A Study of the Inner World of Children with Emotional and Behavioural Difficulties

Hugh Milburn

Vol. I

Doctorate Thesis: Clinical Psychology

University College London
Dedication

To Gayle and Pashi, my wife and daughter who have tramped through all of London’s parks and playgrounds in order to keep out of the house to allow me to write this thesis.

Acknowledgements

I would like to thank Howard Steele, my supervisor who guided me through the story-stems and encouraged me to think about the inner world of the EBD child. Benjamin, who typed the transcripts beyond the call of duty. Fasco for helping with the statistics. Darren, friend and colleague for general support and practical advice, and Bernard, my father-in-law, who got the computer up and running in the last stages and helped see the project to completion. To all the teachers and children who kindly cooperated with this research.
This study investigated associations between children with emotional/behaviour difficulties (EBD) and children without reported problems in their representations of parents and measures of their socio-emotional adaptation. Fifty-nine children were interviewed using the MacArthur Story-Stem Battery (MSSB) to obtain their narrative representations of parents. Data reduction of the content and parent themes of the play narratives generated composites of negative, disciplinary, and pro-social parenting. To measure behaviour problems, teachers completed the Teacher’s Report Form. Results showed significant differences in the play narratives of EBD children compared to controls. The EBD children’s play narratives were characterized by negative parenting (harsh/aggressive and disorganized) and poor narrative coherence. In contrast the control group presented parents as disciplinary (limit-setting), and presented coherent narratives. It was also found that the negative parenting theme was correlated to, and predictive of, children’s externalized behaviour problems, and contributed to discriminating EBD and non-EBD status. The discussion addresses the extent to which the EBD children’s responses to the MSSB are suggestive of disorganized representational processes, which is thought to be related to disorganized attachment classification. Finally, the contribution of the MSSB play narrative technique as an assessment and treatment tool is discussed. This study adds an important dimension to research on parent-child relationships in children presenting with emotional and behavioural difficulties, that is the child’s perception on these relationships.
# TABLE OF CONTENTS

Acknowledgements I
Abstract II

1.0 Introduction 1
1.1 Overview 4
1.2 Etiological models of aggressive behaviour 6
1.3 Coercion theory 6
1.4 Social cognition model 8
1.5 Psychoanalytic models 9
1.6 Self concept 12
1.7 Clinical Applications of Self Concept 16
1.8 Mental representations 17
1.9 Cognitive and developmental perspective 18
1.10 Object relations (internal world) 21
1.11 Attachment theory (internal working models) 22
1.12 Singular versus multiple models of experience 27
1.13 Internal working models and aggressive behaviour 28
1.14 The present study 31

2.1 Method 36
2.2 Procedure 37

3.0 Results 43

4.0 Discussion 55
4.1 Assessment and clinical implications 61
4.2 Negative findings and limitations 64
4.3 Further studies 65

References 68

Appendix 1. Story Stem Method 76
2. Narrative Coding Manual 78
LIST OF TABLES

Table 1: Varimax Rotated Factor Loading of Story Stem Codes 40

Table 2.1: Construction of the Aggregated Composites Story Stem codes and their internal consistency 41

Table 2.2: Intercorrelations of the Story Stem Variables 42

Table 3: Demographics Comparisons between EBD children and control group 45

Table 4: Means and Standard Deviations Comparisons between EBD children and control group on self-report on the Harter Self-Perception Profile for Children 47

Table 5: Correlations between Children’s self-report of competence and TRF scores 48

Table 6: Means (and Standard Deviations) for Comparisons of EBDs and the Controls for Story Completion Scores 49

Table 7: Correlations between children’s representations and TRF scores 52

Table 8: Classification Results of Canonical Discriminant Function Analysis of Story Stem Responses 54
Disruptive or externalizing behaviours (aggression, impulsivity and delinquency) are the primary referral problem of children attending specialist EBD (emotional and behavioural difficulties) schools. These schools cater for children statemented as being too problematic for mainstream schools, either because of high levels of aggression, hyper-activity (restlessness, poor concentration span), and/or social withdrawal and depression. Several investigations have shown that the early emergence of such problems has clear predictive significance for a wide range of adolescent and adult mental disorders (Campbell et al., 1986; Lerner et al., 1985). However, it is not clear what factors predict the continuity or transience of these problems.

Theory and clinical experience support the notion that the affective quality of the developing parent-child relationship is a relevant factor in the development of clinical problems in childhood (A. Freud, 1965; Fraiberg et al., 1982; Mahler et al., 1975). However, the study of its contribution as a risk factor has been hampered by variations in definition and measurement (Greenberg et al., 1990).

The empirically elusive and conceptually complex problem of the role of parent-child relationships in the genesis of aggressive behaviour in EBD children has led to a range of psychological formulations. Patterson and Bank (1989) have put forward the 'coercion' hypothesis, which highlights inconsistent parental discipline. Dodge (1980) has suggested that some children may be highly aggressive because they tend to mistakenly attribute hostile intentions to others. The socialization literature links the lack of an internalized authoritative figure, that promotes adherence to moral standards (Baumrind, 1971; Maccoby & Martin, 1983), to childhood aggression. Object relations (Greenberg & Mitchell, 1983) and attachment theories (Bowlby, 1969; Crittenden & Ainsworth, 1990) suggest that EBD children's parental and self representations would provide insight into the qualitative aspects of their aggression. Object relations and attachment theories hold that the achievement of a stable sense of self during the preschool years is fundamental to
the process of social adaptation and depends, ultimately, upon the formation of an inner 'good object' (Fairbairn, 1952) or secure internal working models of self and parent (Bowlby, 1969). The central question that this study raises, therefore, is: to what extent does EBD children’s qualities of self and parental representations relate to their expression of aggression and socioemotional adaptation?

Associations have been made between insecure attachment in infancy and behaviour problems in later childhood in both normative and high-risk samples. For example, Elicker et al (1992) indicated that insecure attachment across infancy is associated with later emotional and behavioural problems. Furthermore, in two studies of preschool-aged children, Greenberg et al (1990) found that insecure attachments, particularly those characterized as controlling - disorganized, were linked with externalizing behaviour problems among clinic-referred boys. More recently Lyons-Ruth et al (1993) found that insecure disorganized attachment was strongly predictive of hostile-aggressive behaviour in childhood. The bizarre and inconsistent behaviour characteristic of the disorganized attachment has been significantly more common in maltreated children (Crittenden 1990) and other high risk samples, and is of particular interest to clinicians.

Most of this research has focused on the development of the attachment process during the infancy period. With the growing appreciation that attachment-related issues extend beyond the first years of life (Main, Kaplan & Cassidy, 1985), exploration of the characteristics of representational models in school aged children presenting with emotional and behavioural difficulties is warranted.

Clinicians have recognized that there is a major need for systematic knowledge concerning the internal world of the behaviourally disturbed child (Warren et al., 1996). Understanding the child’s experience is important for comprehensive diagnosis and for designing treatment programmes.

The focus of this investigation is on EBD children’s perception of parent-child
relationships. Recently there has been a renewed interest in children's perceptions and experiences of parenting. Researchers from diverse perspectives are now interested in children's representations of emotion, interpersonal conflict, parental behaviour and family relations (e.g. Bretherton, Ridgeway & Cassidy, 1990; Dunn, 1993; Main, Kaplan & Cassidy, 1985; Oppenheim, Emde, & Warren, 1997; Plomin & Daniels, 1987; Stern, 1985; Steele et al., 1997).

In trying to understand the inner world of the EBD child a promising new play narrative measure (MSSB) may help in learning more about the thoughts and feelings, and child parent relationships in EBD children. The MacArthur Story-Stem Battery or MSSB (e.g. Bretherton, Oppenheim, Buchsbaum, Emde, & the MacArthur Narrative Group, 1990), makes use of a standardized set of story beginnings which tap into the child's attachment-related experience, family relationships, conflicts and emotional situations (Buchsbaum et al., 1992). Researchers have come to appreciate the adaptive importance of a child's narrative as a way of making sense of experience and sharing it with others (Slade & Wolf, 1994).

The MSSB narrative technique brings back an important aspect of understanding parent-child relationships, that is the unique perception of the child, in this case the EBD child. Main et al (1985) argue that parental behaviour alone, or parental self-reports, are no longer sufficient to capture the essence of the parenting process as it relates to children's emotional experience.

Buchsbaum et al (1992) using the MSSB in a clinical case approach with maltreated children, were able to offer useful insights into the inner experience of these children. More recently Oppenheim et al (1997) were able to derive three representations of maternal behaviour from the children's play narratives using a normative sample. These were:

Negative Parent - including incidents in the child's narratives of verbal abuse, physical abuse, bizarre/atypical behaviours (e.g., injuries, violence and death involving mother figures).
Positive Parent - including incidents from the child’s narratives showing the mother figure as protective, care-giving, affectionate and helpful.
Disciplinary Parent - including incidents showing maternal limit setting discipline and rewarding of ‘good’ child behaviour.

