting their own needs before the needs of the child. As parents, they become inflexible and rigid, with unrealistic expectations of their children. Their own experience of insecure early attachments, may lead to unstable relationships in adulthood, and an inability to respond to their child's own attachment needs.

Child characteristics:

Young children are most dependent, and therefore most at risk. Those with physical or cognitive deficits are the most vulnerable, as are those who do not feed well or are often ill. Early separation between the parent and infant also leads to increased demands on the parent, and places the child at greater risk.

Social circumstances

Unemployment, poor housing, poverty and ill health, all add to the likelihood of parenting breakdown. Parental social isolation is also a common feature in child abuse cases.

From the above overview, a number of factors emerge which are of particular importance to the current research. Firstly, the fact that socially isolated parents are more likely to abuse or neglect their children (Seagull, 1987). If the parent is able to sustain a relationship with their partner in particular, this will act as a protective factor against the repetition of negative parenting patterns (Reder & Lucey, 1995). Marital discord has been shown to facilitate the transmission of childhood disorder into adulthood (Rutter & Quinton, 1984), and so a harmonious relationship provides protection against this. Secondly, the importance of attachments are stressed in the above review of parenting. Unresolved issues regarding control and care from one's own childhood, lead to difficulties in relationships in later life, in particular with partners and one's own children.

Factors particular to drug using parents

In addition to the above factors considered important to parenting in general, a number of factors must be considered in the assessment of drug using parents (Coleman & Cassell, 1995; Swadi, 1994).

Drug use itself

Financing the habit:

Since this research looks at parenting in opiate users, this will be the main drug type

considered here. This includes heroin, methadone, codeine linctus, DF118 and many others. All of these drugs are available through illegal channels on the black market, as well as being available through prescription. Heroin is only very rarely available on prescription, and is usually obtained on the streets for a high price. In 1994, the weekly cost of maintaining a heroin habit was £560 a week, with a cocaine habit costing between £600 and £1000 a week (Coleman & Cassell, 1995).

The need to obtain the money for a heroin habit drives many users to a life of *crime*, and this leads to difficulties with parenting. The majority of heroin users have some form of forensic history, and many have spent time in prison. Kolar et al (1994) report that 80% of their sample of 70 methadone maintained parents had experienced an arrest during the time their child(ren) was growing up. It may also be that, with drug using parents, any money needed to pay for clothing and food for children, is spent on drugs at times of severe need. Thus other basic needs such as education, providing age appropriate activities, and meeting the emotional needs of the children may be more at risk of being neglected by drug using parents.

Provisions made for the children whilst parents are procuring drugs must be considered. Children may be left alone for substantial periods of time, or exposed to situations in which drugs are changing hands, placing the child at risk.

The effects of the drug:

In relation to parenting, the most important effects of taking opiates on the individual are

that it may lead to sedation at high doses, even resulting in unconsciousness. Withdrawal can be unpleasant, though not life threatening, and the parent may become irritable more easily than usual at this time. Patterns of drug use, severity of use, method of administration and stability are all important factors in considering the effects of drug use on parenting. Use of more than one type of drug is considered more problematic than use of one type only.

Using drugs in the presence of children places the child at risk, and exposes them to inappropriate role models. Thompson & Blennerhassett (1996) report that 61% of 46 adults at a treatment centre, admitted their children had witnessed them taking drugs, leading to them seeing their parents in a state of intoxication, and/or aggression. They also felt this may have led to a lack of care and attention from themselves, towards their children.

In addition to this, *violence* may accompany drug taking/withdrawal. Tracy & Williams (1991) conclude from looking at a number of studies, that 70% of drug-using pregnant women had been beaten as adults, and 86% of these were beaten by their partner. When in an intoxicated state, it would seem people are less able to see things from a child's point of view, and the child may then suffer if exposed to this type of violence. High levels of marital conflict have been shown to have an adverse effect on the child, since this conflict is likely to spill over into the relationship between the parent and child. The child also explains the fighting to themselves, and the story they tell determines the effect the conflict has on them (Cowan, 1996).

Taking drugs may also affect the parent's mental state (Swadi, 1994). For example, the parent may have a primary psychiatric problem such as depression, which is made worse by their drug use.

Social circumstances

People who become dependent on drugs tend to have a number of social problems, such as unemployment, debt, lack of education, housing problems, social isolation and legal problems (Lief, 1985; Neville et al, 1987). Unemployment rates as high as 96% have been reported (Suffet & Brotman, 1976, cited in Davis 1990). Drug use may begin as a way of ignoring these problems, but in time it inevitably leads to a worsening of them. In particular, there may be problems in providing security, protection and stability (Swadi, 1994). For example, other drug users may be living in the home, or using the home as a base to take drugs.

Availability of *support* via a social network, is shown to dramatically improve the quality of parenting provided. Drug users tend to become isolated from normal support systems, and they are often wary of accessing other support systems for help, in case their children are taken into care. Positive factors include presence of a non-using partner/adult in the home, having non-using friends, and having a supportive extended family network which is available and accessible to the drug user.

The drug user's own childhood experience

The drug user, like anyone, is first exposed to parenting techniques in their family of

origin, and it would seem these are often ineffective. They then go on to rely on these techniques themselves when parenting their own children (Davis, 1990).

It may be that these people were driven to drug use in the first instance, by the inadequate parenting and attachments they received as a child. Stoker & Swadi (1990) interviewed adolescents, and asked them to report on their own family relationships. Those adolescents who used drugs, were more likely to see their families as uninvolved, more punitive and distant, with a level of mistrust and poor communication. They saw their fathers as ineffective and less significant than their mothers, and also reported higher levels of divorce, separation, re-marriage and bereavement. The direction of any effect of these factors cannot be concluded, though it may be that these familial factors contributed to the children taking drugs in adolescence.

Another study set out to explore the relationship between one's own childhood family environment and later adult psychosocial functioning, looking in particular at risk for drug taking in adulthood (Kalling Knight et al, 1995). They found a history of parental support to be related to adult psychosocial functioning in drug users. Parental absence was inversely related to levels of parental support, and they further found that when parental support was low, there was a relationship between parent-child conflict and psychosocial functioning in the drug using adult.

The presence of childhood trauma on the propensity to take drugs later in life has also been considered. Regan, Ehrlich & Finnegan (1987) interviewed pregnant methadone

maintained women about their own experience of violence as a child and adult, and the subsequent neglect or abandonment of their child. 15% of their sample (n=178) had been raped as a child, 21% raped as an adult, and 8% had been raped more than once. 19% had been beaten as a child, and 70% beaten as an adult. They found that a history of violence or abuse was related to later drug use, and also the placement of a child into foster care.

Some studies report levels of childhood sexual abuse in drug using women as high as 44% (Benward & Densen-Gerber, 1975) and 77% (Rohsenow, Corbett & Devine, 1988). This high level of childhood abuse, gives rise to many drug using women seeing sexual and physical abuse as something they deserve and cannot avoid (Davis, 1990).

Regan et al (1987) conclude that this exposure to violence at a young age may lead to later drug use and also mental illness. Repeated victimization may lead to difficulty in coping with anger and aggression, and also to low self-esteem and inability to trust. These are all features common in drug-abusing women. Failure to resolve these conflicts and feelings arising from these early traumas would appear to disrupt their ability to parent their own children. Without the appropriate intervention, this inter generational pattern of abuse thus continues, both for the drug using parent and their child.

Some studies have shown a link between stress, disruption and upheaval in families, and later drug use in children in these families (Prins, 1985, cited in Schweitzer & Lawton, 1989). Others have suggested that drug use is a way of dealing with and responding to

psychological pain caused by difficulties in early family relationships (Davis, 1990; Densen-Gerber, 1973, cited in Schweitzer & Lawton, 1989). Lower self-esteem and depression have been associated with a high-risk for drug use (Simpson et al, 1993).

Excessive intrusiveness has been reported in the families of drug users, which may have led to the child rebelling against this through drug use (Jurich et al, 1985). Some studies suggest that having a family member who abuses drugs, allows the family to scapegoat this person and focus on them as a source of family problems. This provides the means to avoid confronting other problems in the family, such as conflict between two parents (Stanton et al, 1982, cited in Schweitzer & Lawton, 1989).

Finkelstein (1994) looked at number of issues around the treatment of pregnant and parenting drug using women. She considers that women may turn to alcohol or drugs to relieve anxiety and pain caused by an inability to form attachments and make affiliations. For example, many drug using women have lost a parent through separation, divorce or death, have a parent who is in some way inaccessible through alcohol or drug abuse, may have been abused or neglected themselves, or have lost a significant other as a child or adult (Finkelstein, 1993).

Research has shown that trauma may leave women psychologically vulnerable to substance abuse. Van der Kolk & Herman (1987) feel that without treatment of the trauma, the women are vulnerable to relapse and re-victimisation. Thus treatment agencies should address this through direct questioning regarding earlier trauma. Through

the alleviation of post traumatic symptoms, clients may then be able to participate fully in the addiction programme. Since similar defenses are used to cope with addiction and with abuse, the drug user may only be able to break out of the victimization and intoxication cycles, through education and treatment for both. Bollerud (1990) also looked at the role of trauma on later drug and alcohol use, and again concludes that drug treatment services must assess these traumas at the start of any programme, alongside treatment of the addiction.

The effects of trauma are also seen in individual's parental self-concept. Without these traumas being addressed and worked through, a negative parental self-concept may result (Fraiberg, Adelson & Shapiro, 1975, cited in Davis 1990). For example, if a mother has unresolved issues of rejection from her own childhood, she may interpret her child's attempts at individuation as rejection of herself, and deal with this by becoming over attached to and enmeshed with the child (Davis, 1990).

Thus we see a common profile amongst drug using women, namely one of childhood abuse, low social support, isolation, and a history of poor parenting.

Possible effects of parental drug use on the child

In-utero exposure

It does not appear that pregnancy provides the necessary incentive to change drug taking behaviour, with few women stopping drug use during pregnancy (Fraser & Cavanagh, 1991). Nine-thousand narcotic-exposed infants are born each year in the USA, which is

between two and three per thousand live births (Brown & Zuckerman, 1991).

It is important to remember that there are a number of difficulties in pin-pointing the exact nature of the effects of drug use during pregnancy, due to the large number of other factors which must be controlled for. For example, alcohol use, levels of drug use, use of other illegal drugs, ante-natal care, and so on. There is also a problem looking at long-term effects of prenatal exposure to drugs, due to the varied nature of the postnatal environment these children are born into, and the effect this has on the child.

Whilst low-birth weight is found in narcotic-exposed infants, again other variables such as poor diet, cigarette smoking, and infections during pregnancy may account for some of this, as opposed to the use of drugs itself. Lifschitz et al (1985) compared three matched groups, namely heroin users, methadone users, and drug free mothers, and followed their children up to three years of age. They found no significant difference between the groups, but instead the children in all three groups were below the 50th percentile for height, weight and head circumference. Thus they conclude it is the presence of multiple risk factors which were important.

Neonatal abstinence syndrome (NAS) has been identified by some, the features of which include symptoms of irritability, tremulousness, sweating, stuffy nose, difficulty feeding, diarrhoea and vomiting. With heroin withdrawal, these signs will be present on the first day of life, whereas with methadone, which has a longer half-life, the first signs may not be apparent until 48 hours after birth or later. Symptoms associated with NAS may be

present for up to 6 months with methadone. These symptoms are likely to affect the bonding process between mother and child, which is of greatest importance in these early months of life. Infants with NAS are likely to be kept in hospital, and this may lead to separation of the infant from the mother.

There is as yet, little conclusive evidence that exposure to drugs in-utero leads to long lasting cognitive deficits in these children, when compared to children of similar socioeconomic status (Brown & Zuckerman, 1991). There is however a marked difference when one considers school performance, with inattention and poor self-discipline reported as common problems in drug-exposed children (Strauss et al, 1976). Kolar et al (1994) reported that 41% of their sample of 70 methadone maintained parents had had a child repeat a grade at school, 19% were involved in truancy and 30% had been suspended. It would seem that whilst their environments stay the same as for other children, the drug-exposed children have some injury to the brain which makes them less able to cope with the adverse circumstances of their surroundings.

DeCubas & Field (1993) looked at twenty children exposed prenatally to methadone, and compared them to a control group on measures of cognitive, emotional and social development, and also achievement. No significant differences were found at school-age, though there was a significant effect on IQ, with methadone exposed children scoring lower. These children were also more anxious, aggressive and showed more behaviour problems. Hyperactivity and impaired attention span were found in 50% of one sample of children born to heroin addicts, aged between one and two years (Wilson, Desmond

& Verniaud, 1973).

Risk of Physical and/or Sexual Abuse

Over the years, opinion regarding heroin users being fit to be parents has varied from insisting all heroin user's children be considered 'at risk' of abuse and neglect, to a more politically correct view that just because you use drugs, does not make you a bad parent.

Both are extreme views, since to automatically remove all children of drug users to another person's care would be unenforceable and unjust, and likewise, to ignore families with drug using parents could lead to preventable abuse and neglect taking place (Neville, McKellican & Foster, 1987). It would seem that a neutral viewpoint, whereby each case is considered individually, would be the best approach.

Kolar et al (1994) reported that 9% of a sample of 70 methadone maintained parents had had charges filed against them for neglect or physical abuse of their child(ren), whilst 7% acknowledged that their child had been exposed to some form of sexual abuse. Once again, it is not possible however to say how much of the abuse is down to drug and alcohol use of the parent, and how much to other factors such as poverty, family disruption and abuse of the parent as a child (Deren, 1986).

Murphy et al (1991) examined 206 court cases of child abuse or neglect, and found in almost 50% of these cases, at least one parent had a drug problem, most commonly heroin, cocaine or alcohol abuse. These parents were more likely than the non drug-using

parents to have previous referrals to child protection agencies, to reject court-ordered services, and to have children permanently removed from their care. Murphy et al conclude that there is a strong case for increased screening, evaluation and treatment of parental substance abuse in cases of child abuse, and also the possibility of using this as a predictor of who is likely to accept services and have their children returned to their care.

In a similar study, Famularo, Kinscherff & Fenton (1992) reviewed 190 cases from a juvenile court in which a child had been taken into custody following clear evidence of significant child mistreatment. 67% involved parents who abused substances, with alcohol abuse relating most commonly with physical abuse, and cocaine abuse relating most to sexual maltreatment.

Other effects on the child

The children of drug using parents are more likely to end up in social services care, or the care of a relative. Kolar et al (1994) reported that four per cent of their sample of 70 methadone maintained parents had placed a child in adoptive care, 9% in foster care, and 1% in a group home. In addition 20% had a child in trouble with the law, and 17% had children involved in drug or alcohol abuse. Swift et al (1996) reported that 29% of women with substance abuse problems had surrendered custody of their children. Since a separation of four weeks or more has been shown to be associated with long term behaviour problems in the child (Rutter, 1981; Bowlby, 1965), this again represents a risk to children born to drug dependent parents.

Kelley (1992) found that 40% of the drug-exposed mothers in her study had their child in foster care, and 75% of these were with a relative, most often the maternal grandmother. Other studies have shown that when a child of a drug using woman is taken into foster care, it is often the maternal grandmother who takes responsibility for the child (Deren, 1986). Since many drug users come from homes where they were abused or neglected, it would appear that the next generation are also being placed at risk in this way.