Similar themes have been identified by other researchers using play narratives and negative parental representations have been associated with insecurity of attachment (Main et al, 1985). Furthermore these categories of parental behaviours are very similar to the parental dimensions described in the socialization literature (Baumrind, 1971). The present study intends to develop further the existing work on the MSSB narrative technique. In an empirically designed study the issue addressed is: whether the play narratives of EBD children can be significantly differentiated from children with no reported problems. Further, can the MSSB narrative technique demonstrate its use as an assessment and possible treatment tool? In addressing these questions the introduction will review relevant literature, to further elucidate these issues.

(1.1) OVERVIEW OF CHARACTERISTICS OF AGGRESSIVE CHILDREN

To examine the nature of the problem as it clinically presents itself, a very broad domain of considerations must be taken into account, including prevalence, child, parent and family characteristics (Greenberg et al., 1993).

Central features. Aggressive behaviours are defined by two diagnostic categories on the Diagnostic and Statistical Manual Mental of Disorders (3rd ed., revised; DSM-III-R; American Psychiatric Association, 1987): oppositional defiant disorder (ODD) and conduct disorder (CD). A diagnosis of ODD is based on features such as tantrums, argumentativeness and non-compliance toward authority figures. CD presents with severe aggression or antisocial behaviours such as fighting, truancy, lying or fire setting. The
antisocial component of behavioural difficulties appears to be quite stable over time (Olweus, 1979) having about the same test-retest reliability as measures of childhood intelligence (approx .50). Although many EBD children do not receive a formal diagnosis they share the general patterns of behaviour characterized by CD and ODD. Studies have indicated that EBD children often show deficiencies in the development of impulse control, emotion regulation, and thought (Dodge, 1986; Greenberg, Kusche, and Speltz, 1991).

Prevalence. The prevalence of emotional and behavioural disorders is almost one in five (Kazdin, 1979). The location and catchment area of a school has been found to be related to prevalence. However in general very different rates of behaviour disorder are found in different types of areas (whether inner city or suburban, socially disadvantaged or advantaged, urban or rural). For instance, the overall ‘deviance’ rate in a survey of Inner London 10-years-olds was 19.1 per cent, as compared with 10.6 per cent on the Isle of Wight, a relatively much more advantaged area (Rutter et al., 1989). It is likely that the varying prevalence of behaviour difficulties according to location relates to differences in home, school and community environments.

Child characteristics. Children with emotional behaviour difficulties are likely to show academic deficiencies, early problems in reading skills and deficits in verbal skills (Moffitt, 1993). They are also likely to show poor interpersonal relations. Furthermore there may be possible deficits and distortions in cognitive problem-solving skills and attributions of hostile intent to others (Dodge, 1980).

Causal relations among neuropsychological functioning, school achievement, family environment, and emotional and behaviour difficulties remain unclear, with complex transactional effects most likely to be involved (Hinshaw, 1992).

Parent and family characteristics. Indices of family stress, such as marital conflicts, single parenthood, low income, low education, and overcrowding seem associated with increased rates of children’s emotional and behaviour difficulties. One of the best documented
findings in the area of child psychopathology is the consistent relation between harsh and ineffective parental discipline and behaviour problems (for a review, see Loeber & Dishion, 1983). This relation has been reported as early as 2 and 3 years of age (Campbell, 1991) and has been emphasized in most theories of the etiology of aggressive behaviour (e.g., Patterson & Bank, 1989). Recently, intergenerational stability of aggressive behaviour and the negative parental behaviours associated with it has also been reported. Huesman, Eron, Ledfkowitz, and Walder (1984) found that aggressive 8-year-olds repeated the poor parenting practices of their own parents when seen again at age 30.

(1.2) ETIOLOGICAL MODELS OF AGGRESSIVE BEHAVIOUR

(1.3) COERCION THEORY

Patterson and Bank (1989) have developed a ‘coercion theory’ to explain the genesis of aggressive behaviour. In their model they divide boys with adolescent behaviour problems into two groups: early starters and late starters.

In Paterson and Bank’s model of early starters, at Step 1, early coercive interaction between parent and child, characterized by scolding and explosive, irritable and inconsistent discipline, leads to escalating child aggressive behaviour, which, in Step 2, produces peer rejection, failure at school, and depressed mood. These developments at Step 2 are followed, in turn, by increased involvement in delinquent acts, deviant peer groups and substance abuse, as well as failures at work.

In Patterson and Bank’s (1989) model, the characteristics thought to place the family at risk for the development of a coercive process included parental lack of social competence, parental antisocial trait (aggression and motor vehicle offenses) and a child’s difficult temperament. Overall in analysing these factors, maternal antisocial trait emerged as the primary independent contributor to coercive interaction. Patterson and Bank concluded from observations that the coercive interactions prevented the child from learning pro-
social skills that are important for forming close relationships with parents or peers.

An extensive developmental literature in non-clinical samples corroborates the relations reported by Patterson and Bank (1989) between coercive discipline and childhood aggression. This literature also makes clear that coercive parental and child interaction is part of a broader parental stance in which positive techniques of motivation and guidance are not being used. For example, in a recent meta-analysis, Rothbaum and Weisz (1994) studied the relation of five major parental control variables to child externalizing behaviour (anger, noncompliance, tantrums), including praise for desirable behaviour (approval), clear directions around desirable behaviour (guidance), use of positive incentives (motivation setting), giving suggestions and choices (noncoercion), and responsiveness to child-initiated behaviour (synchrony). These parental control techniques all related significantly to externalizing behaviour and all loaded on a broad acceptance-rejection factor, and were part of a larger pattern of affectionate and responsive, or at the negative pole rejecting and coercive, parenting practices into larger context of rejecting parental behaviour, characterized by the absence of warmly approving, autonomy respecting, and contingent parental responsiveness.

The results of this recent study are consistent with some past research on parenting and children's perceptions of family life. Goldin (1969) for example summarized the conclusions of this earlier family research in terms of the differing perspectives of 'maladjusted' children as compared to controls, with the former group seeing their parents as less accepting, excessively dominant, and more punitive in their discipline. Research based on parenting attitudes and behaviour (Baumrind, 1971; Maccoby & Martin, 1983) identified typologies of parenting styles. A common typology has identified Authoritative, Authoritarian, Indulgent-Permissive, and Indifferent-Uninvolved types. These styles vary along global dimensions of parental Warmth and Control, with the different parenting types determined according to combinations of high or low levels on these dimensions. The earlier research showed that for young children, the Authoritative (high warmth, control) pattern of parenting has been associated with diverse positive child outcomes including
psycho-social maturity and academic success (e.g. Steinberg, Elmen & Mounts, 1989). In contrast the authoritarian (high control/low warmth) parent style has been associated with children cooperating less and expressing more aggression. In line with the literature it was expected that EBD children would complete their play narratives in ways suggestive of them having received parenting marked by a relative lack of warmth, lack of responsiveness and excessive control; i.e., authoritarian parenting or harsh/punitive forms of discipline. By contrast it is expected that children with no reported problems would complete their play narratives in ways suggestive of them having received authoritative parenting; i.e., with themes of both warmth and non-punitive control predominating.

1.4 SOCIAL-COGNITIVE MODELS OF AGGRESSIVE BEHAVIOUR

Cognitive processes refer to a broad class of constructs that are concerned with how the individual perceives, codes and experiences the world. Individuals who engage in aggressive behaviour have been found to show distortions and deficiencies in various cognitive processes.

From a cognitive perspective aggression is not merely triggered by environmental events, but rather through the way in which the events are perceived and processed. The social information-processing model of Crick and Dodge (1994) proposes that children’s on line processing of social information is guided by underlying mental structures (variously referred to as internal mental structures, cognitive schemata, and mental representations). Crick and Dodge propose, in a similar way to object relations and attachment theory, the important role of early social experiences with primary caretakers in the etiology of social information-processing difficulties. Crick and Dodge (1994) suggest that a child’s early relationship experiences become internalized in the form of expectations about how one is likely to be treated by others. These expectations, or ‘schema,’ (scripts, mental representations) are hypothesized to affect an individual’s social adjustment by influencing how one encodes, interprets, and responds to others’ behaviour. For example, children
who approach social situations with a generally pessimistic or rejecting relationship schema may be especially vigilant to cues suggesting rejection and may fail to encode information that is inconsistent with this schema, as the activation of the schema within a social situation will lead to an individual seeking and recalling information that is consistent with their representations of self and others. Crick and Dodge (1994) argue that such “preemptive” processing of social cues is most likely under conditions of emotional arousal or conditions in which a hostile interpretation of a situation has been made.

Dodge, Pettit, Mccluskey, and Brown (1986) initially examined the problem-solving skills of aggressive children in conflict situations and found systematic biases in their socio-cognitive skills. Dodge suggests that aggressive boys have the tendency to make malevolent attributions where their non-aggressive peers do not and this tendency was found to be exacerbated in threatening contexts. Recent work on hostile attributional biases has further broadened our understanding of the cognitive process accompanying aggressive behaviour. Dix and Lochman (1990) found that mothers of aggressive boys also attributed child misbehaviour more to negative personality dimensions, attributed more responsibility to the child for the misbehaviour, felt that they would be more upset by the child’s misbehaviour and endorsed more forceful discipline responses. Pettit, Dodge, and Brown (1988) further found that children’s aggression was correlated with mother’s tendencies to make hostile attributions to vignettes involving their own children. Thus, recent developmental studies provide evidence that coercive parent-child behaviour is likely to include characteristic perceptual and information processing biases that may be transmitted from parent to child.

(1.5) PSYCHOANALYTIC VIEWS OF AGGRESSION

Since Freud (1920) postulated aggression as a drive, this theme has been a source of profound debate with clinicians and academics of varying theoretical persuasions positioning themselves around the central issue of whether aggression is innately given as
a destructive force (Klein, 1957; Kernberg, 1976) or is a response to an environmental failure and the inevitable frustration and trauma such failure engenders (Winnicott, 1965).

Already in 1949, A Freud pointed to this issue as important in a theory of aggression: "How far the fate of the aggressive urges is determined by internal factors (such as hereditary disposition, inborn relative strength of the erotic and destructive urges, constitutionally heightened inability to tolerate the off-springs of aggression in the mind); and how far the influence is exerted by external factors (such as parental attitudes, increase or decrease of deprivations and frustrations, strict or lenient methods of upbringing)" (p.150).

Within the object relations and self psychology model impulsiveness and aggression are seen to result when the child’s need for secure and trusting relatedness to parental figures are severely thwarted. In such a situation, the child’s experience of the world is thought to become frightening and overwhelming. Winnicott (1965) refers to this state as the child’s experience of fragmentation of self. Aggression, thus becomes a reaction to an experience of danger, such as breaks in parental attunement (Stern, 1985), impingement (Winnicott, 1971), a build up of negative affective experiences (Osofsky, 1988), or more recently as a defense against threats to the psychological self (Fonagy, Moran and Target, 1993).

The self psychologist Kohut (1967) contends that a child’s aggression is a reaction to frustration in the development of self and reflects a breakdown in the achievement of a sense of “security” through the empathic failure of the selfobject, or pre-structural representation of the primary object. Kohut distinguished destructive rage from non-destructive aggression. Non-destructive aggression is an integral constituent of healthy assertiveness. This develops out of optimal frustration from an empathic parental environment. In contrast destructive aggression is thought to emerge secondarily out of non-optimal frustration of an unempathetic parental environment. (Kohut, 1967).
Winnicott (1965) has also emphasized the importance of the mother-child dyad. For Winnicott the environment is not merely outside the individual but is part of the individual's own personal development. The mother through what Winnicott calls 'maternal preoccupation' is able to identify with the baby's needs. The psychological function of maternal preoccupation is to provide a 'good enough' mental mirror which allows the child to gain a mental experience of himself through careful observation of his mother's mental state, identifying within it her perception of his own feelings. Loewald (1978) has also suggested that the development of self-worth is based on internalization of the mirroring interplay of the mother-infant dyad. More recently developmental psychologists such as Stern have called this state “affective attunement” (Stern, 1985). In a similar way to Kohut, Winnicott sees aggression as having an adaptive function, aggression is seen as necessary for the separation between self and parent. Aggression is thought to become pathological when the child experiences emotional deprivations, i.e. when the infant's needs are misunderstood or intruded upon. In a more recent model of aggressive behaviour, Fonagy et al (1993) also differentiate between "adaptive" and protective expressions of aggression and extreme forms in which aggression has become the dominant means of self-expression and in which a pathological pleasure is found in destructiveness. Adaptive aggression is seen as a reaction to environmental frustration and inevitable moments of insensitive parental care. This is similar to Fraiberg (1982) who identifies avoidance and motoric freezing as one of the basic behavioural strategies available to the infant to protect the integrity of the vulnerable infantile psychological-self.

In contrast, extreme pathological use of aggression is thought to be found in drastic failures in mirroring between parent and infant, seen for example in abusive child-parent relationships, or cases of extreme parental depression or psychotic illness, and may result in the fragile psychological self of the child becoming fused with an aggressive defense such that aggression becomes the predominant form of self expression. In these cases it is hypothesized there is a breakdown in the reflective processes. The inter-subjective process (i.e. the child's attempt to experience mental states through identifying with the mind of the object) comes to represent a threat to the child's mental safety. In dealing with this threat
the psychological self fuses with an aggressive defense and manifests as a senseless pleasure in destructiveness (Fonagy et al., 1993).

(1.6) SELF-CONCEPT

Aggressive children do not all experience negative outcome i.e. subsequent psychopathology, including delinquency, placement in a specialist school (see Loeber, 1990, for a review). Researches have tried to identify factors that protect aggressive children from the downward spiral of this developmental trajectory. Two variables that may lessen the risk status of aggressive children are a positive sense of one's competence and a belief that one is valued by significant others (Rutter, 1990). To the extent these two aspects of the self-system can be accurately assessed, our understanding of the relation between EBD children’s internal mental representation of relationships and their adjustment in current and future relationships is greatly facilitated (Bowlby, 1990; Sroufe, 1990). First the self-system conceptualized as the self-concept will be discussed.

Psychologists have examined aspects of the self from a variety of perspectives. This extensive interest in the self stems from the idea that self-related beliefs and feelings play a key role in a child’s psychosocial development. Their self-evaluations are reflected in their behaviour and their ability to adjust to the demands of their environments. Early in life, parents are the main source of information that helps to shape the developing child’s view of self (Bowlby, 1997; Sullivan, 1953; Coopersmith, 1967; Erickson, 1950). Later, as children become older: peers, school, teachers, and significant others transmit messages that they assimilate and internalize. It is widely believed that these messages become integrated into the developing child’s self-concept and help to shape his or her personality (Coopersmith, 1967; Sprigle, 1980). While theoretical advances have been made in the area of self-concept and its importance for child adjustment, there still remain many methodological difficulties in assessing and measuring it (Segal & Kendall, 1990).
The notion that self-worth develops not in a vacuum but rather in relation to social interaction has been widely held by psychologists. For Cooley (1902), our sense of general worth as a person represented the incorporation of attitudes which we believed that others held toward the self. Cooley's metaphor of 'the looking glass', referred to his view that the self constitutes the reflected appraisals of significant others who represent the mirror into which we gaze for information concerning ourselves.

Mead (1934), who was in the same tradition as Cooley, believed that the child is born without a sense of self and that this gradually develops through experiences with parents, siblings, and others. The role of social interaction is seen as central. Mead also believed that although the self acts differently in different settings, there is an underlying unified self. This notion is necessary if we believe in the construct of global self-worth.

Sullivan (1953), although working in a psychoanalytic perspective, had an interpersonal emphasis rather than an intra psychic one. In a similar way to Cooley and Mead, he believed that the self is leaned through "reflected appraisals". He felt that these appraisals are set in motion long before the acquisition of language, and was the first theorist to emphasize the mother-infant relationship in relation to the development of the self.

Similar in many ways to Sullivan's notions regarding self-worth are object relations and attachment theory. Both these theories hold that the achievement of a stable sense of self during the preschool years is fundamental to the process of adaptation and depends, ultimately, upon the formation of an inner accessible, responsive authority based on the child's representations of its parents: an "introjected good object" or internal working models of parents (Bowlby, 1969; Crittenden & Ainsworth, 1990; Klein, 1948; Sandler, 1962). Although empirical evidence suggests that a child's awareness of self does not begin to emerge until between fifteen to twenty months (Emde, 1983; Stern, 1985), object relations and attachment theorists argue that the development of self consciousness is based on a prior sense of self-constancy that takes shape during the first year-and-a-half of life. This view of the centrality of self-permanence, of what Bowlby has called "a secure
attachment" (1969), to normal development has also been shared by child psychiatrists (Rutter, 1975) and developmental psychologists (Stem, 1985). Stem, for example, argues that the development during the first year of a sense of "core self", therefore based on the unification of "self invariants" (agency, coherence, and affectivity), is a precondition of global self-worth.