Long term problems are also reported, in that these children with drug using parents are more likely to experience a psychiatric disorder both in childhood (Von Knoring, 1991) and in adulthood (Matthew et al, 1993).

There emerges from this research, a picture whereby a number of factors in the drug user's own childhood place them both at risk for drug use, and also at risk of being poor parents themselves. The resulting drug use may exacerbate the parenting problems, and also lead to a child who is more difficult to parent. One framework through which to explore these inter-generational effects on parenting and drug use, is that of Attachment Theory.

ATTACHMENT THEORY

Attachment theory began with the observations of John Bowlby, when looking at the effects of separation on infants and their caregivers. He noted the evolutionary importance of what he termed the attachment between the infant and the mother, which can be observed across the animal kingdom. The nature of the attachment in the infant

is thought to remain stable, and also to effect the development of later personality and social behaviour in childhood and adulthood (Main 1991). Bowlby stated that "patterns of interaction are transmitted more or less faithfully from one generation to the next." (John Bowlby, 1969, p323).

Indeed, the inter-generational transmission of patterns of attachment has been established in developmental research (Steele & Steele 1994), such that a mother who was insecurely attached to her own mother/carer, is likely to form an insecure attachment with her own child, and likewise, security begets security. It is also possible however to identify those parents who experienced significant adversity as children, but who are now coherent and secure.

Attachment theory suggests that an infant exhibits proximity-seeking behaviours, such as crying, in order to gain a response from the primary attachment figure, often the mother. It is through this learning process that the child achieves a *secure-base* in the environment, which they know they can rely on.

If the care-giver is accessible and responsive, the infant will learn that their signals are working, and they will feel *secure*. If however, the care-giver is unpredictable or inconsistent in responding to their signals and cries, the infant may learn to cry more than usual, or explore less. This may in turn lead to an *anxious* child. Alternatively, it may be that the care-giver rejects the infants attempts at closeness and proximity-seeking, and the infant then learns to *avoid* the mother, for fear of rejection.

Through these interactions with the main care giver, the infant constructs what Bowlby termed an *internal working model* (IWM) of themselves, their care giver, and the interactions between them (Bowlby, 1973). Thus the IWM reflects the extent to which the infant's attachment needs are being met.

The construction of the IWM leads to expectations as to the way people will behave, and these expectations exist along two dimensions: "(a) whether or not the attachment figure is judged to be the sort of person who in general responds to calls for support and protection; [and] (b) whether or not the self is judged to be the sort of person towards whom anyone, and the attachment figure in particular, is likely to respond in a helpful way" (Bowlby, 1973, p204). Bowlby saw the IWM as being resistant to change, but not closed to modification in the light of new experience.

MEASURES OF ATTACHMENT

The Strange Situation Procedure

Ainsworth et al (1978) developed the work of Bowlby further by developing a laboratory procedure named the 'Strange Situation'. This enabled Ainsworth and her colleagues to elicit the infant attachment behaviour, upon separation from the mother or primary care giver. This is done by first activating the exploration behaviour system of the infant, through introducing them to a novel playroom. They then activate the attachment behaviour system by the mother leaving and re-entering the playroom at various points in the procedure. Throughout these separations and reunions, the child's reactions to this conflictual and stressful situation are observed very closely.

Through analysis of their behaviour, infants are categorised into one of three main attachment styles - secure (B), avoidant (A), and resistant/ambivalent (C). In addition to the three categories, there later came a fourth category, namely disorganised (D). This was characterised by contradictory behaviour in the infant, who showed undirected and incomplete attachment behaviour, and sometimes fearful behaviours in the presence of the care giver.

The Strange Situation is however a lengthy and costly procedure. It requires an appropriate laboratory environment, video and audio taping equipment, and at least two experimenters to carry it out. The very nature of the procedure results in distress to both parent and child, and indeed this stress is essential for a successful outcome. It is also only suitable for children below a certain age (approximately 1-2 years), and so limits population sampling.

The Adult Attachment Interview

Main, Kaplan & Cassidy (1985) used discourse-analysis methods to study the transcripts of adults in interviews asking directly about attachment experiences. Using information gathered from these transcripts, they developed the Adult Attachment Interview (AAI), which looked more closely at eliciting these experiences, and a rating procedure was developed and validated for classifying the transcribed interviews (Main & Goldwyn, 1984; Main & Goldwyn, 1985/1991).

The AAI is a 60-90 minute interview, which aims to 'surprise the unconscious', and to gain an insight into the interviewee's early childhood experiences, in particular regarding relationships with care givers. It also aims to assess the current state of mind towards attachment in the interviewee. The interview is tape-recorded, then transcribed and analysed by trained analysts. The adult is then assigned an attachment status of Autonomous-Secure (F), Insecure-Dismissing (D) or Insecure-Preoccupied (E). Again a fourth group later emerged, namely Unresolved (U) regarding past loss or trauma.

Measures of infant attachment status in the general population using the Strange Situation have been shown to correlate with a measure of attachment in the parent using the AAI (Fonagy, Steele & Steele, 1991; Main et al, 1985; Van Ijzendoorn, Juffer & Duyvesteyn, 1995). Adult attachment status is thus felt to be related to, and indeed built on, the infant attachment style developed in the first years of life.

As with the Strange Situation, the AAI is a costly and lengthy procedure. It again requires audio taping equipment, and the transcribing of interviews up to two hours long. It may also be a difficult interview for participants to take part in, as it gives rise to early memories which may not have been thought of for some time. It is therefore best if participants have access to a supportive therapeutic relationship at the time the interview takes place.

The Parental Bonding Instrument

A number of studies in the area of parenting and attachment have used the Parenting

Bonding Instrument (PBI) as an assessment tool. It was developed by Parker et al (1979) as a means of assessing the level of parental contribution to disorder. The focus is on the characteristics of control/protection and care, following factor analysis which showed these to be the principle dimensions in interpersonal relationships. 'Low care' and 'Overprotection' are found to be disposing factors in most psychiatric conditions (Parker, 1983).

To complete the PBI, participants must remember each parent in the first 16 years of their lives, and indicate the extent to which a number of statements reflect their memories. This generates a 'care' and a 'protection' score. Using these scores, participants can be assigned to one of four quadrants: high care/low protection = 'optimal bonding'; high care/high protection = 'affectionate constraint'; low care/high protection = 'affectionless control'; low care/low protection = 'neglect'.

There are a number of limitations with this brief, self-report measure. However, its brevity and simplicity are also an advantage, and it has shown a number of robust results, in particular linking anomalous parenting with psychiatric disorder, especially the depressive disorders (Parker, 1990).

Hazan & Shaver's measure of romantic attachment style

Hazan & Shaver (1987) used attachment theory as a framework for examining romantic love. They consider that love is an attachment process in itself, and one which will be influenced by individuals attachment histories. Within this framework they found potential

explanations for a number of issues related to love, such as fear of intimacy, intimacy, jealousy and trust. This theory also links in loneliness and love, with separation and loss (Parkes & Weiss, 1983).

Hazan & Shaver (1987) set out to explore the relationship between Ainsworth's attachment styles in infancy, and the experience of adult's romantic attachment styles. They developed a single-item measure of these three attachment styles, by taking the descriptions used by Ainsworth, and translating them into a language more appropriate to describing adult romantic love. By asking respondents to choose one of these three categories as being most like them regarding their most important romantic relationship, Hazan & Shaver found similar proportions in the three categories, to those frequencies found in infant and child samples in the general population.

As pointed out by Steele and Steele (1994), it is important to note that the Hazan and Shaver measure is a measure of romantic attachment style, not of adult attachment as would be measured by the AAI. Since it is a self-report measure, there is a risk that the participant's choice of category will be influenced by idealization / defensiveness, leading to an inaccurate secure categorisation, or false positive. The use of linear scales for each category, as used in this research, provides a possible way around this. Thus as well as choosing a category from the three given, participants also indicate the extent to which they agree with each.

Whilst acknowledging a number of possible weaknesses with the measure, its advantages

are that it is brief, and is very easy to use. It has also been shown to be a robust measure of romantic attachment style, and correlates highly with other such measures.

Bartholomew's measure of attachment

Bartholomew (1990) expanded the Hazan & Shaver three category measure, to include a further measure of avoidance. This addition was made on the observation that the AAI dismissing category differed from the Hazan & Shaver avoidant category, in that the former had a positive view of the self, whilst the latter see themselves in fairly negative terms (Bartholomew, 1990, 1993; Shaver & Hazan, 1993).

In her four category model, there are two underlying dimensions, namely positive / negative view of the self, and positive / negative view of others. (see Figure 1 below). The former dimension relates to the dependence on others for feelings of self-worth. A positive view of the self reflects feeling internally worthy, without the need for external validation, and a negative view of the self links with anxiety around being accepted in close relationships. The latter dimension, the view of the other, reflects one's beliefs about the availability of others, and the levels of support one can expect from them. Positive view of others is found in those who will be able to seek support and closeness with others when in relationships, and negative view of others is found in those who will avoid being intimate. Thus the four categories emerge, reflecting the different ways in which people control their levels of security when in close relationships (Bartholomew, Cobb & Poole, 1997).

Figure 1: Bartholomew's Four Category Model of Adult Attachment (adapted from Bartholomew 1997, p.252)

	Positive View of Self	Negative View of Self
Positive model of Other	SECURE	PREOCCUPIED
Negative View of Other	DISMISSING	FEARFUL

Whilst acknowledging the over simplification which this model represents, Bartholomew (1997) goes on to describe in detail the parenting styles which are felt to have led to these attachment styles. For example, inconsistent parenting, when accompanied by messages of parental devotion, may make the child feel they are responsible for any lack of love from their parent(s). This can lead to a style where the individual is totally reliant on the acceptance and approval of others, for a sense of their own self-worth.

The dismissing and fearful groups, avoid depending on or having close contact with others. This may be as a result of parenting which was generally unresponsive and rejecting. However, the dismissing group has managed to maintain a positive view of the self, by somehow distancing themselves from others, and developing a sense of self-reliance and defence against needing or relying on others. The fearful group on the other hand, whilst concluding that others are unavailable and unloving, see themselves as being unworthy of that care and that love. They desire closeness and are aware of their needs for close relationships, but they also fear this in case of rejection.

Brennan, Shaver & Tobey (1991) compared the Hazan & Shaver measure with the Bartholomew measure, and found the same two dimensions underlying both typologies, with both measures corresponding as predicted. They used the measures on adult children of alcoholics, and found they scored high on avoidant and anxious-ambivalent scales of Hazan & Shaver's measure, and on Bartholomew's measure, scored mostly in the fearful category. This would suggest that these adults were the 'disorganised, disoriented' children identified by Main & Solomon (1990), once they had grown up. It has been shown that these children are more common in families where a parent is an alcoholic, depressed, or where abuse is present.

ATTACHMENT IN DRUG USERS

Attachment related research with the drug user's infant

It is clear that the drug-dependent mother and drug-exposed child are at increased risk during a critical period in development during which attachment patterns are thought to be established, namely infancy (Kelley 1992). A number of studies have looked therefore at attachment style in infants born to drug dependent mothers.

O'Connor et al (1987) examined the effects of using alcohol during pregnancy, on infant attachment status at one year as measured by Ainsworth's Strange Situation (Ainsworth et al, 1978). They found that the majority of infants born to mothers who had consumed more alcohol were insecure, when compared to light or abstinent drinkers. In a later study, O'Connor et al (1992) found that infants exposed to alcohol prior to birth, showed increased negative affect. This in turn led to less positive interaction from the mother, and

resulted in insecure infant attachment.

The drug using mother may also be in a state of withdrawal at the time of the child's birth, and so may be unable to provide the consistent and responsive manner needed to facilitate successful bonding (Lief, 1985). It is likely that the social services will be involved with drug using women, and indeed they may be observing early interactions between mother and child. This social pressure may further increase irritability and the ability to function well as a parent. Further to this, once home the mother often has little knowledge of infant care and development, and in their un-ordered and often chaotic lives, will be unable to provide the necessary order and routine.

It therefore seems that it is a combination of infant and carer characteristics which lead to increased parenting stress and child maltreatment in this population (Kelley, 1992). Foetal exposure to drugs is known to have an effect on the behaviour of the infant (Kelley et al, 1991) and the later development of the child (de Cubas & Field 1993). A child exposed to drugs in this way is likely to be a child who is difficult to parent and to bond with, and who may be stiff and difficult to cuddle and comfort (Kelley et al, 1991). For example, cocaine-exposed infants are known to achieve an agitated cry much more quickly than a normal infant, and they also tend towards being easily overstimulated.

Research has shown that drug dependent mothers report problems in attachment to their children, feel inadequate as a parent, are socially isolated and often suffer from depression (Kelley 1992). These women also tend to lack a basic knowledge of child care and

development, which can lead to unrealistic expectations of the child. As shown above, family histories of these women show high levels of disruption, loss of parental figures, and a lack of strong, affectionate parent-child relationships (Lawson & Wilson, 1979) on which to model themselves.

Attachment related research with the drug using mother

A number of studies have used the PBI with drug users, to examine the link between parenting styles and drug use. Schweitzer & Lawton (1989) found that drug addicts perceived their early parenting as characterized by high protection and low care. This 'affectionless control' is considered a high risk style of parenting, in that it is found in many of those with psychiatric problems.

Bernardi, Jones & Tennant (1989) also administered the PBI to drug users, and compared scores with alcoholics and controls. Maternal and paternal overprotection was found more in narcotic addicts, with only maternal overprotection found in alcoholics. It was found that parenting, in particular paternal parenting, was more disturbed in narcotic addicts, than in the other two groups. Depression was found to be very common in the drug using sample, and was found to influence the PBI scores, making the relationship between protection scores and addiction non-significant.

One study of particular importance to the current research, despite the small number of women used, was that of Conte et al (1994). They attempted to identify factors which predicted successful outcome of the mother-child relationship in thirteen drug users,

compared to thirteen non-drug users. The women were interviewed when pregnant, regarding their perception of themselves and other key individuals in terms of a number of attachment related characteristics. They were then followed-up when the child was two years of age.

In this longitudinal study, they found that those drug using mothers who had retained custody of their infant at two years, showed similar profiles to the non-drug dependent group, all of whom had kept their children. They saw their mothers as affectionate, flexible, accepting and cheerful. The drug users who had lost custody, tended to see their mothers as not affectionate, authoritarian, controlling and ungiving. The difference in profiles appeared between those who had kept custody of their child, and those who had left their baby. The difference was not seen according to whether or not the mother used drugs.

It would seem therefore, that it is not drug use per se which predicts the outcome of the mother/child relationship, and that other attachment-related factors play an important role.

WOMEN, DRUG USE AND TREATMENT - A NEGLECTED AREA?

Drug using women, in particular those who are pregnant, have attached to them a great stigma, experiencing social rejection and blame. This can result in low self-esteem, guilt, depression and increased isolation (Zuckerman & Bersnahan, 1991). There is however a lack of gender-specific treatment services, since these women require different emotional, social and economic help to their male counter parts. They also often have

child-rearing responsibilities, and may be lone parents. The punitive laws which currently outlaw the use of heroin during pregnancy, only serve to alienate these women further from seeking help, and so exacerbate the problem (Moss, 1991; Poland et al, 1993). For many of these women, to enter treatment may mean losing their children to foster care, and treatment agencies may reinforce the view of society that they are terrible people and bad mothers, and the women themselves then start to believe this.