The variety of existing self-worth measures are characterized by numerous problems (Wylie, 1979). Many of these problems are common to all research dealing with internal cognitive and affective structure for instance, problems with the attempt to make observable that which is internal and unseen, and problems associated with the validity of self-reports. The list of problems specific to self-worth measurement additionally include the following: (1) various domains of functioning are often put together to yield summary scores; (2) the relative importance the child places on a particular domain is often not taken into consideration; (3) issues related to the social desirability of items are often not addressed and interpretation of very high scores is difficult. Two of the most commonly used measures, Coopersmith’s Self-Esteem Inventory (1967) and the Piers-Harris Children’s Self-Concept Scale (1984), each contain several such shortcomings (Wylie, 1979; Harter, 1983).

More recently, Harter (1983) has devised a series of scales that addresses these problems. Harter has argued that self-worth is a distinct dimension of self-evaluation which is related to, but independent from, the different areas of self-competence (e.g. athletic, social acceptance). In addition scales are based on a developmental theory of the self with a different scale designed for children in early childhood, middle childhood, and adolescence. According to Harter, the development of the self is based on a child’s cognitive development with children’s self-representations becoming more complex and abstract across development as children’s cognitive abilities increase (see also Damon & Jart, 1988). Harter also created a new question format for her measures. Her ‘structured alternative format’ presents children with the alternative statements and asks the children to pick which statement is more true for them and then if it is “really true” or “sort of true” for them. By
presenting both statements as legitimate choices, Harter (1982) argues that children are less likely to provide socially desirable answers.

Although it would appear that Harter has made substantial improvements in the measuring of self-worth, problems still remain. Some investigators (Savin-Williams & Jaquish, 1981) feel that the self as experienced may differ significantly from the self as presented, as a result of lack of awareness, insight, defenses, and emotional state. Following hypotheses proposed by Bowlby (1973, 1980), and Main (1985), representations of the self formed early in life are of special interest, providing a basis for more complex later versions. Pre-verbal representations of the self in relationships are viewed as operating outside of conscious awareness and thus are resistant to dramatic change. Moreover, particularly in cases where care-giving is harsh or otherwise inadequate for children, early defensive processes may distort representations of self relationship experience. Thus, gaining access to feelings and attitudes which operate at an unconscious level is a particularly challenging problem for researchers. It could be argued that to obtain access to a fuller picture of self, the use of projective techniques would have advantages. Bellak (1986) argues that in projective techniques the child is not the direct focus of the questions and thus is less likely to give socially desirable answers. Because the child is unaware of what the researcher is interested in there is less censorship, and potential access to less consciously held, but powerfully influential, representations of self. The material obtained by projective techniques may be quite rich in quality because these measures tap unconscious material, permit a multiplicity of responses, and have no rules of right and wrong.

The already mentioned MSSB is a promising new play narrative measure which may help in learning more about the self-related beliefs and feelings of self. However, there is the possibility that the child’s responses do not truly refer to himself but rather to his friend, a storybook hero, etc. It is difficult to tell whether the child is fantasizing about the way he would like to be or describing himself as he truly believes he is. Despite these potential drawbacks Buchsbaum et al (1992) have presented preliminary evidence that the MSSB narratives, which are more structured than a typical projective, capture the child’s
representations of his or her world as they play out real-life themes.

(1.7) CLINICAL APPLICATIONS OF SELF CONCEPT

In general, reported correlation between self-worth and various indices of mental health in non-select samples of children tend to be low but significant (e.g. Harter, 1882; Harter & Pike, 1984). When the relationship between normative children’s self-worth and perceived parental behaviours is measured, a significant positive correlation is found between perceived parental support and self-worth (1980). In a related study, perceived maternal loving and demanding dimensions were positively related to self-worth in children, while perceived maternal punishment was negatively correlated with self-worth (Peterson, Southworth, & Peters, 1983). Harter (1990) has found that low self-worth is correlated with depression in children in middle childhood and adolescence.

It appears that there is a strong negative association between children presenting withdrawn behaviour problems and self-worth (Coopersmith, 1967; Rosenberg, 1965). Findings also suggest the presence of negative representations of self in maltreated children. Research on maltreated children reveals lower self-worth (Kauffman & Cicchetti, 1989), and poor social functioning (George & Main, 1979), when compared with non-maltreated children.

However, the positive association between self-worth and behavioural adjustment is less consistent with children presenting with aggressive behaviour. Some researchers find that aggressive children have lower self-worth than non-aggressive children (e.g., Lochman & Lampron, 1986), but this finding is not universal across studies (e.g., East & Rook, 1992). In fact, some studies find that aggressive children are likely to overestimate their levels of competence and social acceptance.
(1.8) MENTAL REPRESENTATIONS

Representation signifies a thing that stands for, takes the place of, symbolizes or represents another thing. A mental representation is a more or less stable reproduction within the mind of a perception of something external. A mental representation combines and is built from a variety of multi-determined perceptions and impressions about the external object or thing. For instance, a child's mental representation of his mother may consist of attributions, distortions, fantasies, other forms of constructions, and accurate perceptions of the "real" mother, as well as images and fantasies of the child himself in interaction with the mother (Tyson & Tyson, 1990; Stern, 1985).

Through experience memory traces of perceptions gradually differentiate the self from the non-self and build up distinct representations of self and other. These mental representations, which can either become conscious or unconscious, gradually define the differences between inner and outer worlds. Through this process the individual comes to represent his or her life experiences and others internally, to process subjectively, memorize and organize them into coherent wholes. This whole becomes the foundation of his or her personality and, in turn influences the way he or she perceives and relates to the social world.

It is argued by Fonagy et al (1993) and Main (1991) that the capacity to mentally represent emotions and cognitions of self and other has clinical implications. They propose that the ability for mentalization may be particularly important to overcome unfavourable experiences, such as child abuse or trauma. For example, when children can represent ideas as ideas, or feelings as feelings they are not forced to accept the implication of parental rejection and adopt a negative view of themselves. A child who has the capacity to conceive of the mental state of the other can also conceive of the possibility that the parent's rejection is to do with the parent rather than the child, and is therefore able to moderate the impact of negative experience.
The notion of the construction of a representational world of self and other may be viewed from different theoretical perspectives. Object relations theories (Greenberg & Mitchell, 1983) draws attention to the inner world of imagination and desire. It highlights the affective qualities of the interpersonal infant-caregiver relationship which is seen to either hinder or enhance the child’s socio-cognitive functioning. Cognitive psychology has provided empirical information which has proven useful in correcting and guiding the object relations perspective. Others like Stern (1985) have drawn extensively from developmental research in enriching object relations understanding of the development of representations of self and other. Bowlby’s reformulation of the psycho-analytic perspective in his attachment theory, though sharing many basic assumptions, was able to make them more amenable to empirical investigation (Bretherton et al., 1990), through his notion of internal working models. A discussion of these perspectives will enhance our understanding of the relationship between the socio-cognitive adaptation and the inner world of the EBD child, and the importance of trying to access that world.

(1.9) THE COGNITIVE PERSPECTIVE AND DEVELOPMENTAL PSYCHOLOGY

Cognitive processes refer to a broad class of constructs that pertain to how the individual perceives, codes and experiences the world. Cognitive psychology claims that internal mental states play important causal roles in the generation of action. It is conceived that the mental/cognitive system must process information from a range of sensory inputs (from reality), and make selective interpretations, involving perception and attention, memory, reasoning, and emotion, which in turn guides responses to interpersonal situations (Beck, 1983).

The pioneering work of Piaget (1951; 1954), based on observations of his own children, provided a developmental framework for the acquisition of cognitive structures. Piaget’s epistemological study explained the development of intelligence in the child as a result of
a dynamic interaction with the environment. Piaget invented the model of the mind based on mental structures called schemata; the initial schema of the newborn infant being that of innate reflexes. The schemata undergo developmental changes in relation to objects and events - by acting on objects information is acquired, assimilated and the schemata are modified accordingly to accommodate the new information. Through the continual assimilation and accommodation of information into a coherent system of relations the child constructs a representation of reality. When sensori-motor intelligence has sufficiently elaborated understanding to make language and reflective thought possible, the beginning of symbolization aids the differentiation of inner and outer reality.

Piaget's (1964) conception of the schemata has been instrumental for clinical applications of cognitive psychology. Beck (1976) and Crick & Dodge (1994) have developed the idea that dysfunctional schemata arise in childhood, typically in problematic parental relationships. These schemata normally remain dormant until a negative life event or stress occurs which activates the schemata. For example, if the schemata are focused on parental rejection of self expectations of others will focus around rejection leading to misinterpretations of people's intentions and possible antagonistic/aggressive social interaction.

According to Piaget's theory, the child was considered not capable of evoking mental representations of self and other until the advent of symbolic thought. However recent developmental research has shed new light on early perceptual and cognitive capacities of the infant which indicate that infants are capable of forming representations earlier than posited by Piaget. Furthermore, observational studies of early mother-infant interactions (Call, 1980; Stern, 1974; Brazelton et al., 1979; Trevarthen, 1979) describe proto-linguistic and affective interchanges which may be considered as early organizers of internal representations. Drawing from both psychoanalysis and developmental research, Stern (1985) has shown that representations of self and other begin to accrue from the earliest months in the interpersonal context. The self is seen as evolving through emergent, core, subjective and verbal stages during the period between birth and eighteen months. Stern
emphasizes the role of maternal attunement, i.e. sensitive modulation and mirroring of the child’s affective state, in helping the infant integrate a sense of self. This process of attunement is thought to be impaired in mothers of insecurely attached infants, leading to ‘derailment’ or mismatching in the maternal response, leading to a less organized sense of self.

Stern (1985) formulated the concept of “Representation of Interactions that have been Generalized” (RIGS) as a basic memory unit. This idea is similar to the notion of “episodic memory” (Nelson & Gerundel, 1981) and “dynamic memory” (Schank, 1982). Stern shows that mental representations of self and other take shape through repeated and generalized mother/father-infant affective interaction and become represented as schemas-of-being-with (Stern, 1985).

Information processing theorists, based on the model of a computer, have introduced the notion of “scripts” in explaining the structure of mental representations (Nelson, 1985; Schank & Abelson, 1977). These are generalized, prototypic emotional episodes which describe behavioural or social events as occurring in temporal order. Scripts also refer to the mental process which abstract from diverse experiences common elements which allow a child to represent past interactions in such a way that facilitates predictions concerning future interactions (Fischer et al. 1990). The concepts underlying “scripts” have been described as useful in understanding the nature of children’s mental representations for several reasons (Nelson, 1985). Firstly, that scripts are likely to form in which mental representations of self, other and events are established from early on in life; secondly, that complex events and emotions seem to be expressed in this sequential, episodic format rather than in a static “picture” format; and finally that the script forms is a way of breaking down emotion prototypes into action and events components (Fischer et al. 1990).
Object-Relations theory (Greenberg & Mitchell, 1983) is centrally concerned with the role of mental representations of self and other play in the conduct of close human relationships (Greenberg & Mitchell, 1983). A fundamental premise of this approach is that the infant does not internalize a static image or representation of the self and the other, but the infant internalizes constructions of various dimensions of the affectively charged relationship between self and other that are established around fundamental experiences of gratification and frustration in caring relationships (Kernberg, 1990; Loewald, 1962). Both emotional relatedness and moments of separation, or disruptions of relatedness, that inevitably occur in the course of development, contribute in important ways to the child's internalization of mental representations of relationships. The interest of Object relations theory in representational structures that evolve from the internalization of affect-laden caring interactions is consistent with, and in part influenced by, psychoanalytically informed research in infant development (e.g. Emde, 1983; Stern, 1985).

A basic postulate of object relations theory is that consistent, positive, affective experiences between the child and parental figures result in relatively integrated and differentiated mental representations of self and other. In contrast significant inconsistencies, disruptions and negative experiences in care-taking interactions, or what Erikson (1951) refers to as a lack of 'basic trust' can lead to undifferentiated, unintegrated, and disorganized representations of self and other, which necessitates defensive strategies to regulate the child's inner experience (projection, denial, and splitting).

©The concept of mental representations of caring relationships, for example, is consistent with Stern's (1985) formulation of the "Representations of Interactions that have been Generalized" (RIGS). Repeated experiences of self and other, organized around particular affects associated with a significant other (e.g. mother, father) and invariant attributes of that interaction, result in the representation of attributes of the self and the other and the affects and actions that connect self and other. The emphasis on mental representations in psychoanalysis is also consistent with developments in social cognition.
The emphasis placed by object-relations theories on the internal representation of primary relationships and patterns of affective experience and affect regulation bound up in those relationships, stresses the significance of mental representations in organizing and directing behaviour. Thus, an object-relations perspective enables us to move from the level of behavioural observation - a molecular analysis of children's discrete actions in interpersonal situations, to the level of dynamic mental representations, the socio-cognitive and affective representations which organize that behaviour.

(1.11) ATTACHMENT THEORY AND INTERNAL WORKING MODELS

Working within a broadly object-relational perspective, Bowlby's (1969, 1973, 1980) seminal work on the attachment relationship between infant and primary care-giver subsequently expanded upon the concept of representational models of attachment figures and of the self and their role in personality development and psychological functioning. Bowlby introduced the term internal working models. Internal working models are mental representations constructed during childhood and based primarily upon early experiences with significant caregivers. In addition to representational models of relationships, parallel but interactive models of the self are formed. Thus, with the experience of a caretaker as being reliably available and emotionally responsive, the child's construction of an accessible, responsive internal working model of the attachment figure, as well as a reciprocal representational model of the self as acceptable in the eyes of the attachment figure, is promoted. Furthermore both cognitive and emotional processes are seen to influence the way that events and interactions are actively represented and appraised, consciously and unconsciously. Bowlby also posits that the disposition to form attachments constitutes a primary biological need, which ensures survival. As such, it is argued that the primary attachment relationship and its developmental sequel, constitute one of the most important and pervasive influences upon human development.

Bowlby's terminology differs from that used by object relations theorists. However,
Bretherton et al (1990) point out that an assumption fundamental to both approaches is that representations of self and significant other developed through childhood experience come to be re-enacted in future close relationships. Main & Kaplan (1985) take the significance of attachment organization still further by proposing that internal working models organise a specific attachment relationship direct not only feelings and behaviour, but also attention, memory and cognition insofar as these relate directly or indirectly to attachment. Individual differences in patterns of behaviour, but also to patterns of language and structures of the mind. These include a diverse range of socio-cognitive and affective processes that govern behaviour.

The move to the level of conceptualizing attachment status in terms of differing configurations of mental representations marks a relatively recent development in attachment research (Main & Kaplan, 1985). By definition, mental representations of attachment cannot be accessed directly, but they can be inferred from behaviour and thought (e.g. Main et al., 1985). In infancy, inferences of internal representations of the relationship with a parent rely on behavioural observations of infants in a structured separation-and-reunion task, the Ainsworth Strange Situation (Ainsworth et al., 1978). In the original study, Ainsworth et al identified three distinct patterns of infant response to reunion with a primary caregiver following prior separation.

A “secure” pattern of attachment (category B) was indicated by the infant showing signs of missing the parent upon separation, actively greeting the parent upon reunion, and then settling to return to play in his/her company.

An “insecure-avoidant” attachment pattern (category A) was indicated when the infant showed little or no distress at separation from the parent, and actively avoided or ignored the parent upon reunion.

“Insecure-ambivalent” attachment (category C) was indicated when the infant became highly distressed by the separation and then sought or singled for contact on reunion, but
failed to be comforted by the parent's attempts. Indeed, the infant frequently resisted contact.

Ainsworth et al's tripartite classification system has been reliably and extensively used and a number of longitudinal studies have shown that secure attachment in infancy strongly influences many aspects of psychological adaptation including: prosocial behaviour, self-regulation, and reported by teachers to have less behaviour problems (Skolnick, 1986); adaptive affect regulation (Erickson et al., 1985; Oppenheim, Sagi & Lamb, 1988) and cognitive resourcefulness and social problems skills (Matas et al., 1978; Grossmann & Grossmann, 1991). In contrast insecure children have been shown to be less cooperative with their mothers (Stayton et al., 1973); to present with psychological disturbance, i.e. aggressive behaviour problems (Sroufe, 1989); to be less socially competence, and show less ego resilience (Urban, Carlson, Egeland & Sroufe, 1991).

Recently researchers have described a new category of attachment organization that has emerged from a re-examination of earlier data in which certain children fitted uneasily within the existing three categories (Main & Solomon, 1986, 1990; Main & Hesse, 1990). Main and colleagues have described a diverse behavioural pattern identified as "disorganised and /or disoriented" (Type D). This is characterized by approach and avoidance behaviours, a “dazed” response upon reunion, behavioural stilling in postures suggestive of depression, confusion or fear (cf.. Fraiberg, 1982), and other signs of apprehension in the presence of the caregiver. Type D attachment is particularly prevalent in samples of children who have been maltreated (Carlson, Cicchetti, Barnet & Braunwald, 1989); who present with depression and aggressive/hostile behaviour (Lyons-Ruth et al, 1993).