Colten (1982) compared beliefs and attitudes in mothers who used heroin with those who did not. She concluded that treatment services must acknowledge that the role of mother is very important to drug using women, even when their children are not currently living with them. They are likely to have concerns about their children's health and also have general problems in rearing their children. It is therefore critical that treatment services take this into account, and resources made available to help women in these areas.

Colten concludes that the majority of concerns drug using mothers have are similar to those of any mother, but they are less likely to explicitly mention these. Treatment service workers must therefore try to ask direct questions, and offer help. Colten also states that drug using mothers are more likely to doubt themselves as good mothers, and some positive rewards from drug workers may help to bolster self-esteem.

Different drug treatment programmes aimed specifically at pregnant / child-rearing women have been developed and assessed, with varying outcomes (Black et al, 1994; Keenan, Dorman & O'Connor, 1993). Overall there was some positive effect from increased ante-

natal and post-natal care, and teaching regarding parenting behaviour and children's development. Some studies have shown that positive interventions with pregnant drug users leads to a decrease in drug use, greater attendance at ante-natal appointments, heavier birth weight babies and longer gestations (Carroll et al, 1995; Chang et al, 1992).

Finkelstein (1994) points out that "to be effective in helping women, treatment programs must help clients develop models for healthy, mutually empowering, nondestructive relationships." (p.11). She also stresses that the two issues of child welfare and maternal drug use should not be viewed as separate problems, but must be addressed together. Treatment services do exist where the drug using mother is able to enter residential treatment with her child(ren), and these have been found to have no adverse effect on the child, and to have many benefits for the mother (Goddard, Bennett & Rigby, 1990).

Davis (1990) stresses that treatment services must be developed which stress the re-parenting of these chemically dependent women, which will help to resolve un-met childhood needs. This should then be followed on with a programme to teach effective parenting techniques to help them parent their own children. Links between the psychological profile of these women and their parenting styles need to be identified, in order that they can be interrupted to prevent the inter-generational transmission of family dysfunction which otherwise prevails amongst this population.

Treatment services clearly need to address a number of issues pertinent to drug using women, in particular around pregnancy, parenting, past trauma and support. Treatment

also needs to be accessible and non-judgemental, and it needs to be safe for parenting women to approach without fear of re-crimination or of losing their children.

This current research may help with the treatment of drug using mothers, in that it may enable us to identify those drug users most likely to have difficulties with looking after a child, and so target scarce resources in their direction. It is also furthering our knowledge in an important and often neglected area - that of women and substance misuse.

Certain risk factors have already been identified in terms of which drug using women are likely to abandon their children at an early age. These factors include a lack of involvement in treatment, lack of antenatal care, no stable accommodation, no legal income and indifference to infant's hospitalization (Lawson & Wilson, 1979). It may be that a measure of romantic attachment can be added to this list.

RESEARCH QUESTIONS

The current research will attempt to examine a number of factors which may help us to predict further, those drug using mothers who are likely to experience parenting difficulties, and who are at greatest risk of losing custody of their child(ren). This will be done by considering four main research questions.

- (1) Using a similar measure of successful parenting to that used by Conte et al (1994), namely retaining custody of one's child, what factors relating to the drug user and their drug use, correlate with this outcome measure? It is predicted that a longer

history of drug use, greater dependence, and worse psychological health, will be found in those who have lost a child into social services' care.

- (2) Following on from previous studies looking at PBI scores in this client group (Bernadi, Jones & Tennant, 1989; Schweitzer & Lawton, 1989), what is the relationship between the drug user's own childhood memories of being parented, and the outcome of the mother / child relationship? It is predicted that those with poor parenting, are more likely to have lost a child into social services' care.
- (3) Given that social support and presence of a supportive romantic partner (Quinton & Rutter, 1988; Reder & Lucey, 1995) would appear to protect the individual from parenting breakdown, does romantic attachment style relate to the outcome of the mother / child dyad? In addition, how does the romantic attachment measure relate to other factors such as patterns of drug use, levels of crime and health? It is predicted that those with a secure romantic attachment style, will be less likely to have lost a child into social services' care. It is also predicted that they will have a shorter history of drug use, and have better health and have spent less time in prison, than those with an insecure romantic attachment style.
- (4) From the above, can we say which factors emerge as the greatest correlates of successful outcome of the mother / child relationship in the drug using population? How can this be incorporated into a model of factors influencing parenting amongst drug users?

CHAPTER TWO : METHOD

OVERVIEW

This chapter will first describe the setting in which the current research took place, followed by a description of the ways in which participants were recruited. There is then an outline of the questionnaire and the measures used, and finally the participants recruited into the study are described.

THE SETTING

The participants in this study were all female drug users, who had used illegal drugs in the last year, had at least one child, and had been in treatment for their drug problem at some point. Anyone who was obviously psychotic or suffering from a diagnosed personality disorder, was excluded from the trial. The women were recruited from two treatment centres, one in North London and one in South London. Whilst a small minority (two) had very recently finished a detoxification programme, the majority were still taking methadone, either as part of a detoxification or a maintenance programme.

The North London Service

This is a large drug treatment centre, consisting of a primary care unit (PCU), a methadone programme, and a community service which liaises with local GP surgeries.

The clients on the methadone programme are either given prescriptions, allowing them to collect their methadone from community pharmacies, or they attend the on-site dispensing

service. In the latter case, clients must attend each day, and they are given their methadone to take on site and under supervision. The service also runs groups for clients, such as women and men's groups. Each client has a named keyworker who monitors their progress and counsels them through their treatment.

It was considered most appropriate to contact clients initially via the PCU, which is attached to the main treatment centre. The GP in charge of the service was keen for the research to take place, and over 200 women were on the records at the service. The PCU is a drop in service which is separate from the client's methadone treatment. They come to the PCU in total confidence, solely for their primary health care needs. The PCU does not deal with their methadone scripts or treatment in any way.

The South London Service

This service consists of a community drug team (CDT), and a methadone maintenance clinic (MMC). At the CDT, clients are primarily on a detoxification, and collect prescriptions weekly from their key worker, and then collect methadone from a community pharmacy. These clients may be seen by their key worker at their homes, and therefore do not necessarily attend the treatment centre. The MMC clients are dispensed to on the centre premises, with the majority coming on a daily basis. As a client progresses and becomes more stable, they are able to come in less often, and they get take away methadone for the other days.

DATA COLLECTION

Procedure

Ethical approval was obtained from the UCL/UCLH research ethical committee in May 1997 (See Appendix A). The participant information sheets (see Appendix B) were then sent to the GP in charge of the PCU, who had agreed to hand them to potential participants.

Since the PCU does not run to appointments, it was impossible to predict when or if women would come into the clinic. It had been agreed that a member of the PCU staff should be the first to approach a client with the information sheet. Once this had happened and the client had agreed to proceed, the researcher was introduced to the client.

Since the PCU is a confidential service, and one which clients value very highly, it was important to stress at all times that information they may give to me in the course of an interview, would be kept entirely confidential from their treatment. In addition, reassurance was given both in the participant information sheet and again verbally, that their names would not be stored with the completed questionnaires.

If the client agreed to be interviewed, the consent form (see Appendix C) was filled in and signed, and the interview carried out in the counselling room at the PCU. A total of 35 women were recruited from this treatment centre. There is no formal record of refusals, but an estimated ten women were approached, who did not consent to take part.

Ethical approval was obtained to carry out interviews at the South London treatment centre in October 1997 (See Appendix D). It was agreed to try to recruit initially from the MMC, where clients were attending on a daily or weekly basis. A drug worker from the MMC volunteered to coordinate recruitment with the researcher. She handed out information sheets (see Appendix E) in the week prior to the researcher attending the clinic, and a number of appointments were set up with clients.

Consent forms (see Appendix F) were given to each woman at the start of the interview, and had to be signed before the interview could take place. Since each of the women there were coming into the clinic on a daily or weekly basis, it was possible to approach all the women with children who attended the MMC, almost all of whom consented to do the interview.

In addition to those women in methadone maintenance, some women were recruited from the CDT. These women were approached initially by their key worker, and an appointment set up for the interview to take place. 29 participants were recruited in total from the South London service.

Each interview lasted an average of 30 minutes, with some lasting 20 minutes, and some up to an hour. There were cases where the participant was unable to read or write, and then the whole questionnaire was read out to them. Where possible however, the sections on health and attachment were given to the participant to fill in themselves, with guidance where needed. At the end of the interview, the participants were paid £5 for their time,

which was given in the form of shop vouchers.

Measures

All measures were obtained through a questionnaire, which the researcher filled out with participants. Questions were asked and filled in by the researcher, except where indicated otherwise. The questionnaire consisted of the following:

Section A: Demographic Information

This included information on age, ethnic group, number of children, accommodation (where and with whom the participant lives), occupation past and present, and age left school.

Section B: Drug and alcohol history

This included questions on past and present drug use, across a range of different drugs including alcohol. These questions included 'age first used drug x', 'months of daily use in their lifetime', and also 'amount of drug being used currently' alongside the 'amount of money spent' on it.

The *Severity of Dependence Scale* (Gossop et al, 1992) was used as a measure of dependence for those drugs currently being used by each participant (See Appendix G). This measure has been used in previous research and has been shown to have good reliability and validity (Gossop et al, 1992; Gossop, 1995). It consists of five questions about participant's use of a particular drug over the last month. For example, 'Was your

use ever out of control?' and 'Did you wish you could stop using the drug?'. These are scored on a four point scale, from '0' to '3', yielding a total score of between zero and fifteen, the higher the score, the greater the dependence.

Section C: Health

This section was given to participants to fill in themselves. It included two measures:

(1) The *General Health Questionnaire* (GHQ) - short version (Goldberg & Hillier, 1979).

This questionnaire was developed for use clinically, to aid in the detection of psychiatric disorder. This shorter version has 28 items in total, an example being "Have you felt well and in good health". The response scale is a four-point scale, along the lines of "Better than usual - Same as usual - Worse than usual - Much worse than usual". This is scored from zero to three. Participants are asked to consider how they have been feeling over the last month, when filling out their answers.

Four items were added to this section, regarding use of psychiatric medication, past and present. These do not form part of the total GHQ score, and were analysed separately.

(2) The *Beck Depression Inventory* (BDI: Beck et al, 1961), was also included in this section. The BDI is a 21-item scale, with participants asked to choose one of four statements which corresponds most closely to how they are feeling currently, and over the past week. An example of a question is:

- (0) I do not feel sad
- (1) I feel sad
- (2) I am sad all the time and cannot snap out of it
- (3) I am so sad or unhappy that I cannot stand it

The responses are scored according to the numbers in brackets by the chosen statement, giving a possible score of between zero and 63, with a higher score indicating more severe depression.

Section D: Attachment

This section was completed by the participants themselves, and consisted of two questionnaire measures of romantic attachment, and a measure of the drug user's memories of their own parents.

(1) The *Hazan and Shaver Romantic Attachment measure* (Hazan & Shaver, 1987). This measure consists of three statements describing different ways in which one might feel regarding relationships. Participants are asked to think of their most important romantic attachment, and to choose the statement which most corresponds to how they felt or feel about this attachment (See Appendix H for copy of the three statements). Participants were also asked to indicate on a six-point likert scale, how much each statement was like them, with 'six' indicating 'very much like me', and 'one' indicating 'not at all like me'.

The development of the measure has been over-viewed earlier, and Hazan & Shaver (1987) provide further details on the reliability and validity of the measure, which is shown

to be robust. There are a number of problems with self-report, primarily the problem of memory, in that not everyone will have accurate or clear memories of their most important love relationship, and likewise, their memories of their childhood and their parents are likely to be imperfect. There may also be some defence against the questions asked, and this will affect the answers given. Whilst there are limitations, several studies have followed, which have confirmed its usefulness (Crowell & Treboux, 1995; Sperling, Foelsch & Grace, 1996).

(2) The *Bartholomew Adult Attachment measure* (Bartholomew, 1990). This is similar to the above measure, only there is an additional fourth category (See Appendix J for copy of the four statements). Participants again indicate how much they are like each of these statements on a six-point scale, and also choose the one which they are most like.

This measure has been shown to correlate highly with the Hazan and Shaver measure (Brennan, Shaver & Tobey, 1991), and to be reliable and valid (Bartholomew, 1997). It is reviewed more fully in Chapter One.

(3) The *Parental Bonding Instrument* (PBI: Parker, 1983). This is a 50-item self-report measure, half of which asks about the participant's father, the other half about the mother. Participants are asked to respond to a number of statements, by indicating on a four point scale whether the statement was 'Very like', 'Moderately like', 'Moderately unlike' or 'Very unlike' their father/mother. These categories are scored from '0' to '3' along two factors, namely care and protection. (See Appendix K for a copy of the measure).

This factorial structure has been confirmed in both clinical and non-clinical groups, and supported by demonstrations of a similar two-factor model of parenting (Arrindell et al, 1986). The sex of the respondent has no effect, nor does social class, though the PBI is sensitive to cultural influences (Parker, 1990). There is an overall tendency for participants to rate mothers as more caring and more protective, than fathers.

Test-retest reliability is high over a number of months, and some studies show some consistency over up to ten years. A number of studies also show the PBI to be an accurate reflection of 'actual' parenting (Mackinnon et al, 1990; Parker, 1986), though more work is needed to confirm this. Responses have also been shown to be unaffected by the participant's mood or mental state at the time of filling in the questions (Parker, 1989).

Section E: Treatment history

This brief section asked about the total number of treatment episodes, use of needle exchanges, success in past treatments, and length of time in the current treatment episode.

Section F: Parenting and Support

As well as asking about presence of a current sexual partner, the main part of this section looked at information regarding the participant's children. This included the number and age of children, paternal drug use and involvement in child care, any episodes of the child being in the care of someone else including social services, time on the child protection register, drug use during pregnancy, and who the child lives with currently. These

questions were asked for each child.

Section G: Finance

The main aim of this section was to ascertain how each participant was financing their drug use, and to obtain information on past and current criminal activities. This included questions about any periods the participant has spent in custody.

THE SAMPLE

A total of 64 women were recruited into the study. One woman had been excluded, since she had been diagnosed with borderline personality disorder, which had made the interview difficult, and led to invalid results.