These differing behavioural patterns give rise to correspondingly diverse mental representations of self, caregivers and the attachment relationship (Main, 1991). The qualities of the child's internal working model will depend on how the attachment needs of the infant are met by the parent. Empirical work on this issue supports the theoretical
model; numerous studies provide detailed home observations of the kind of parenting which leads to the major types of child attachment (e.g. Ainsworth et al. 1978; Grossmann, Grossmann, Spangler, Suess & Unzner, 1985). A securely attached child has an internalized representation of an available and responsive caregiver (Sroufe, 1989). Such children are able to express negative affect with the expectation that it can be tolerated and that they will receive comfort. Children who internalise this type of relationship also tend to have the capacity for flexible emotional regulation which relies less heavily upon the use of defensive strategies (Stern, 1985). Conversely, children with insecure attachment relationships internalize a predictably unresponsive, interfering caregiver, with the expectation that negative displays of affect will not be responded to. It is hypothesized that avoidant children anticipate rejection when in need of comfort and have difficulty in the direct expression of negative affect, except through displacement (Kobak & Sceery, 1988). Given this, it is to be expected that such children will need to rely more on defensive manoeuvres to regulate unpleasant affect leading to higher risk of distortion in socio-cognitive functioning. For insecure-ambivalent children the expectation is of an insensitive, ineffective and unpredictable parent. This gives rise to a dependent and helpless relationship. Although such children are able to express negative affect, the tendency is for them to be overwhelmed by its expression and become fearful and angry (Buchsbaum et al, 1992).

Questions about the correspondence between attachment representation and behaviour are problematic in the case of disorganized children. This is caused in part by the lack of observational studies of parent-infant interaction in the first year. It is thought that disorganized children may rely heavily on defensive process to regulate affect. For it is hypothesized that disorganized children’s caretakers lack an organized response to their affective states and their behaviour is either frightened or frightening (Main & Hesse 1990; Carlson et al., 1989; Lyons-Ruth et al., 1990). Thus, it can be seen that internalised representations of the attachment relationship are crucial to the child’s evolving representations of the self and significant other (see Cassidy, 1988), and the regulation of affect and cognition. Further research has linked its importance to such factors as the
quality of language discourse (Strage & Main, 1985), metacognitive development (Main, 1991) and identification of emotion (Cicchetti & Beeghly, 1987).

The Intergenerational Transmission of Internal Mental Representations

A recent advance of our understanding of the caregiving context of infant representations has come from Main and Goldwyn's (1985-1994) introduction of the Berkeley Adult Attachment Interview (AAI). On the basis of an hour-long, semi-structured interview probing parents' coherence in narrating and evaluating their own early attachment-related experiences, parents' state of mind regarding attachment issues can be reliably classified into categories corresponding to the secure, ambivalent and avoidant patterns observed in infancy. A fourth category labelled unresolved corresponds to the infant disorganized classification. A meta-analysis of 18 studies investigating the correspondence between infant attachment patterns and maternal interview classifications yielded a significant three-category agreement rate of 70%, even when maternal interviews were carried out before the birth of the infant. Four-category correspondence, based on nine studies, was a reliable 63% (van Ijzendoorn, 1995).

Main (1991) identifies the quality of the coherence of the narrative as the strongest indicator of the accessibility and the security of the parents' mental representation of their own attachment histories. She associates a coherent narrative with a singular and integrated representational model which is relatively free from cognitive and affective distortion. Main's findings emphasize the importance of assessing the overall quality of the narrative data rather than just content alone (this observation has been helpful in the development of a coherence measure on the coding scheme for the present study on EBDs children's narratives).

Fonagy et al (1991) found that maternal representations of attachment assessed pre-natally predicted infant-mother attachment patterns (secure versus insecure) at 12 months, 75% of the time. They suggest that the defensive behaviours of children classified as insecure may have their origins in the parent's defensive strategies revealed in the quality of their
AAI narrative. They support this contention by drawing upon research which shows that children will need to resort to defensive behaviour in those situations where the primary caretaker is unable to be sensitively "attuned" or in touch with the emotional state of the infant (Trevarthan, 1977; Stern, 1985). The mother's inability to contain (cf. Bion, 1962) and accurately respond to the emotional needs of her child is understood in terms of failures of empathic care-taking in her own developmental history, assessed by her responses in the interview.

Fonagy et al (1991) have developed the concept of a reflective-self to conceptualize the necessary state of mind of the caregiver for being sensitively attuned to the infant's mental state. They argue that such an ability is associated with coherent representations (as assessed by the AAI) which are indicative of an integrated attachment history on the part of the parent. In contrast, they argue that failures in the reflective capacity of the caregiver will result in deficits in the child's developing ability to reflect upon his own mental states and those of others (the child's reflective-self functioning). This hypothesis is similar to the notion of "metacognitive monitoring" (Main, 1991), and it identifies an inter-generational aspect of the parent-child relationship as contributing significantly to individual differences in children's metacognitive development.

(1.12) SINGULAR VERSUS MULTIPLE MODELS OF EXPERIENCE

Like many clinicians Bowlby was interested in how neglectful, rejecting and especially abusive care-giving was internalized in a child's internal working model. Bowlby's (1980) formulation to this problem is based on the traditional psychoanalytic distinction between conscious and unconscious processes, but framed in terms of defensive processes and singular versus multiple models of attachment (see Main, 1991 for a full discussion of this issue). Avoidance of the painful feelings associated with rejection and emotional unavailability permit the child to maintain a conscious representation of the parent as loving but the model of the parent as rejecting remains at an unconscious level. Alongside this
unconscious representation of the parent as rejecting is the associated painful affective experience. The child thus has more than one model of the caregiver, a realistic unconscious one and a preferred but idealized conscious one. These incompatible models are engendered by the child’s need to view rejecting parents in a positive light and, correspondingly, the parents need to persuade the child to interpret their rejecting behaviour as loving (Bowlby, 1980). Excluded from awareness are not only the painful (realistic) representations of events, interactions, attachment figures and self but also the associated painful affects. Because these negative affects are forced to be split off from conscious experience, the individual will be inhibited from experiencing certain feelings and contemplating certain beliefs. In extreme circumstances, such as abusive parenting, it is hypothesized that cognitive and emotional representations may be unavailable to the child because of persisting multiple models or mental splits. It is argued by Bowlby (1990) and Main (1991) that the extensive use of multiple models may well distort information processing leading to the development of inadequate working representations of self and other which in turn will interfere with effective coping and optimal socio-cognitive and affective development. Thus, the frequent use of defensive processes may significantly constrain the child’s potential for feeling and thinking in new relationship contexts, to enable healthy development. Furthermore defensively biased multiple models may form the initial stages of defensive structures that create a risk factor for the development of childhood psychopathology, i.e. antisocial or aggressive behaviour.

(1.13) INTERNAL WORKING MODELS AND AGGRESSIVE BEHAVIOUR

The clinical prominence of internal working models has been recognized since Bowlby studied the early relationship patterns of juvenile delinquents (Bowlby, 1944). Theory and research suggests that disorganized children are at greater risk for poorer socio-cognitive functioning and child psychopathology than children classified into the one of the standard secure(B) or insecure Ainsworth classification groups (A,C). The behaviour and thought of children placed in one of the three Ainsworth groups are believed to represent a range
of alternative strategies for coping with variations in maternal sensitivity (Main, 1990) as well as alternative strategies for regulating negative affect (Kobak & Sceery, 1988). As long as there is a reasonable fit between the behaviour and expectations of mother and child, even the relatively insecure avoidant and ambivalent strategies may be considered adequate for normal behavioural adaptation (Grossman & Grossman, 1990; Jackson, 1993). In contrast, by definition, disorganized behaviour suggests an absence of, or perhaps a breakdown in, behavioural and regulatory strategies (Main & Solomon), which may reflect and/or lead to measurable differences in the child’s social-emotional adaptation.

The absence of coping strategies among disorganized infants is supported by the greater association found between these infants and clinical and high-risk samples of preschoolers and early primary age children. Several studies now report disorganized infants and childhood aggression. Lyons-Ruth, Alpern, and Repacholi (1993) found that insecure disorganized attachment in combination with maternal psychosocial problems such as depression, strongly predicted hostile-aggressive behaviour problems in nursery. In a second study, Lyons-Ruth, Easterbrooks, and Cibelli (in press) noted deviant levels of internalizing behaviour in children with disorganized infant attachments if they concurrently had a low IQ score. Furthermore, children with disorganized infancy classifications were rated as more internalizing and externalizing at age 7.

Hann, Cstino, Jarosinski, and Britton (1991), studying infants and their impoverished mothers, also found that disorganized attachment relationships were predictive of later aggression. Disorganized attachment appeared to be related to a form of conflict negotiation between mother and child at 20 months, such as less affection from mother and their infant showing more refusals and initiating more aggression to their mothers’ initiatives.