Demographics

Table 1 : Overview of participant's demographics

Variable	Mean (range)	SD
Age (years)	34.2 (20-52)	7.01
No. adults living with	1.9 (0-42)	6.36
No. children living with	0.9 (0-4)	1.09
No. Children	2.3 (1-6)	1.26
Age of youngest child (mths)	89.6 (2-276)	69.27
Age of oldest child (mths)	152.6 (4-336)	85.98
Age left education (years)	15.5 (12-21)	1.45

Variable	Description	N	%
Ethnic Group	White - UK	51	80
	White - other	8	12
	Black - UK	2	3
	Black - Caribbean	1	2
	Non-white - other	2	3
Accommodation	Council/Housing Association	50	78
	Private housing	6	9
	Hotel/Bedsit	2	3
	Shelter	1	2
	No Fixed Abode	1	2
	Other (inc Bail Hostel)	4	6
Have current partner?	Yes	39	61
	No	25	39
Ever worked?	Yes	56	88
	No	8	12
Of those who have worked - working currently?	Yes - full time	2	4
	Yes - part time	6	11
	No	48	85
Current/past job	Office/white-collar	12	21
	Skilled - service	11	20
	Unskilled - service	29	52
	Performance/Voluntary	4	7

Table 1 above shows demographic information for the 64 female participants. The mean age of the 64 participants was 34.2 years. The majority of women were ethnic group 'white - UK', and lived in council or housing association accommodation. The mean number of adults whom participants lived with was 1.9, ranging from none, to forty two in the case of a bail hostel. The mean is 0.6 if the outliers are excluded, ranging from none to three. The mean number of children whom participants lived with was 0.9.

The mean number of children was 2.3, with a maximum of six. The mean age of participants when they left school was 15.5 years. Regarding employment, 56 participants (88%) had had a job at some point since leaving school, leaving eight (12%) whom had never worked. Eight women worked at the time of the interview (15%), two of whom worked full-time. The majority of participants had done or were doing 'Unskilled - service' work, including waitressing, hairdressing or shop work.

39 women (61%) had a sexual partner at the time of interview, 31 of whom also used illegal drugs, and 26 of whom were living with them. 18 women had children with their current partner.

Drug use

All of the participants had used methadone in the last year, and 58 (91%) had used it every day in the last month. 47 participants (73%) had used heroin in the last year, 35 of whom had not used any in the last month. Only six women had used it every day during the last month. 38 women (59%) had used crack in the last year.

21 women (33%) were currently only using opiate drugs, with 12 only using methadone. 54 women (84%) had used more than one type of drug on a daily basis during their lives. The mean age for starting to use heroin was 22 years, with a mean length of daily heroin use of 80 months. The mean age for first using methadone was 26 years, with a mean number of months of daily use of 57. Mean Severity of Dependence Scores (SDS) were 6.5 for heroin and 7.5 for methadone (scores range from 0-15, with 15 indicating high

dependency).

Regarding route of administering drugs, 54 women (84%) had used drugs intravenously at some point in their lives. 28 of these women (53%) admitted to sharing injecting apparatus at some point, with only two having shared in the last year, and none in the last month. Currently, 48% of those who were using heroin had injected it, with the remainder smoking or chasing. All the women currently took their methadone orally.

Health

The mean BDI score was 23.29 (SD 14.53), indicating a moderate to severe level of depression. Only 13 women (20%) scored in the 'not depressed' range of 0-9. The mean GHQ score was 36.95 (SD 21.59), indicating a mild to moderate level of psychological disorder.

Crime

The most common crime committed by these women was shoplifting, with 66% having done this at some point in their lives. Almost 50% had dealt drugs at some point, and over a third had engaged in prostitution. 36 women (56%) had been in prison during their lifetimes, and eleven (17%) had been in police cells. The average number of times the mothers had been in custody was 2.95 (SD 2.50), with a mean length of time spent in custody of 57.88 weeks (SD 109.30). Eight women (12.5%) were currently facing criminal charges.

CHAPTER THREE : RESULTS

OVERVIEW

This chapter will consider each of the research questions cited at the close of Chapter One. Firstly it describes the sample in greater detail, regarding the main variables of romantic attachment, PBI scores and parenting outcome. Tables will be then be used to show the statistical analyses of the relevant data, and this data will also be described in detail. (Please note that where a group of participants is referred to as 'secure', or 'avoidant', this is with reference to their romantic attachment style only, and is not intended to denote adult attachment status categories as measured by the AAI.)

THE SAMPLE

Romantic attachment style

According to the Hazan and Shaver (1987) measure, 31 participants (48%) were in the avoidant category, 12 (19%) in the anxious/ambivalent category, and 21 (33%) in the secure category. Thus 43 participants (67%) were insecure.

When the Bartholomew (1992) measure was looked at, 14 (22%) mothers were secure, 10 (15%) preoccupied, 17 (27%) fearful, and 23 (36%) dismissing. When the Hazan and Shaver results are compared to the Bartholomew results (see Table 2), they were found to be highly related [$\chi^2(6) = 77.21, p < .0001$].

Table 2: Relationship between the two attachment-style measures

Hazan & Shaver's attachment type	Bartholomew's attachment types				Row Tot.
	Secure	Preoccupied	Dismissing	Fearful	
Avoidant	0	0	16	15	31
Anxious-ambivalent	0	9	2	1	12
Secure	14	1	5	1	21
Column Total	14	10	23	17	64

All of those in the Bartholomew Secure group, were in the Hazan and Shaver secure group. Nine out of ten of the preoccupied group were in the corresponding anxious/ambivalent group. Finally, 31 of the 40 in the fearful and dismissing groups were also in the Hazan and Shaver avoidant group.

There are however nine women who do not choose the expected corresponding categories on the two measures. In particular, there are five women who are 'secure' on the Hazan and Shaver measure and 'dismissing' on the Bartholomew measure. This has been found in other studies (Brenan, Shaver & Tobey, 1991), where it was suggested that some avoidant participants with high self-esteem are likely to mis-categorise themselves as secure, even though they are unlikely to show secure behaviour in intimate relationships.

Overall, it was considered most appropriate to use the Hazan and Shaver measure for the bulk of the analysis, since the group sizes in the Bartholomew four-category measure were smaller, and so reduced statistical significance.

Parental Bonding Instrument Scores

It is important first to note some additional information which was obtained in the course of administering the PBI to participants. This has been summarised below in Table 3, showing the additional details regarding the participant's mother or father.

Table 3: Additional information from PBI

	Father	Mother
Step-parent	2	1
Grandparent	1	2
Died before 16 yrs old	6	2
Left home before 16 years	1	1
Never known	6	0

Since this information was not asked for directly, it cannot be concluded that the numbers with further information were not greater. Comments can only be made regarding information which was obtained during the administration of the questionnaire. All of the six women who never knew their father, and two of those whose father died when they were young, could not answer the PBI questions. Two women could not answer questions about their fathers because it was too painful for them, and one woman said this for the questions about her mother.

The mean PBI scores obtained are shown below in Table 4. The table shows the paternal care score was slightly lower than the maternal care score. The mean paternal protection

score was slightly higher than the maternal protection score.

Table 4 : Total PBI score for each of the four subscales obtained

	Total scores	
	M	SD
Paternal Care	19.68	12.85
Paternal protection	17.43	8.62
Maternal Care	20.90	13.27
Maternal protection	16.68	9.63

Since there is no control group in this study, it is not possible to find means from an exactly matched sample. However, two other studies, namely Schweitzer and Lawton (1989) and Bernardi, Jones and Tennant, (1989), used the PBI with narcotic users and alcoholics, with matched controls. These were mixed gender groups, but they provide a rough marker against which to compare the current sample.

The control group data in the above cited papers, quoted means which differ slightly from each other. When considered together, there emerges a mean 'normal' maternal care score of 26, maternal protection of 14.2, paternal care of 22.9 and paternal protection of 13.8. These normative means have been used in the current study in order to divide the sample into one of four quadrants, as shown below in Table 5.

Table 5 : Assignment of participant's parenting into the four quadrants of the PBI

	Quadrant 1 High protection/ low care	Quadrant 2 High protection/ high care	Quadrant 3 Low protection/ low care	Quadrant 4 Low protection/ high care	χ^2
Mother	25 (39%)	11 (17%)	10 (16%)	18 (28%)	7.23, **
Father	19 (33%)	15 (27%)	7 (13%)	15 (27%)	3.11, p=.07

Note 1: * $p < .05$, two-tailed, ** $p < .01$, two-tailed, *** $p < .001$, two-tailed.

Note 2: Quadrant 1 = Affectionless Control, Quadrant 2 = Affectionless Constraint, Quadrant 3 = Neglect, Quadrant 4 = Optimal Parenting.

Thus the greatest number of women see their mother and father's parenting as falling in the 'affectionless control' quadrant. This is significantly more than expected for the maternal scores. To compare this quadrant distribution with another study which used the PBI with drug users, Schweitzer and Lawton (1989) found 53% and 52% of their mixed gender drug users were in the maternal and paternal 'affectionless control' quadrant respectively, compared to 39% and 33% in the current study. They also found only 9% and 13% in the maternal and paternal 'optimal parenting' quadrant respectively, whereas in this study there were 28% and 27%.

Parenting and parenting outcome

General Information

A total of 148 children were born to the 64 participants in this study, with the average number of children for each participant being 2.31 (range 1-6). Only one participant was unable to give all the requested details regarding her children, as this was too upsetting for her. 37%(n=55) of the children were planned pregnancies, and during 56.8%(n=84)

of all the pregnancies the mothers used either methadone or illegal drugs. 42 women (66%) had started to use drugs before they had their first child, and eight women (12.5%) had had all their children before they started to use drugs. 29 (45%) women had had a child on the child protection register at some point.

The participants who had been in prison/police custody, were asked about what had happened to their children at this time. 17 (36%) said their children were already in the care of others at the time of their arrest, 11 (24%) sent their children to stay with relatives, and two (5%) women's children stayed with their fathers. For eight women (17%) their children had not been born at the time they were in custody, and three women (6%) had grown up children and so childcare was not an issue. Three women (6%) had their children placed with foster parents, and the remainder had their children stay with friends.

Losing custody of a child to social services

The main parenting outcome variable looked at, was whether or not participants had ever, at any time, lost legal custody of a child (LC) to social services, as opposed to those who had never lost custody of a child (NLC) in this way.

As shown below in Table 6, 29 mothers (46%) had at some point lost legal custody of a child to social services, with 11 mothers (17%) having at least one child in foster or adoptive care at the time of interview. In the NLC group, 29 women (85%) were still in contact with all of their children, even if they were not living with them. In the LC group,

this was true for 18 women (62%).

Table 6: A description of the LC/NLC groups regarding child custody

	LC (N=29)		NLC (N=34)		TOTAL	
	N	%	N	%	N	%
In SS care currently	11	17	0	0	11	17
Mother still in contact with all her children	18	62	29	85	47	73
All children live with mother only	2	7	10	29	12	19
All children live with mother and partner	3	10	8	24	11	17
At least one child lives with maternal grandmother	3	10	8	24	11	17
All children live with father	1	3	3	9	4	6
Father(s) in contact with all the children	11	38	21	62	32	50

In the NLC group, ten women (29%) have all their children living with themselves alone. Eight women in this group (24%) have all their children living with themselves and a partner. In the LC group, two women (7%) have all their children with them alone, and three women (10%) have their children living with them and a partner. Eight women (24%) in the NLC group had a child living with their own mother (the child's maternal grandmother), compared to three women (10%) in the LC group. Very few of participant's children lived solely with their fathers, and more fathers were in contact with their children in the NLC group, than the LC group.

Other measures of parenting outcome

In addition to the LC/NLC variable, the total number of months all the participant's children spent in care was added together, to give a total time in care for all their children. This was then divided by the number of children each participant had, to give a mean length of time in care for each child. For those women in the NLC group, this total would always be '0', and so this variable did not provide any additional information for this group.

*Table 7 : Time spent in care per child
for women in the LC group*

Time in care / child	N	%
< 1 month	6	29
1-12 months	8	38
1-5 years	3	14
> 5 years	4	19
Total	21	100

When this variable was calculated for the LC group, the results shown above in Table 7 were obtained. It is important to note that for eight women, the 'time spent in care' information was missing data. This was mostly due to women being unable to recall the exact length of time each child spent in care. The results obtained show that the majority of women in the LC group, lost their child to social services for under one year, with a significant proportion for under one month.

A confounding variable in looking at time spent in care, was the age of the child. A participant could have a five month old who is in permanent foster care, compared to a woman with a sixteen year old, who was in care temporarily for 3 months. Both women could have a total time children spent in care of three months, but they are not really comparable. To explore this further, a 'mean age' was then calculated, whereby the total age in months of all a participant's children was divided by the number of children that participant had. This was then compared between those who had a mean time in care of a year or less, and those who had a mean time in care of over a year. There was no significant difference between these two, indicating that having an older mean age of children, does not predict having a child in care for longer.

Any further analysis using the 'time in care per child' variable was not productive. The large amount of missing data meant the numbers in each category were too small to reach statistical significance.

For the bulk of the analysis therefore, the 'ever lost custody of a child to social services' (LC) versus 'never lost custody of a child to social services' (NLC) variable was used. These two groups of women will now be looked at with reference to a number of different factors, in an attempt to answer research question number one, namely, what factors relating to the participant's and their drug use, correlate with this custody measure?

CHILD CUSTODY - LOSING A CHILD / NOT LOSING A CHILD TO SOCIAL SERVICES' CARE

Demographics and loss of a child to social services' care

The relationship between demographics and losing legal custody of a child was first considered. There was no difference between the LC group and NLC group regarding participant's age, number of adults they lived with, number of children they lived with, age left education, or age of the participant's youngest/oldest child . However, the number of children the participant had did vary significantly between the two groups. The LC mothers had significantly more children (mean 2.93, SD 1.33) than the NLC mothers (mean 1.80, SD 0.93) [$t(62)=3.98, p<.001$].

Drug use and loss of a child to social services' care

This set of analyses set out to examine firstly whether or not levels of past and current drug use have any effect on, or are affected by, the custodial status of the child(ren). The results can be seen below in Table 8.

There was no difference between the LC and NLC groups, regarding age first used heroin, nor for lifetime months of daily heroin or crack use. There was no difference in amount of heroin or methadone used per week in the last month. The severity of dependence score for methadone was significantly different between these two groups of mothers, with the LC mothers scoring lower than the NLC mothers. The severity of dependence score for heroin did not differ between the two groups.

Table 8: Drug use in participants who had/had not lost a child to social services' care.

	Have lost a child to SS care (LC)		Have never lost a child to SS care (NLC)		T-Test
	M	SD	M	SD	
Age first used heroin	22.38	5.17	21.91	7.24	t(61)=.04
Months of daily heroin use in lifetime	80.31	66.76	79.83	57.98	t(61)=.17
Months of daily crack use in lifetime	17.56	24.20	17.37	27.64	t(52)=.62
Months of daily use in lifetime	72.24	72.90	44.63	31.71	t(36.72)=1.90
Total amt heroin (mg) used/week in last month	224.05	465.50	519.71	1398.68	t(42.77)=1.17
Total amt methadone (mls) used/week in last mth	514.00	324.80	394.71	183.79	t(42.68)=1.75
Severity of Dependence Score for heroin	5.40	3.72	7.06	4.39	t(23)=-.74
Severity of Dependence Score for methadone	6.39	2.75	8.29	2.70	t(57)=-2.67 **

Note: * p< .05, two-tailed, ** p< .01, two-tailed, *** p< .001, two-tailed.

Having used more than one type of drug (polydrug use) was not found to increase risk of losing custody of a child. Similarly, current polydrug use did not relate to the custody variable. Overall it would seem that levels of drug use past and present, other than current methadone dependence, did not predict the custody variable, nor were they

affected by it.

Health and loss of a child to social services' care

T-test analysis did not show any difference between the LC and NLC participants, in terms of their scores on the BDI and GHQ. This would suggest that loss of a child to social services care does not affect current mental and physical health in this population. This is shown below in Table 9.

Table 9: BDI, GHQ and Crime in participants who had/had not lost a child to social services' care.

	Have lost a child to SS care (LC)		Have never lost a child to SS care (NLC)		T-Test
	M	SD	M	SD	
BDI	24.76	15.90	22.00	13.40	t(62)=.96
GHQ	36.24	21.86	37.54	21.65	t(62)=-.06
Number of times in police custody	3.45	3.14	2.48	1.67	t(44)=1.33
Number of weeks spent in police custody	62.34	97.38	53.61	121.67	t(43)=.27

Note: * p< .05, two-tailed, ** p< .01, two-tailed, *** p< .001, two-tailed.

Crime and loss of a child to social services' care

There was no significant difference found regarding number of times participant's themselves were in police custody / prison, between the LC and NLC groups. There was also no difference in total number of months participants spent in police custody / prison. This is shown above in Table 9.

Parental Bonding Instrument scores and loss of a child to social services' care

Research question number two set out to consider the participant's memories of their own parents, to see if this affected their ability to parent themselves as measured by the LC/NLC variable. The PBI was used to obtain information regarding participant's own parents, and the four scores obtained are shown below in Table 10.

Table 10: PBI scores in participants who had/had not lost a child to social services' care.

	Have lost a child to SS care (LC)		Have never lost a child to SS care (NLC)		T-Test
	M	SD	M	SD	
Paternal care	17.83	13.29	21.21	12.50	$t(51)=-.85$
Paternal protection	18.33	9.81	16.69	7.59	$t(51)=-.59$
Maternal care	19.21	14.15	22.35	12.50	$t(61)=-1.15$
Maternal protection	15.97	9.22	17.29	10.07	$t(61)=-.45$

Note: * $p < .05$, two-tailed, ** $p < .01$, two-tailed, *** $p < .001$, two-tailed.

The paternal care score was slightly higher in the NLC group, as it was for maternal care.

The paternal protection score was lower in the NLC group, but the maternal protection score was higher in this group. None of these differences approached statistical significance.

When the four quadrants were compared according to the LC/NLC variable, there was again no significant difference found. There were roughly equal numbers of women in each quadrant, who had or had not lost a child to social services' care. This is shown below in Table 11.

Table 11 : Numbers in the four quadrants of the PBI, for maternal and paternal scores, in participants who had/had not lost a child to social services' care

	Quadrant 1 High protection/ low care	Quadrant 2 High protection/ high care	Quadrant 3 Low protection/ low care	Quadrant 4 Low protection/ high care	χ^2
Mother-LC	9 (47%)	5 (33%)	4 (57%)	7 (50%)	ns
-NLC	10 (53%)	10 (67%)	3 (43%)	7 (50%)	
Father -LC	12 (50%)	4 (36%)	4 (40%)	9 (50%)	ns
-NLC	12 (50%)	7 (64%)	6 (60%)	9 (50%)	

Note 1: * $p < .05$, two-tailed, ** $p < .01$, two-tailed, *** $p < .001$, two-tailed, ns = not significant.

Note 2: Quadrant 1 = Affectionless Control, Quadrant 2 = Affectionless Constraint, Quadrant 3 = Neglect, Quadrant 4 = Optimal Parenting.

Romantic attachment style and loss of a child to social services' care

Table 12 : Hazan & Shaver's romantic attachment style in participants who had/had not lost a child to social services' care

	Avoidant	Anxious	Secure	χ^2
LC	21	3	5	**
NLC	10	8	16	

Note 1: * $p < .05$, two-tailed, ** $p < .01$, two-tailed, *** $p < .001$, two-tailed, ns = not significant.

Research question number three was considered next, namely the relationship between romantic attachment style, and the custody variable. When legal custody of the child was looked at between romantic attachment groups as measured by the Hazan & Shaver measure, Chi square analysis reveals a significant difference between the three groups [$\chi^2(2)=12.21, p < .01$]. This is shown above in Table 12. The LC group were more likely to be avoidant than was expected, and were less likely to be secure. This would appear

to indicate that there is an association between the romantic attachment style of the participant and whether or not a child of theirs was ever lost to social services care.

In addition to the categorical measure of attachment, a scale score was obtained for each of the three romantic attachment categories, with a 'one' indicating 'not very like' and a 'six' indicating 'very like'. When these scores were compared between the LC and NLC groups, the following results were obtained (see Table 13 below).

Table 13: Romantic attachment category scores in participants who had/had not lost a child to social services' care.

	Have lost a child to SS care (LC)		Never lost a child to SS care (NLC)		T-Test
	M	SD	M	SD	
Avoidant	4.06	1.72	3.46	1.72	$t(62)=2.78^{**}$
Anxious	2.41	1.48	2.94	2.09	$t(62)=-1.15$
Secure	2.59	1.80	3.86	1.91	$t(62)=-2.72^{**}$

Note: * $p < .05$, two-tailed, ** $p < .01$, two-tailed, *** $p < .001$, two-tailed.

The LC group scored significantly higher on the avoidant scale, and significantly lower on the secure score. There was no difference on the anxious scale, between the LC and NLC groups.

ROMANTIC ATTACHMENT STYLE

As research question number three proposed, the next section will now consider the romantic attachment variable in greater detail, in an attempt to show what other variables this measure correlates with.

Demographics and romantic attachment style

The three romantic attachment groups were not seen to differ in terms of age, number of children, number of adults living with participant, or age of oldest/youngest child. However, analysis of variance does show a significant difference between the three groups for two of the demographic variables. The number of children the participant lives with is significantly higher in the secure group (mean 1.33, SD 1.20) than in the avoidant group (mean 0.58, SD 0.89) [$F(2,61)=3.40$, $p<.05$]. Also, the age the participant left school is significantly older in the secure group (mean 16.00, SD 1.87) than the avoidant group (mean 15.07, SD 1.14) [$F(2,60)=3.31$, $p<.05$].

Drug use and romantic attachment style

Levels of drug use were compared across the three attachment style groups, including amounts used, age started using, months of daily use, and levels of current use (see Table 14 below). The table shows that the number of months of daily heroin use differs significantly between romantic attachment groups, with the secure participants having a shorter history of heroin use than the insecure participants. The remaining drug variables do not differ significantly according to romantic attachment style.

Table 14 - Drug use according to romantic attachment style

	AVOIDANT		ANXIOUS		SECURE		ANOVA
	M	SD	M	SD	M	SD	
Months of daily heroin use in lifetime	87.61	65.51	111.17	65.30	51.10	40.30	F(2,61)=4.54 **
Months of daily crack use in lifetime	18.80	25.93	24.60	36.63	12.20	19.06	F(2,52)=0.82
Months of daily methadone use in lifetime	71.65	70.19	42.17	28.65	44.29	35.76	F(2,61)=2.12
Total amt heroin (mg) used/week in last mth	447.83	955.83	171.88	275.83	104.29	167.33	F(2,60)=1.76
Total amt crack (mgs) used/week in last month	1273.91	2958.23	50.00	75.59	170.00	626.69	F(2,48)=1.97
Severity of Dependence Score for heroin	6.69	3.86	6.40	3.78	6.00	3.78	F(2,23)=0.06
Severity of Dependence Score for methadone	6.78	2.73	7.64	2.66	8.10	3.11	F(2,56)=1.29

Note: * $p < .05$, two-tailed, ** $p < .01$, two-tailed, *** $p < .001$, two-tailed.

Health and romantic attachment style

Table 15 below shows a significant difference across the three romantic attachment groups, in participant's scores on both the BDI and GHQ. In both cases, Tukey's HSD shows these differences to be between the secure group and both the insecure groups, with the latter scoring higher on both measures.

Table 15: BDI, GHQ and Crime scores according to romantic attachment style.

	AVOIDANT		ANXIOUS		SECURE		ANOVA
	M	SD	M	SD	M	SD	
BDI	25.94	14.79	30.50	11.92	15.14	12.13	F(2,61)=6.16 **
GHQ	40.52	21.33	44.67	16.86	27.29	21.81	F(2,61)=3.56 **
No. times in custody	3.92	2.95	1.64	1.03	2.00	1.41	F(2,43)=4.40 *
Length of time in custody (weeks)	79.67	142.31	70.14	75.10	18.73	28.40	F(2,42)=1.50

Note: * $p < .05$, two-tailed, ** $p < .01$, two-tailed, *** $p < .001$, two-tailed.

Crime and romantic attachment style

The mean number of times the participant had been in custody (including police cells overnight) was found to be significantly different across the three groups, as shown above in Table 15. The total number of weeks spent in custody was not found to be significantly different across the three groups, although the secure group clearly spent less time in police custody / prison than either of the two insecure groups.

Parental Bonding Instrument scores and romantic attachment style

As shown in Table 16, analysis of variance showed a significant difference between the three romantic attachment style groups according to paternal care scores [$F(2,50)=3.17$, $p=0.05$]. Tukey's HSD showed this to be a difference between the avoidant and anxious groups, with the latter having higher care scores. There was also a significant difference for the maternal protection scores [$F=3.14$ (2,60), $p=0.05$], with the secure group having lower maternal protection scores than the anxious group.

Table 16 - PBI scores according to romantic attachment style

	AVOIDANT		ANXIOUS		SECURE		ANOVA
	M	SD	M	SD	M	SD	
Paternal care	16.14	13.53	27.30	6.38	21.20	12.84	F(2,50)=3.17 *
Paternal protection	17.68	8.16	18.80	8.60	16.07	9.82	F(2,50)=0.32
Maternal care	17.42	13.33	21.18	14.16	25.90	11.57	F(2,60)=2.70
Maternal protection	17.32	9.81	21.64	8.02	13.14	9.16	F(2,60)=3.14 *

Note: * $p < .05$, two-tailed, ** $p < .01$, two-tailed, *** $p < .001$, two-tailed.

Bartholomew's measure of adult attachment style

As shown in the Method section, there is a strong significant association between the Bartholomew and Hazan and Shaver categories. So far, the Hazan and Shaver (1987) measure has been used for all the analysis, as the numbers in the three groups were greater than for the Bartholomew (1992) measure, where there are four groups.

It is however of interest to consider the Bartholomew measure in relation to the LC/NLC variable, in particular to consider the two different avoidant groups, namely 'fearful' and 'dismissing'. Chi-squared analysis (see Table 17) showed a significant association between the Bartholomew categories and the LC/NLC groups [$\chi^2(3)=12.88$, $p < .01$]. Fewer than expected of the secure group had lost custody of a child at some point, and this was also true for the preoccupied group. Both the avoidant groups had more women in the LC group than was expected, in particular in the fearful group.

Table 17 : Bartholomew's attachment style in participants who had/had not lost a child to social services' care.

	Secure	Preoccupied	Fearful	Dismissing	χ^2
LC	2	2	12	13	**
NLC	12	7	5	10	

Note 1: * $p < .05$, two-tailed, ** $p < .01$, two-tailed, *** $p < .001$, two-tailed, ns = not significant.

When the continuous Bartholomew scores were compared between the LC and NLC groups (see Table 18 below), the only significant difference was found for the fearful group, with the LC group scoring considerably higher than the NLC group on this measure. The LC group were also seen to be less secure and more dismissing, though not significantly so. There was no difference according to the preoccupied measure.

Table 18: Bartholomew's attachment category scores in participants who had/had not lost a child to social services' care.

	Have lost a child to SS care (LC)		Never lost a child to SS care (NLC)		T-Test
	M	SD	M	SD	
Secure	2.66	1.68	3.47	1.96	$t(61)=-1.76$
Preoccupied	2.28	1.60	2.91	2.04	$t(61)=-1.39$
Fearful	4.48	1.77	3.29	2.01	$t(61)=3.41$ ***
Dismissing	4.28	2.0	3.29	2.01	$t(61)=1.94$

Note: * $p < .05$, two-tailed, ** $p < .01$, two-tailed, *** $p < .001$, two-tailed

SUMMARY: AN OVERALL VIEW OF FACTORS AFFECTING DRUG USING PARENTS

Finally, question four of the original research questions must be addressed, namely to attempt to bring together the above analyses, to describe those factors affecting parenting outcome in the drug using population. For this, two main analyses were carried out to see first which variables would help to predict the custody variable, and secondly, to look further at the romantic attachment style variable and which other variables might best correlate with this.

Discriminant Analysis

The main correlates of having lost a child to social services at some time were seen to be 'romantic attachment style', 'dependency on methadone' and 'number of children'. Discriminant analysis was therefore carried out to see whether these variables can be used to predict whether or not a participant will have ever lost custody of a child to social services care. Since drug use, PBI scores and criminal history did not relate to the custody variable, these were left out of the analysis.

The Wilks' Lambda for the 'number of children', 'secure attachment score' and 'methadone Severity of Dependence Score' variables were, respectively, .70, $p < .001$; .70, $p < .0001$; and .64, $p < .0001$. The analysis showed these three variables together account for 77% of the variance, and are a highly significant function [$\chi^2 (3) = 24.50$, $p < .0001$]. The analysis also showed that the three variables would be able to predict the LC/NLC groupings in 80% of cases.

Multiple Regression

Multiple regression analysis was then carried out in order to see how much the variables looked at, correlated with the secure romantic attachment variable. The variables entered into the regression were the PBI maternal protection and paternal care scores, the BDI score, the number of times mother in custody variable, age finished education, and months of daily heroin use in lifetime.

The analysis of variance gave a significant F value [$F(6,31)=2.66, p=.05$], showing these variables to be having a significant effect on the secure romantic attachment variable. The multiple correlation co-efficient was .58, with an R^2 value of .34, indicating that these variables account for over 30% of the variance.

CHAPTER FOUR : DISCUSSION

OVERVIEW

This chapter will first summarise the original aims of the current research, and outline the methods used in order to answer the questions put forward. The main findings will then be reviewed, and alongside this, possible explanations for these findings will be discussed. The limitations of the current study, both in terms of design, and the measures and methods used are then outlined, and finally there is some consideration of the professional and clinical implications of the findings, and areas for future research are proposed.

SUMMARY OF AIMS AND METHODS

The current research set out to examine romantic attachment styles in drug using women with children. Its main aim was to try to identify factors which may help to identify those women who are likely to experience some form of parenting breakdown.

A questionnaire was designed, which entailed the women answering questions about their drug use, health, criminal activity, romantic attachment status, their memories of their own parents, their children, and their drug treatments. A number of different measures were used, including the Parental Bonding Instrument (Parker, 1983), Hazan and Shaver's Romantic Attachment Measure (Hazan & Shaver, 1987), and the Beck Depression Inventory (Beck et al, 1961).

A total of 64 women were interviewed, and the data was then analysed according to four main research questions. The main outcome variable looked at was whether or not the women had ever lost custody of a child to social services' care. Women who had lost a child in this way, were then compared to women who had not, to try to identify differences in their histories and current status. Of particular interest was a measure of romantic attachment status, and whether this differed between the two groups, and also whether this measure could help to predict other factors relating to areas such as drug use, crime and health.

THE MAIN FINDINGS

Parenting Breakdown - losing custody of a child to social services

It is difficult to separate out the specific influence of drug use on child abuse, since drug users are also likely to be in other risk groups regarding their social and economic status. However, children of parents who abuse drugs have long been considered to be at increased risk of abuse, neglect, and developmental problems (Bays, 1990; Murphy et al, 1991).