The preschool analogue of infant disorganized behaviour, termed controlling-disorganized attachment patterns, have also been related to aggressive behaviour among two cross-sectional studies of clinic-referred preschoolers (Greenberg et al., 1991; 1993). In both
studies, oppositional children were significantly more likely than those in the group to show controlling-disorganized patterns. Teachers also rated oppositional children higher on both internalizing and externalizing behaviour.

Theoretically, Main and Hesse (1990) have hypothesized that disorganization of infant attachment strategies is related to parental unresolved fear, transmitted through behaviour that is frightened or frightening to the infant. Direct studies of frightened or frightening parental behaviour have not yet been conducted, however. In indirect support of the role of fear in the genesis of disorganization, Lyons-Ruth and Block (1993) have demonstrated that disorganized infant attachment behaviours occurred predominately in the context of maternal childhood experiences of family violence or abuse, but not maternal childhood experiences of neglect alone. In addition, the severity of family violence or physical abuse was related to increased hostile and intrusive maternal interaction with her infant. These findings reiterate the potential multi generational context of coercive parent-child interactions identified by Huesman et al. (1984).

Only a few other studies of mother-child interaction among disorganized dyads have been reported. Main, Kaplan, and Cassidy (1985), studying middle-income families, reported that mothers of disorganized infants as well as mothers of avoidant infants exhibited low fluency and balance in discourse with the same children at age 6, with mothers of disorganized infants being particularly dysfluent (see also Strage & Main, 1985). Spieker and Booth (1988) also found that mothers of disorganized infants differed from mothers of secure infants in having lower adult conversational skills and less positive perceptions of child temperament. Lyons-Ruth, Bronfman, & Pasons (1994) have also found that affective communication errors, in which the mother either displays confusing cues to the infant (e.g., extends arms toward infant while backing away) or doesn't respond appropriately to clear infant cues (e.g., laughs while infant is distressed) were particularly discriminative of mothers whose infants displayed disorganized strategies.
Children attending specialist schools for emotional and behavioural difficulties (EBDs) primary referral is due to disruptive or externalizing behaviour problems. Kolko and Kazdin (1991) report that in recent years a worrying trend has emerged with an increase of these children presenting with quite serious antisocial behaviour (for example arson, inflicting severe injury on others and substance abuse). It is also apparent that many of these children are found to have been maltreated by parent(s) and significant others i.e. sexual, physical abuse, and emotional neglect. EBD children have tended to be neglected by local therapeutic resources, partly due to break downs that occur in maintaining contact and communication with the parents of EBD children (Chazan et al., 1994). Furthermore there are conflicts and disagreements on what should be the treatment of choice for these children (Kazdin, 1997). Therefore the study of EBD school children is warranted. Gaining further understanding and assessment procedures of EBD children’s internal dynamics and how they may relate to their socioemotional functioning may be important in helping to think about constructive and appropriate treatment programs for these children and their families.

As has been reviewed the role of unpredictable parental behaviour i.e. inconsistent and coercive discipline, has been seen to be a etiological factor in the genesis of aggressive behaviour problems (Patterson, 1982). The socialization literature would also appear to corroborate the ‘coercion’ hypothesis put forward by Patterson and Bank (1989). The socialization literature on parenting has demonstrated links between parenting styles and children’s socioemotional adaptation (Goldin, 1969; Baumrind, 1971; Maccoby & Martin, 1983). Specifically the Punishment (Goldin, 1969) and the Authoritarian (Baumrind, 1971) parental dimensions have been found to be associated with children’s aggressive behaviour.

Cognitive (Crick and Dodge), object relations and attachment theorists, though using different terminology, agree that a child’s aggressive behaviour may stem from infancy, before the coercive cycles identified by Patterson and Bank (1989). Further, that the
critical factor in determining the relationship of a child's aggressive behaviour to normality or pathology is the extent to which the child is able to maintain internal representations of a secure, trustworthy sense of self and caregiver. It is proposed that in situations where the caregiver frequently rejects or maintains a hostile approach in relating to the child, the child develops internal working models of the self as unworthy and significant others as untrusting (Bretherton, 1985).

In line with these formulations of aggressive child behaviour, attachment theorists and researchers have been able to identify empirically attachment strategies that are associated with specific kinds of parent-child interaction and the child's optimal socioemotional adaptation. The parenting style experienced by the secure child is described as sensitive, accepting and cooperative to the child's attachment needs. This parental style is compatible with Baumrind's (1971) Authoritative parent. In contrast, the parenting style of the disorganized child is described as frightening, hostile and lacking in "basic trust" in responding to the child's attachment needs. The disorganized child has been found to be over-represented in high-risk populations and clinical groups, and more recently to be associated with aggressive child disorder (Ruth et al., 1993).

In trying to understand further the role of representations in children's psychological functioning, attachment research has moved from sensori-motor based assessments of attachment relationships during infancy to cognitive-affective representations of self and other in older children. The move to the level of representation in attachment research (Main, Kaplan & Cassidy, 1985) argues that parental behaviour alone, or parental self-reports are no longer sufficient to understand the parenting process as it relates to children's socioemotional adaptation.

The central question that this study raises is: To what extent does the aggression and socioemotional adaptation in EBD school children relate to play narratives of untrustworthy and insecure self and parental behaviour that are hostile and frightening. Furthermore will EBD children's play narratives be suggestive of disorganization of information processing
implying the defensive strategy of multiple models (Bowlby, 1980; Main, 1991)?

In order to address these questions of how the aggression and sociemotional adaptation of EBD school children relate to their mental representations of their parents and of themselves, this study uses the play narrative technique, the MacArthur Story-Stem Battery (MSSB; Bretherton, Oppenheim, Buchsbaum, Emde, & the MacArthur Narrative Group, 1990). In the MSSB narrative technique children are asked to complete play narratives describing conflicts and emotional events in the context of parent-child relationships. It is likely that the MSSB may cause children to think about possibly distressing past real-life experiences, similar to those depicted in the story-stem (e.g. martial conflict) and further demands of the children that they provide some indication of how they deal with interpersonal and intrapersonal conflict. The MSSB stimulates children to provide a picture of how they perceive their parents responding to imagined domestic dilemmas (e.g. a child’s juice gets spilled or a child gets burned after disobeying mother’s request to keep away from the stove while she cooks). The present study also used the Harter Self-Perception Profile for Children (HSPPFC; Harter, 1985), which is a child’s self report on questions pertaining to its sense of social acceptance, behavioural conduct and global self-worth. Further, to compare the children’s parental and self representations to their observable conduct and emotional states, teachers were asked to complete, for each child, the Teachers’ Report Form (Achenbach & Edelbrock, 1979), a widely-used assessment of the presence of internalized and externalized problems, based on the ratings of different aspects of children’s behaviour.

The reliability and validity of the MSSB narrative technique is becoming well established (Oppenheim, Emde, & Warren; Warren et al., 1996; Steele et al (in preparation). Several other studies have used the story-stem technique to learn more about children’s thoughts and feelings of family relationships. Buchsbaum and Emde (1990) used children’s narrative to examine young children’s moral development. Bretherton and colleagues (1990) used the story-stem technique to understand more about children’s attachment and family relationships. Buchsbaum et al. (1992), using a clinical case approach, found inappropriate
aggression, neglect, and sexualized behaviour in the narratives of maltreated children. More recently, Oppenheim et al (1997) found in a normative sample that the story-stem narratives of parental representations were associated with the child’s behaviour as reported by their mothers. To date no empirical study has been carried out using the MSSB narrative technique with a focus on differentiating between children with emotional or behavioural disorders and those without disorders based on the quality of representations they construct. The present study is addressing this issue.

In general, the stories presented to the children in this study dealt with conflicts between children and parents, which under ordinary circumstances would not be expected to evoke physical aggression in either children or parents (such as when a child spills its juice). What children are faced with in all the stories, are the kinds of everyday occurrences which, according to object relations and attachment theories, are essential for children to master in the process of establishing stable, coherent and differentiated mental representations of self and parental figure: e.g., separations from and reunions with parents, situations in which parental authority conflicts with a child’s desires. In other words, the story stems in the MSSB offer an indication of how EBD school children might be related to particular, qualitative aspects of parent-child interactions that may have shaped their relations to their parents.

In consideration of the primacy placed by object relations and attachment theories on the child’s ability to form accessible, responsive internal working models of the attachment figure, as well as a reciprocal representational model of the self as acceptable in the eyes of the attachment figure, it was hypothesized: that among EBD children aggressive and socioemotional functioning would be linked to negative parental representations, indicative of perceptions of parental behaviour as unpredictably frightening and aggressive. Furthermore that these negative representations would be found to discriminate children with no reported childhood disorders. Consequently, the following set of predictions were made concerning EBD school-children’s MSSB story-stem completions, and HSPPFC self-worth ratings relative to the control sample:
(1) Self-Worth related questions (HSPPFC)

1.1 EBD children will present with lower self worth and overall competence.

1.2 Self-Worth ratings will be negatively associated with the teachers ratings of the child's emotional and behavioural regulation.