The results of this research do indeed indicate that drug users experience difficulties in parenting, since almost half the women interviewed had at some point lost custody of a child to social services' care (the LC group). It is not possible to say whether or not these women's children were at risk of child abuse and maltreatment, as information relating to the reason children were placed in care was not collected. It is likely however, that some

form of neglect took place for the child(ren) to be taken into care by social services.

It would seem therefore that children with drug using mothers are at increased risk. However, it is also true that these women are often under the watchful eye of the social services, and are likely to be under a certain level of stress through feeling watched and through having their parenting assessed at every turn. This may result in some drug using women having children taken away prematurely, without an opportunity for appropriate intervention. There may also be drug using women who have managed to avoid having social services' involvement in their lives, and so have kept their children, regardless of the quality of care they are actually providing.

When the length of time spent in social services' care was considered, it was clear that a substantial proportion of women had lost a child for under one month. A separation even of this length of time has been shown to be associated with long term behaviour problems in the child (Rutter, 1981; Bowlby, 1965). It is not possible to consider the effects of this time spent in care on the child in the current study, since child measures were not included. It is likely that separations for over one month will increase the risk of long term effects on the behaviour, development and mental health of the child. Details of other separations, through for example hospitalisation, were not collected. It may be that those women who had not lost a child into care, had other enforced separations from their children, with similar potential long term effects.

The converse of this overall finding however, is that over 50% of women interviewed had managed never to lose custody of a child to social services' care (the NLC group). These women were more likely to have all their children living with them, and to still be in contact with all their children.

This group were also more likely to have a child living with their own mother than the LC group. Whilst a distinction should have been made between grandmothers who have legal custody of the child and those who are helping out informally, this finding would be in keeping with other research (Kelley, 1992) which found that drug users who no longer have their children living with them are likely to have children living with their own mothers. This indicates the potential importance of close contact with one's mother, since this may protect them from having a child taken away into social services' care. Other studies have shown all round high levels of support from drug using women's own mothers, and low support from the children's fathers (Colten, 1982).

There is a danger, as mentioned in the Introduction, that a further generation is being placed at risk in this way. The drug user may have experienced inadequate parenting from their own parent, and then feel unable to cope as a parent themselves. As a result of this, the grandchild is being left with the drug user's mother, and therefore being exposed to the same parenting which may have led to the mother's own drug use or parenting difficulties. Thus the inter-generational transmission of poor parenting and insecure attachment may be facilitated.

Number of children and parenting breakdown

One of the main findings was that women in the LC group had significantly more children than those in the NLC group, suggesting that a major risk factor for losing a child into social services' care, is simply to have more children. Whilst it could be argued that the odds of losing a child are certain to be higher if you have six children rather than one, it is unlikely that such an effect would be seen in a non-drug using population. There was no difference between the groups regarding the mean age of their children, so it does not seem that having older children increases the chance of having lost a child. Without a control comparison, it is not possible to say whether the 'number of children' effect relates to drug use, or whether it is also found in non-drug using women of a similar socio-economic background. This warrants further work.

This 'number of children' finding has not been reported in other studies looking at parenting and drug use. Since the effect seen here is quite a significant one, this would seem to be an important but neglected area. It may be that women are getting into a cycle where they continue to have children, despite repeatedly losing custody of the children either to relatives or to the state. The current study does not show these women who have more children to be more insecure regarding romantic attachment, thus these two factors seem to be having an effect independent of each other.

Drug use and parenting breakdown

Since all the participants in this study were drug users, no conclusions can be made about

drug use versus no drug use in terms of identifying parenting breakdown risk factors. The aim of the study was to identify risk factors from within a drug using population, and so *levels* of drug use and *length* of drug using history were compared between the LC and NLC groups.

The main difference found was that the NLC group had a greater dependency on methadone, as measured by the Severity of Dependence Scale (Gossop et al, 1992). Many definitions have been put forward of 'dependence' (eg Edwards 1981), but it is generally agreed that as dependency develops, the user becomes more preoccupied by the drug, and experiences a greater desire and compulsion to use it. Whatever the initial reasons for taking the drug, new factors affect the continuation of use, and thus the dependence on the drug may increase.

This is a somewhat unexpected finding. A possible explanation of this increased methadone dependency in the NLC group, may be that these women see methadone as essential in enabling them to function better, and so be good enough parents. They may feel that without methadone they risk losing their children, and so their dependence on this drug increases. It may also be that these women come to depend on their methadone as a way of coping with the pressures of being a mother. It could also be said that the methadone severity of dependence score related to current status, and the custody variable mostly to the past, and therefore any correlations between the two are not relevant. Overall, this finding would need to be replicated, and would then warrant further

consideration.

It is perhaps surprising that a longer past history of daily heroin and crack use was not seen in the LC group, nor did they have a longer history of daily drinking. A history of polydrug use was also not found to relate to the custody variable.

Regarding current use, it is perhaps to be expected that this did not relate to the custody variable, since one measures status in the present, and the other looks at an event in the past. It was thought that those who had lost custody of a child in the past would be those who were using more then, and were therefore more likely to be using more currently. This was not found to be so. It was also found that those who had lost custody of child were no more likely to have modified their behaviour, and now be taking fewer drugs. Without further information regarding the participant's drug use at the exact time their child was taken into care, it is not possible to draw definite conclusions regarding levels of drug use and losing a child to social services' care.

Health and crime and parenting breakdown

Regarding the psychological well-being of these women, the LC and NLC groups did not differ on BDI or GHQ scores. It would seem from this, that losing a child to care does not effect current psychological well-being.

As with the drug use variable, it is important to remember that the BDI score is a measure

of current status, and the custody variable relates in part to the past. It is therefore perhaps not surprising that there is no correlation between these two measures. It was thought that women who had lost a child to social services' care, would be more depressed currently perhaps as a result of this, but this was not found to be the case.

Overall, the mean depression score of the participants in the current study was in the moderate to severe range. It is of interest to note that despite this, only twelve women (19%) were currently being prescribed anti-depressant medication. This may indicate that the BDI is over-estimating the prevalence of clinical depression, or it may be that the treatment services are failing to pick up on these types of difficulties.

It was also predicted that those mothers who had spent more time in prison, would be more likely to have lost custody of their child(ren). This was not found to be the case. Only three women (6%) lost their children to foster care at the time of their arrest. It would therefore seem that in this population, prison was not a major precipitating factor in a woman losing custody of a child to social services' care.

Parental Bonding Instrument scores and parenting breakdown

Moving on to research question number two, another factor thought to contribute to parenting (Belsky, 1984) is the parent's own development and childhood experience. In this study, the PBI was used to provide an indication of the sort of parenting participants themselves had received.

When the PBI scores were compared between the LC and NLC groups, there was very little difference regarding the care and protection scores for both fathers and mothers. Thus women who experienced 'affectionless control' from their parents, were no more likely to lose a child to social services' care, than those who experienced 'optimal parenting'. It would seem then that it is not possible to use the PBI to differentiate between the LC and NLC groups in the current study of drug users.

PBI scores were also compared to PBI scores in other drug user studies (Schweitzer & Lawton, 1986). This revealed that in the current study there were fewer participants in the 'affectionless control' quadrant, and more in the 'optimal parenting' quadrant, than in the other study.

One possible interpretation of these differences, is that the parents of the current sample were indeed of a 'higher quality' than those in the Schweitzer and Lawton study. It may also be that this difference between the two studies relates to gender, since the Schweitzer and Lawton study used both male and female drug users. In addition, using control scores from other studies is not an accurate method, and this in itself may account for the insignificant results, and also the difference seen regarding distribution between the quadrants in this study compared to others.

Romantic attachment style and parenting breakdown

At this point in the analysis, it was clear that few of the characteristics of the drug using

women were helping to identify those who were likely to have greater difficulties in parenting. In a population where they all use drugs, most are depressed, the majority have a criminal history, and a large proportion had themselves received inadequate parenting, varying levels in these factors do not appear to help differentiate amongst these women. Research question number three therefore, set out to examine whether a measure of romantic attachment provided any further insight.

Firstly, having a current partner was not seen to vary between the LC/NLC groups. However, this is also a current measure, and does not relate back to earlier relationship status when the child was lost to care. The romantic attachment measure was therefore used to provide an indication of how each individual feels towards intimate relationships in general.

When using the Hazan and Shaver measure, it was found that those women who showed a secure romantic attachment were less likely to be in the LC group than would be expected. It is not possible to draw any firm conclusions regarding the direction of an effect, but a secure romantic attachment style would appear to be a factor contributing to a reduced risk of parenting breakdown.

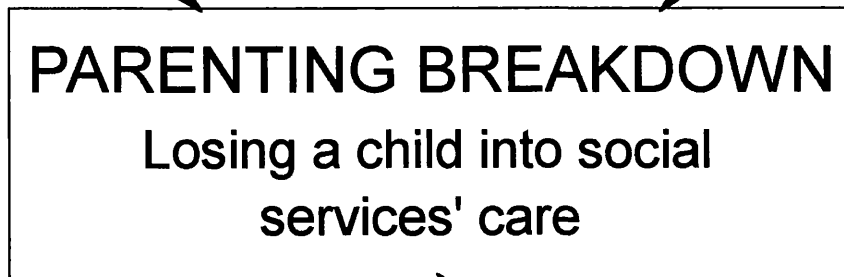
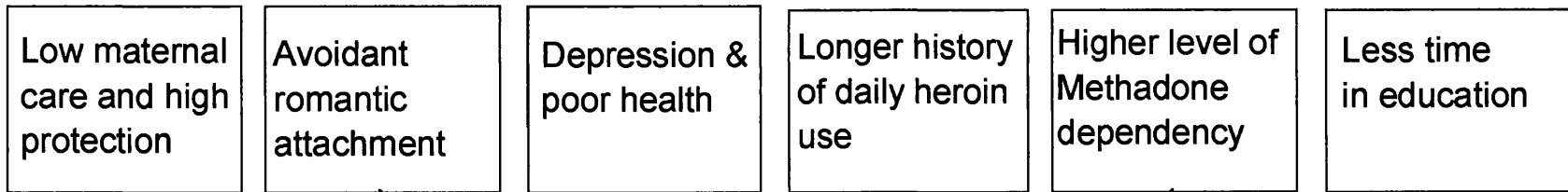
When using the continuous measures for each of the three categories, security was significantly higher in the NLC group. It was also found that those women in the LC group scored higher on the avoidance scale. There was no difference regarding levels of

anxious attachment characteristics between the LC and NLC groups. Thus it would seem that the anxious traits are not a risk factor in parenting.

It may be that a secure romantic attachment style protects the individual from more prolonged drug use, depression, and from parenting breakdown. This romantic security may also mean the individual is more likely to be in a supportive relationship at any one time, which in turn protects against repetition of their own difficult childhood patterns when they come to parenting their own children.

It therefore emerges from the findings so far, that romantic attachment status and number of children are key variables in relation to losing a child at some point to social services' care. Discriminant analysis shows that these variables, along with the methadone dependency score, would allow us to predict the LC / NLC groups in almost 80% of cases. Figure 2 on the following page attempts to illustrate the parental characteristics and social factors which are having a significant effect on the breakdown of parenting in this population, as measured by the LC/NLC variable. It shows how only romantic attachment style, greater methadone dependency, and having a greater number of children, were found to have a significant influence on the a participant losing care of a child to social services.

Parental characteristics



Child characteristics

Data not available

Social Factors

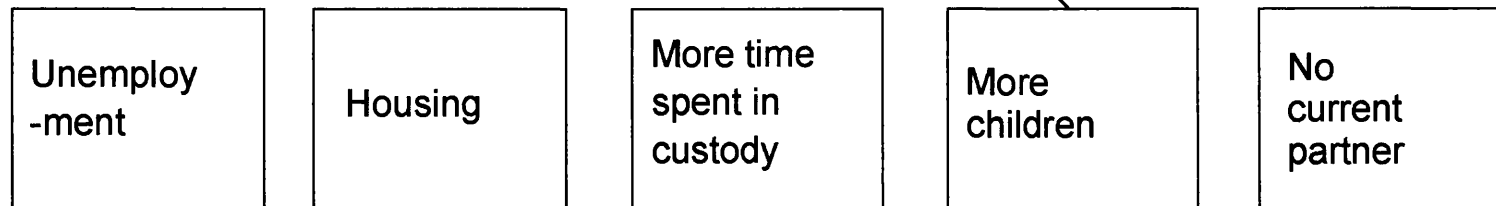


FIGURE 2

Romantic attachment style

Research question three also set out to examine romantic attachment style further, to attempt to see what else it might distinguish between amongst these drug using women.

In addition to the finding that the avoidant women were more likely to be in the LC group, it was found that those scoring higher on the avoidant score were more likely to have none of their children living with them than women scoring lower on avoidance. Since the number of children did not vary in relation to this score, this would seem to suggest that the avoidant group are more likely both to have lost a child into social services' care, and are also more likely to have a child currently living with someone other than themselves.

The secure women were also more likely to have spent more time in education than the avoidant women. This could suggest that the more educated women were more likely to develop a secure romantic attachment status. Alternatively, the secure woman may be more likely to come from a more stable family where education is given more importance, and it is this background, not the education itself, which predicts the secure romantic attachment style.

The secure group were seen to have a shorter history of heroin use than the two insecure groups, but otherwise current drug did not vary significantly between the romantic attachment style groups. It would seem therefore that those who are able to form secure

romantic attachments are therefore likely to use heroin for shorter periods of time. It may be that the secure group are less likely to form relationships with other drug users, and this protects them from more prolonged heroin use. The secure group may also be more likely to engage in treatment services and form relationships with workers there, and so use fewer street drugs.

The romantic attachment measure was also seen to correlate with the depression and psychological health scores, with the secure group scoring significantly lower on both. This would seem to indicate that the ability to form secure romantic attachments protects the individual from depression.

The number of times the participant was in custody themselves, was significantly lower in the secure group than the avoidant group, though it was lowest of all in the anxious group. The secure group spent considerably less time in custody than both the insecure groups, though this was not a significant difference. Thus those who are more able to form a secure romantic attachment, are less likely to end up in prison, and also spend less time there.

When the romantic attachment groups were compared as to participant's memories of their own parents, the avoidant group indicated that their fathers had been significantly less caring than the other groups, and the maternal protection score was significantly higher in the anxious group than in the secure group. Overall, the Hazan and Shaver

measure was not seen to correlate very significantly with the PBI scores, which might otherwise have been predicted. When the quadrants were looked at, those women in the 'affectionless control' quadrant, were not seen to be significantly less secure than those in the 'optimal parenting' quadrant. This would suggest that the link from poor parenting received and an inability to form secure romantic attachments, does not exist in the current population.

Parker, Barrett and Hickie (1992) examined the links between PBI scores and social bonds in adulthood, through a review of the relevant literature. They predicted that there might some continuity between parenting received, and quality of social networks and intimate relationships in adulthood. What they found was that these links are more in evidence regarding early memories and later diffuse social bonds, and that this was less so in relation to intimate adult relationships. They suggest that, aside from perhaps cases of extreme parental deprivation, deficiencies in parenting received are able to be modified by subsequent experience, in particular, positive experience in interpersonal relationships.

When comparing the PBI and the romantic attachment measures, it is important to distinguish, as Parker, Barrett and Hickie (1992) themselves stress, between the notion of an 'attachment' and a 'bond'. They see the former as being more biologically determined, following instinctive drives, with the latter being perhaps subject to more voluntary and cognitive influences. Rutter (1980) distinguished between a general tendency to seek attachments, and the process of selecting personal and social bonds that

are reciprocal. Characteristics in the adult intimate partner are likely to have an effect on the bond formed, such that the bond then reflects these characteristics and not just past developmental characteristics of the subject.

A poor marriage (Rutter, Quinton & Hill, 1990) has been shown to be a major factor in predicting the continuation of childhood adversity into adulthood, and the protective effects of a good marriage have been reported by many (eg. Heller, Swindle & Dusenbury, 1986, cited in Parker, Barrett & Hickie, 1992). What the current research may be showing is that it is not the presence of a supportive partner, but simply the *ability* to form strong and secure romantic attachments which may be enough to enable these women to break this pattern of repeating cycles from their own difficult childhoods, to become good enough parents themselves.

Whilst poor parenting as measured by the PBI was not found to correlate with insecure romantic attachment style in the current study, it may be that poor parenting received by those with an insecure romantic attachment style allows dysfunctional patterns to be repeated across generations, and so poor parenting again takes place. When an individual is able to form secure romantic attachments, this cycle is broken, and they are more likely to be able to be a better parent than their own parents were.

It follows that those women who avoid intimate relationships, the 'avoidant' style in Hazan and Shaver's measure, are likely to miss out on this opportunity for corrective experience.

This would also be the case for the 'dismissing' and 'fearful' insecure types identified using Bartholomew's measure. This might provide further insight into why the women in the anxious group did not have an increased likelihood of having lost a child into care. It would seem that the anxious and secure groups were more similar regarding parenting outcome, and the avoidant romantic attachment style presented the greatest risk.

The Hazan and Shaver 'anxious' group correlate significantly with the Bartholomew 'preoccupied' group, who are seen to have a negative view of the self, and a positive view of others. It could therefore be that a negative self image makes them more reliant on the opinions and gestures of others for their self-esteem. Through this reliance, they may be more willing to engage in relationships, which may then provide greater opportunity for the corrective experience needed to overcome repeating cycles of inadequate care. Further analysis of the anxious group would be of interest.

This leads to addressing the final research question, namely to consider how all of the above findings may fit into a model whereby the outcome of the mother and child can be predicted. Since romantic attachment style was found to correlate significantly with a number of the other variables, in particular the custody variable, it could be said that to have a measure of romantic attachment style would help to predict those women most likely to lose a child to social services' care.

Parental characteristics

Social Factors

87

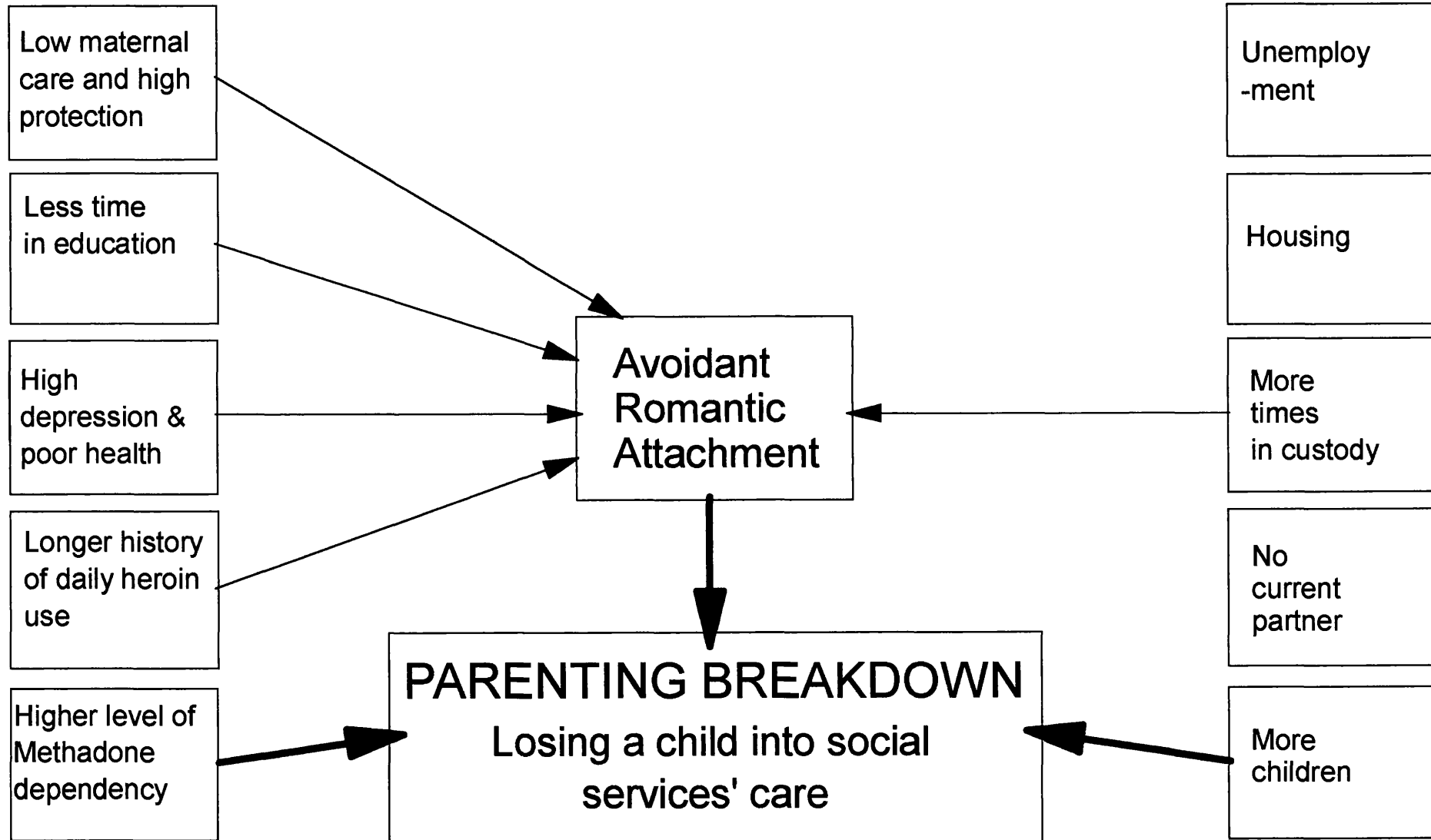


FIGURE 3

Figure 3 on the previous page, shows the interplay of romantic attachment style in looking at relationships between parental and social factors, and parenting outcome as measured by the LC/NLC variable. The three variables shown to influence parenting breakdown in Diagram 1, are again shown here, namely methadone dependency, romantic attachment style, and having more children. What this diagram also shows is how a number of other social and parental factors relate to the romantic attachment style measure. Thus romantic attachment style emerges as a central factor in predicting parenting breakdown as measured by loss of a child into social services' care.

LIMITATIONS OF THE STUDY

Design limitations

The current study set out to try to pick out from within a drug using population, factors which might help to identify those most at risk of parenting breakdown. One limitation of such a design is the lack of a control group, which might have enabled further analysis and conclusions to be drawn. This is particularly so regarding comparisons of PBI scores, analysis of PBI quadrants, and consideration of drug use versus no drug use. It would be possible to use a matched clinical control group, looking at mothers with a psychiatric diagnosis versus the drug using mothers. This would however be a difficult sample to gain access to, in particular regarding parenting issues. A third group of matched 'normals' could also be included.

There is also the issue of using an 'in treatment' sample. All of the women in the current

study were in treatment, and so may be less chaotic than those who are currently using illegal drugs out on the streets. It may be that it is those who are not in treatment who are most at risk of parenting breakdown, and the results would have to be replicated with these women before firm conclusions regarding the relationship between attachment and parenting in drug users are made.

However, to under-take research with a non-treatment group of drug users is to undertake an extremely difficult and lengthy task. Contacts in the drug using world need to be built up, and much time spent on fruitless visits to varying locations before an interview can take place. There is also an increased chance of the participant being under the influence of drugs when interviewed, so delaying the interview. It is undoubtedly a worthwhile aim to research this population, but this aim was considered out of the scope of the current research.

Measures not obtained

There are a number of questions which with hindsight, could have been included in the questionnaire, and would have provided further useful information. Firstly, more information regarding the participant's own parents would have been of interest, such as parental drug and alcohol use, whether or not participants still see their parents or are in contact with them, and any time they spent away from their parents when they were young, for example were they ever in care themselves.

Regarding the parenting of their own child(ren), more detailed information about separations would have been of use. For example, did the participant's child suffer from opiate withdrawal after birth, and subsequently spend a time in hospital away from the mother? In addition, a more accurate measure of parenting and parenting outcome could have been obtained by asking participants the total time each of their children has spent living with themselves.

A detailed measure of social support would also have been useful, to provide details about the amount of support the participants felt they were receiving from their mothers, fathers, partners and friends.

The current research did not obtain any measures regarding the participant's children. It would be of considerable interest to use a measure such as the Behavioural Screening Questionnaire (BSQ: Richman & Graham, 1971) with this population, to allow us to see the impact of child characteristics on the parenting outcome. This measure consists of 60 questions relating to current health, development and behaviour of the child. A cut-off point exists where it is possible to identify children with behavioural difficulties, marked developmental delay, and physical handicap.

In addition a measure such as the Parenting Stress Index (PSI: Abidin, 1990) would have provided useful information regarding the factors contributing to stress the parent experiences. It looks at three domains, namely child salient characteristics in terms of

temperament, parent personality and pathology, and situational variables contributing to parenting stress.

Limitations of the measures used

With hindsight, the use of the GHQ with this population is perhaps questionable due to the large number of questions relating to somatic symptoms. It became clear in doing the interviews that when a drug user is asked about 'hot and cold spells', they invariably relate these to their times of withdrawal, not to their state of health in general. This could also be said for questions relating to headaches, tiredness, and sleep problems. It could also be argued that this same bias existed for everyone in the current study, and so may not have influenced results.

The GHQ can be broken down into four sub-scales, one of which considers somatic symptoms only. This was done, and it was not found that this sample scored significantly higher on this subscale. However, the real issue is not high somatic scores, but whether or not the scores themselves are reflecting health in general, or relating to drug withdrawal.

It is also seen that the BDI contains some items which may be answered by drug users in relation to their withdrawal and drug use, as opposed to depression as such. For example, the items regarding disturbed sleep, and also loss of interest in sex. Both of these are features of drug use and withdrawal, and so BDI scores may be inaccurate with this

population.

The PBI scores may tell us something about the parenting participants received, but it does not tell us anything specific about their childhoods, and levels of adversity suffered. Questions regarding such details could have been added into this section. It was also found that a number of participants had step-parents, or had lost their parents at a young age, and this meant there was a significant amount of missing data for the PBI. Also, as stated previously, the lack of a matched control group in the current study meant it was difficult to divide the participants into the four quadrants, and to draw any firm conclusions about the quality of parenting received.

The drug data obtained should perhaps have been more detailed to allow closer analysis. In the present study, it is possible to compare length of history of drug use and also current use, but there is no information regarding the level of drug use at the exact time when a child was taken into care. It is therefore not possible to draw any firm conclusions regarding the effects of levels of drug use, and losing a child to social services' care.

One difficulty with the Hazan and Shaver measure, is that with three categories, participants are unable to indicate that whilst they are most like one category, they are also quite like another too. There is also the danger of choosing the category they would most like to be like, as opposed to the one they are like. To try to overcome this, a continuous measure for each category was also obtained. In addition, the Bartholomew measure was

included, and since these two measures of romantic attachment correlated significantly in the expected way, it would seem that some of the predicted downfalls of using a questionnaire measure were avoided. Increased numbers in the current study would have allowed greater analysis using the Bartholomew measure.

One measure which may have been preferable is Simpson's Attachment Style Measure (Simpson, 1990). This is a fuller questionnaire version of the statements used in the Hazan and Shaver measure, which allows greater discrimination of individual differences. Thus the interviewee may agree highly with part of the avoidant statement, and not agree at all with another part of it. Each of the avoidant sentence scores are then added up to produce an overall avoidant score, and likewise for the other two categories. This would avoid the difficulty of having to choose one statement.

IMPLICATIONS FOR FURTHER RESEARCH

Many of the limitations quoted previously could be overcome through using the AAI with a drug using population. This would firstly overcome the inability of the current study to access information regarding early trauma and loss. The AAI also avoids the limitations of using a questionnaire measure, such as response bias. Its strength is that it allows the researcher to 'surprise the unconscious', and so the interviewee is not able to hide their true adult attachment status. Through using the AAI, it would also be possible to further examine the links between childhood adversity and drug use in adulthood.

During the course of conducting the interviews for the current research, some participants gave considerable detail regarding their own parents, about abuse they had suffered from parents and partners, and also about what led them into drug use initially. Since a structured questionnaire was being used, this information was not formally recorded, and thus could not be analysed. The AAI would again be a useful tool in accessing this information. It would also suggest that some form of qualitative research with this population would be of interest, using discourse analysis methods to analyse transcripts obtained.

The inter-generational patterns of attachment and drug use are of considerable interest. It may be possible to conduct the AAI with a number of drug using women and their mothers, to make comparisons across generations. It is often seen that drug using men and women are still living with their mothers, and their mothers play an important role in caring for their grandchildren. Is this placing another generation at risk, or are these women more likely to have a secure adult attachment style? The Strange Situation Procedure could then also be used to provide information on a third generation.

It would also be of interest to look more closely at the parents of drug users. Since research shows that a good marriage prevents parent's depression from spreading into other aspects of family life, some measure of the drug users parent's marital status and nature of the relationship could be obtained. Are drug users whose parents are still happily married, more likely to themselves be secure in romantic attachments, and are they

more likely to be stable regarding their drug use?

Further research with the children of drug users would also be of interest. It has been shown in the introduction to the current research, that children born to drug dependent women often suffer from withdrawal, and subsequent developmental and behavioural difficulties. However, a number of women in the current study had not used drugs prior to having their first child. It would therefore be of interest to consider the effects of subsequent drug use on a child who was not exposed to drugs in the womb. This type of research is best done longitudinally, and is therefore perhaps more difficult to carry out. Once again, the use of qualitative methods with older children of drug using parents would be of interest. For example it would be possible to use the AAI with teenage children.

PROFESSIONAL AND CLINICAL IMPLICATIONS

Since a measure of romantic attachment style is seen to correlate with parenting difficulties, a longer drug use history, and higher levels of depression, it could be possible to use such a measure for screening purposes on entry to treatment. Thus those women most likely to need help with parenting could be identified early on, and interventions and resources targeted accordingly. A measure could be obtained from pregnant women in particular, and so it may be possible to stop the cycle of inadequate care and parenting from repeating itself before it is too late.

Those women presenting with a past history of abuse or trauma, but who have a secure romantic attachment style, could be considered more likely to be able to overcome these traumas. Use of a measure such as the AAI could potentially help treatment services to address early trauma/loss on entry to treatment in a formal and structured way. Addressing such issues has been shown by other researchers to be of critical importance if one is to successfully tackle the drug use itself (Bollerud, 1990).

The difficulty clinically in approaching early loss and trauma, and issues around attachment bonds in this population, is that drug users often do not have the necessary resources to cope with their emotions. For too long they have used drugs as a way of coping. Any treatment that aims to deal with these traumas, needs also to teach practical coping skills, and relapse prevention.

Since the presence of a secure and supportive romantic partner is seen to protect the individual and allow them to parent more successfully, it could be assumed that the presence of a secure and supportive 'partner' through the therapist/patient relationship may also play a role. Through ongoing therapy, the drug user may be able to learn to trust and depend on someone who is available to them in a reliable and boundaried manner. Therapy could focus on dependency and other attachment related issues, and the impact this has on parenting in this population could then be assessed.

Further to this, those with an insecure romantic attachment style may be those who are

most likely to experience difficulties in forming a therapeutic relationship, and so may be least able to access help appropriately. Research in this area could help with the training of clinicians working with this client group. Clinicians would need to be taught to approach and deal with attachment related issues, in order to facilitate the therapeutic alliance.

There is also the issue of ante-natal care. As mentioned above, a measure of attachment could be used as a screening instrument to identify those most likely to need help with parenting. What is also clear from a review of the literature, and anecdotally from the current research, is the general lack of ante-natal care drug using women receive. Whilst previous research does not show dramatic improvements with increased ante-natal care, it may be that the type of ante-natal care is inappropriate. General education regarding labour and child care is of course important, but perhaps further work around attachment related issues is also appropriate at this stage, particularly in those with an insecure attachment style. The birth of a child is likely to be a time when significant issues regarding one's past come to the surface, and these issues could be addressed through individual or group work.

CONCLUSION

Drug use clearly has an effect on parenting. When one considers for example the Belsky model (Belsky 1984), it is possible to see that 'drug use' would have an impact on each of the factors shown. For example, the developmental history is likely to be one in which

abuse, overprotection and neglect took place (Davis, 1990), and the social network is likely to be limited.

However, to simply fit drug use into parenting models, and conclude that there will be problems, is to misrepresent a proportion of drug users who are good enough parents, and who despite difficult childhoods, are able to overcome these adversities and function well.

Drug users do need help with parenting, and if we are to identify those most in need, we perhaps need to address attachment related issues. Those most able to form secure romantic attachments in adulthood, are those who are most likely to avoid isolation, and also avoid relationship conflict. This not only will protect them from repeating patterns seen with their own parents, but will also protect their own children from the transmission of depression, and as a result the child is less likely to have behavioural and psychological difficulties (Cowan, 1996). Such a child is less difficult to parent, and a positive cycle so begins.

To quote Cowan (1996, pp. 157) "In order for parents to be nurturant and responsive to their children, they must be in adult relationships in which they feel responded to, nurtured and valued. an ongoing satisfying relationship with an intimate partner has the potential to provide the nourishment that parents need in order to pass it on to the children they love." Cowan was referring to the general population, but it would seem from the current study that the drug users are affected in a similar way.

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APPENDICES



CAMDEN & ISLINGTON
Community Health Services NHS Trust

Your Partner for Health

LOCAL RESEARCH ETHICS COMMITTEE

Medical Directorate, Vezey Strong Building, 112 Hampstead Road, London NW1 2LT

Tel: 0171 530 3055 Fax: 0171 530 3018

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8 May, 1997

Dr Howard Steele
Lecturer in Health Psychology
Sub-Department of Clinical Health Psychology
University College London
Gower Street
LONDON
WC1E 6BT

Dear Dr Steele

Application No: 97/47

Title: Styles of attachment in women abusing drugs: Are insecure styles correlated with increased dependency and difficulties in the mother-child relationship?

Thank you for your letter dated 7 May 1997 in response to the Local Research Ethics Committee's concerns about the above study. The Committee is satisfied about the comments regarding the recruitment of 100 participants and the method of approaching subjects. It is also happy with the changes to the information leaflet, and, therefore, I am pleased to say that the Committee is now able to give its approval to this project.

Please note that the following conditions of approval apply:

- ♦ It is the responsibility of the investigators to ensure that all associated staff including nursing staff are informed of research projects and are told that they have the approval of the Ethics Committee.
- ♦ If data are to be stored on a computer in such a way as to make it possible to identify individuals then the project must be registered under the Data Protection Act 1984. Please consult your department data protection officer for advice.
- ♦ The Committee must receive immediate notification of any adverse or unforeseen circumstances arising out of the trial.

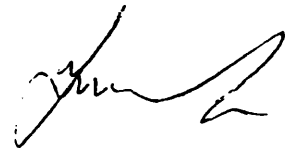
.../Page 2

Dr Steele
8 May 1997
Page 2

- ♦ The Committee must receive notification: a) when the study is complete; b) if it fails to start or is abandoned; c) if the investigator/s change and d) if any amendments to the study are made.
- ♦ The Committee will require details of the progress of the research project periodically (i.e. annually).

With best wishes.

Yours sincerely



Stephanie Ellis
CHAIR

cc Louise Hankinson

APPENDIX B

XXXXXXX CENTRE STUDY LOOKING AT STYLES OF ATTACHMENT IN DRUG USING WOMEN

PARTICIPANT INFORMATION

You are being invited to take part in a study which is looking at women who use drugs. I am interested in your patterns of drug use, your levels of drug dependence, your physical and mental health, and your current social circumstances. I am also interested in your memories of your relationship with your own parent(s) or main care giver(s). I will be looking to see how this may influence you as a parent yourself, your relationship with other adults, and also your drug use.

To take part in this study you will be asked to fill out a short questionnaire, and it is important to note that some of the questions are of a sensitive and personal nature. It should take no longer than 30 minutes, and you will be paid £5 in the form of shop vouchers, for your time. The information you give will provide an essential input into the service at XXXXXXXX, where they are keen to tailor their service to women, in particular regarding child care issues.

Confidentiality is an essential part of the service you receive at this clinic. It will not be endangered by your taking part in this study. **NONE OF THE INFORMATION YOU GIVE ME WILL BE SHARED WITH ANYONE ELSE WORKING IN THIS SERVICE.** Your name will not be stored with the information you give me. You will be assigned a number, and only this will be written on the questionnaire. The consent from which you sign will be stored separately from the questionnaire, and neither are held at the XXXXXXXX Service.

You do not have to take part in this study if you do not want to. If you decide to take part, you may withdraw at any time without having to give a reason. Your decision whether to take part or not will not affect your care and management in any way.

All proposals for research using human participants are reviewed by an ethics committee before they can proceed. The proposal was reviewed by Camden & Islington Community Health Services NHS Trust Ethics Committee.

If at any stage in the study you need further information or assistance, you will be able to contact me, Louise Hankinson, at the XXXXXXXX Primary Care Unit: Tel: xxx xxxx.

CONFIDENTIAL
CONSENT FORM

- 1) I have read the information sheet about this study Yes _____ No _____
- 2) I have had an opportunity to ask questions and discuss this study Yes _____ No _____
- 3) I have received satisfactory answers to all my questions Yes _____ No _____
- 4) I have received enough information about this study Yes _____ No _____
- 5) Which health professional have you spoken to about this study?

- 6) I understand that I am free to withdraw from this study :-

at any time
without giving a reason for withdrawing
without affecting your medical care
Yes _____ No _____
- 7) Do you agree to take part in this study? Yes _____ No _____

Patient signature _____ Date _____

Name (in block letters) _____

Investigator signature _____

Maudsley Hospital

Denmark Hill
London
SE5 8AZ

Telephone: 0171 703 6333

Fax: 0171 919 2171

Tel: (0171 919) 2892

ETHICAL COMMITTEE (RESEARCH)

27 October, 1997

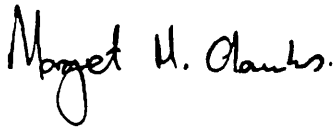
Dr E Finch
National Addiction Centre
4 Windsor Walk

Dear Dr Finch

**Re: Styles of attachment in drug dependent women: are insecure styles
correlated with increased dependency and difficulties in the mother-child
relationship? (124/97)**

The Ethical Committee (Research) considered and confirmed Chair's action to approve
Study No. 124/97 from an ethical point of view, at its meeting on 17 October 1997.

Yours sincerely



Margaret M Chambers
Research Ethics Coordinator

APPENDIX E

THE XXXXXXXX DRUG SERVICES

STUDY LOOKING AT DRUG USING WOMEN WHO HAVE CHILDREN

PARTICIPANT INFORMATION

You are being invited to take part in a study which is looking at women who use drugs. I am interested in your patterns of drug use, your levels of drug dependence, your physical and mental health, and your current social circumstances. I am also interested in your memories of your relationship with your own parent(s) or main care giver(s). I will be looking to see how this may influence you as a parent yourself, your relationship with other adults, and also your drug use.

To take part in this study you will be asked to fill out a short questionnaire, and it is important to note that some of the questions are of a sensitive and personal nature. It should take no longer than 30 minutes, and you will be paid £5 in the form of a shop voucher for your time.

The usual rules of confidentiality will apply to all participants in this study. Confidentiality is an essential part of the service you receive at this clinic, and it will not be endangered by your taking part. Your name will not be stored with the information you give me. You will be assigned a number, and only this will be written on the questionnaire. The consent from which you sign will be stored separately from the questionnaire, and neither are held at XXXXXXXX.

You do not have to take part in this study if you do not want to. If you decide to take part, you may withdraw at any time without having to give a reason. Your decision whether to take part or not will not affect your care and management in any way.

All proposals for research using human participants are reviewed by an ethics committee before they can proceed. The proposal was reviewed by The Bethlem and Maudsley NHS Trust and The Institute of Psychiatry Ethical Committee.

If at any stage in the study you need further information or assistance, you will be able to contact me, Louise Hankinson, through your key worker at XXXXXXXX.

CONFIDENTIAL

**XXXXXXX DRUG SERVICES
STUDY LOOKING AT DRUG USING WOMEN
WHO HAVE CHILDREN**

CONSENT FORM

- 1) I have read the information sheet about this study Yes _____ No _____
- 2) I have had an opportunity to ask questions and discuss this study Yes _____ No _____
- 3) I have received satisfactory answers to all my questions Yes _____ No _____
- 4) I have received enough information about this study Yes _____ No _____
- 5) Which health professional have you spoken to about this study?

- 6) I understand that I am free to withdraw from this study :-
at any time
without giving a reason for withdrawing
without affecting your medical care
Yes _____ No _____
- 7) Do you agree to take part in this study? Yes _____ No _____

Patient signature _____ Date _____

Name (in block letters) _____

Investigator signature _____

APPENDIX G

Severity of Dependence Scale

In the LAST MONTH:

1 Did you ever think that your heroin use was out of control?

Never or almost never	Sometimes	Often	Always or nearly always

2 Did the prospect of not taking any heroin make you very anxious or worried?

Never or almost never	Sometimes	Often	Always or nearly always

3 Did you worry about your heroin use?

Never or almost never	Sometimes	Often	Always or nearly always

4 Did you wish you could stop using heroin?

Never or almost never	Sometimes	Often	Always or nearly always

5 How difficult would you find it to stop or go without heroin?

Easy	Quite difficult	Very difficult	Impossible

APPENDIX H

Hazan & Shaver's Measure of Romantic Attachment

Please select **ONE** of the following descriptions that describes you best, by placing a tick in **ONE BOX ONLY**. *Please note that the word "close" does NOT have to mean physically.* Try to think about yourself regarding your most important romantic relationship.

Please also indicate below each description, to what extent each describes you, by circling one of the seven numbers. Circle 1 if you think it describes someone very much like you, and circle 7 if you think the description is not at all like you.

I am somewhat uncomfortable being close to others; I find it difficult to trust them completely, difficult to allow myself to depend on them. I am nervous when anyone gets too close, and often, love partners want me to be more intimate than I feel comfortable being.

*Very much
like me*

*Not like me
at all*

7 6 5 4 3 2 1

☐

I find that others are reluctant to get as close as I would like. I often think that a partner doesn't really love me or won't want to stay with me. I want to get very close to people and this sometimes scares people away.

*Very much
like me*

*Not like me
at all*

7 6 5 4 3 2 1

☐

I find it relatively easy to get close to others and am comfortable depending on them. I don't often worry about being abandoned or about someone getting too close to me.

*Very much
like me*

*Not like me
at all*

7 6 5 4 3 2 1

☐

APPENDIX J

Bartholomew's Adult Attachment Measure

Please read each one carefully, and tick **ONE** box next to the description which you think is most like you. Also indicate as before, the extent to which each description is like you, by circling a number underneath.

It is relatively easy for me to become emotionally close to others.
I am comfortable depending on others and having others depend on me. I don't worry about being alone or having others accept me.

*Very much
like me*

*Not like me
at all*

7 6 5 4 3 2 1

☐

I want to be completely emotionally intimate with others., but I often find that others are reluctant to get as close as I would like. I am uncomfortable being without close relationships, but I sometimes worry that others don't value me as much as I value them.

*Very much
like me*

*Not like me
at all*

7 6 5 4 3 2 1

☐

I am somewhat uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely, or to depend on them. I sometimes worry that I will be hurt if I allow myself to become too close to others.

*Very much
like me*

*Not like me
at all*

7 6 5 4 3 2 1

☐

I am comfortable without close emotional relationships. It is very important to me to feel independent and self-sufficient, and I prefer not to depend on others or have others depend on me.

*Very much
like me*

*Not like me
at all*

7 6 5 4 3 2 1

☐

APPENDIX K

These questions list various attitudes and behaviours of parents. As you remember your Father in your first 16 years, would you place a tick in the most appropriate brackets next to each question.

	Very like	Moderately like	Moderately unlike	Very unlike
1. Spoke to me with a warm and friendly voice	()	()	()	()
2. Did not help me as much as I needed	()	()	()	()
3. Let me do those things I liked doing	()	()	()	()
4. Seemed emotionally cold to me	()	()	()	()
5. Appeared to understand my problems and worries	()	()	()	()
6. Was affectionate to me	()	()	()	()
7. Liked me to make my own decisions.	()	()	()	()
8. Did not want me to grow up	()	()	()	()
9. Tried to control everything I did	()	()	()	()
10. Invaded my privacy	()	()	()	()
11. Enjoyed talking things over with me	()	()	()	()
12. Frequently smiled at me	()	()	()	()
13. Tended to baby me	()	()	()	()
14. Did not seem to understand what I needed or wanted	()	()	()	()
15. Let me decide things for myself	()	()	()	()
16. Made me feel I wasn't wanted	()	()	()	()
17. Could make me feel better when I was upset	()	()	()	()

	Very like	Moderately like	Moderately unlike	Very unlike
18. Did not talk with me very much	()	()	()	()
19. Tried to make me dependent on him	()	()	()	()
20. Felt I could not look after myself unless he was around.	()	()	()	()
21. Gave me as much freedom as I wanted	()	()	()	()
22. Let me go out as often as I wanted	()	()	()	()
23. Was overprotective of me	()	()	()	()
24. Did not praise me	()	()	()	()
25. Let me dress in any way I pleased	()	()	()	()