1.3 Self-worth ratings will be negatively associated with Negative parenting (harsh/aggressive and disorganized) and positively associated with content themes of narrative coherence, affiliation and positive parental themes in the MSSB.

(2) Story-Completion task-based questions

2.1 EBD children will present with lower prosocial and affiliation themes in their narratives.

2.2 EBD children's narratives will be less coherent.

2.3 EBD children will present less positive and disciplinary representations, and more negative parental representations.

2.4 The MSSB will be able to significantly discriminate EBD status and non-EBD status.

(3) Teacher's reports of the children as related to their story-stem completion

3.1 Narrative coherence, prosocial, affiliation, parental representations positive and disciplinary will be negatively associated with teachers' ratings of the child's emotional and behavioural regulation.

3.2 Negative parental representations will be positively associated with teacher's ratings of the child's emotional and behavioural regulation.

3.3 Negative parental representations will be positively associated with parental, conflict as reported by teachers, while positive themes will be negatively associated.

3.4 Negative parents will be a predictor of the child's emotional and behavioural regulation.
(2.1) METHOD

Participants
Participants were children (N = 39) attending two special schools for children with 'Emotional and Behavioural Difficulties' (EBDs). They were children who had been statemented as being too problematic for education in mainstream schools either because of high levels of aggression or hyperactivity or both. The records were replete with reports of behavioural and emotional problems. For all EBD children, uncontrolled aggressive behaviour, acts of aggression toward peers and teachers figured significantly in the past problems in classroom conduct that had led to these children’s placement in EBD schools. Reports of emotional disturbance, impulsivity or depression, were common but not universal. Eight of the children had been registered in the Child Protection Register under categories of either physical and emotional abuse, neglect, or sexual abuse. Further, the records of 14 of the children described fragmented family lives including family violence and difficult separations. In both samples, there was a preponderance of boys to girls, with 19 boys to 2 girls at the Willow School and 15 boys to 3 girls at Vernon House, and ages ranged from 84 to 132 months (7 to 11). In order to compare the narrative responses, self-esteem ratings, and CBCL scores of the EBD samples with those of non-clinical children, the same measures were administered to a control sample of 17 children, matched for age, without reported problems, attending a non-specialist Paddington Green School (12 boys, 5 girls). The parents and child was contacted by letter from the head teachers with a brief outline of the aims and method of the study, and a form for their consent. Informed consent to participate was given by parents of all children, and the children also agreed to be interviewed.

The participants came from predominantly working-and lower-middle class backgrounds, and included children from a variety of ethnic minority backgrounds.
(2.2) PROCEDURE

Each child was tested alone, away from the class room. The following tasks were conducted during either one testing session (1 hour), or two if the child became tired or restless: British Vocabulary Scale (Dunn, Dunn, Whetton and Pintille, 1982), Self-Perception Profile for Children (Harter, 1985), and the Children's Narratives (The MacArthur Story - Stem Battery - Bretherton et al., 1990). In addition school teachers completed questionnaires: Teacher's Rating Scale of Child's Actual Behaviour (Harter, 1985), Teacher Report Form (Achenbach & Edelbrock, 1979) and Demographics. Information on the child was also gathered from school reports.

Measures

MacArthur Story-Stem Battery (MSSB). The MacArthur Story-Stem Battery (Bretherton, Oppenheim, Buchsbaum, Emde, & the MacArthur Narrative Group, 1990) involves 12 story beginnings, or 'stems' describing a range of emotionally laden, conflictual family interactions that children are asked by the examiner to complete (see Appendix). The examiner began the task by telling the child that they were going to play together, and that the examiner would start some stories and the child was invited to finish them. Following the introduction, a warm-up stem was presented in which the family consisting of a father, mother, older child, younger child, grandmother, and each character was named. Both child story characters were of the same sex as the child-participant. Children were encouraged to enter a narrative, in an expressive mode and complete the story. The examiner did not continue with the remainder of the story stems until children showed at least three of the following: talking with the examiner, manipulating the dolls, talking in character voice, or referring to the birthday story. The stems were presented in an animated, dramatic manner to help the child get into the appropriate frame of mind, and all ended with the invitation, "show me and tell what happens next?". Non-directive comments, such as "Does anything else happen in the story?" were used to facilitate children's narratives. In addition, stems had standard probes designed to explore specific issues. For example, if after the stem that involves a child-doll getting hurt the subject did
not suggest what happen to the child-doll, the examiner would ask, “does anybody do anything about the hurt hand?” The examiner moved from one story stem to the next after children addressed the main issue in the stem and brought the narrative to an end. If children addressed the main issue in the story and them continued to develop additional themes, the examiner waited for a natural pause and asked, “How does the story end?” All responses were audio recorded.

Children’s narratives were coded by two coders (the present author and a MSc student who was unaware of the hypotheses of the present study) using a modified version of a system developed by Robinson, Mantz-Simmons, McFie, and the MacArthur Narrative Working Group (1992). (As the author had administered the story-stems to children, all narratives transcripts of the samples were randomly mixed and given new codes to ensure blind classification). The content themes in children’s stories were coded using the following categories: empathy/helping (a character or the object identifies with or demonstrates an understanding of the thoughts and feelings of the other, or a character helps another with a task), reparation/guilt (a character makes amends or displays guilt feelings following disharmony between characters), affiliation (all characters participate in a positive activity together), affection (a character displays hugs, kisses, praise), interpersonal conflict resolution (child attempts to solve an interpersonal conflict in a prosocial way); aggression was coded as non-severe (children get into a fight but no one is severely hurt or verbal aggression) and severe (aggression with injury/violence and death); blame (a character self/other blames for an act they have committed). Inter-rater reliability, based on all narratives and calculated using Kappa, ranged between .79 and .89 with a median of .83 Differences revealed during reliability checks were conference, and the consensus scores were used for analyses.

**Coding children's representations of parental figures.** The coding system is based on D. Oppenheim, S.Park, J. Robinson, L.Mantz-Simmons and J. MacFie,  The MacArthur Narrative Coding Manual, (unpublished). The additions to the coding system are based on developments from Oppenheim, Emde, and Warren (1997). The coding of parental
representations included rating the presence or absence of the following five categories in
descriptions of parents: protective/caring/helpful, affectionate, harsh/punitive, bizarre/atypical, and disciplining/controlling. Ratings were made only for children's portrayals of parents’ behaviour toward the children in the narrative, not for descriptions of exchanges between parents. Inter-rater reliability using Kappa, ranged from .66 to .90 with a median of .81.

Content themes and parental representations were mutually exclusive, so that each narrative event received only one content theme or parental representation code. Also, no additional scores were given to a child who repeated a content theme or parental representation in a story-stem. However, because a child’s narrative could contain several different themes/representations presented sequentially, it was possible to assign several content themes and parental representations to one narrative. The number of content themes and parental representations belonging to each category was counted across all the narratives, and mean content theme and parental representations scores were generated.

**Coding children's coherence of narrative.** The coherence of the children’s MSSB narratives was coded on a 3-point scale. Narrative coherence referred to verbal style rather than to content of themes of the story. The child’s narrative was considered coherent if each component follows or refer to a previous component in a logical and sequential way, and was coded 2. An incoherent narrative was coded 0 when the narrative was like a series of vignettes, where events/emotions were unrelated or there were contextual/emotional shifts occurring out of the blue. Inter-rater reliability calculated using Kappa ranged from .79 to .91 with a median of .83.

**Data Reduction**

In order to reduce the number of variables principal component analyses with Varimax rotations were conducted on some of the content categories and the parental representations. Four factors with eigenvalues larger than 1.0 were revealed, accounting for 74% of the common variance. The factor loadings are shown below in Table 1.
### TABLE 1
Varimax Rotated Factor Loading of the Story Stem Codes

<table>
<thead>
<tr>
<th></th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental (Bizarre/Atypical)</td>
<td>.92</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental (Harsh/Punitive)</td>
<td>.82</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aggression</td>
<td>.85</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental (Affection)</td>
<td>.84</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affection</td>
<td>.85</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empathy/Helping</td>
<td>.71</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reparation/Guilt</td>
<td>.67</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental (Disciplinary)</td>
<td></td>
<td>.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blame</td>
<td></td>
<td></td>
<td>.70</td>
<td></td>
</tr>
<tr>
<td>Affiliation</td>
<td></td>
<td></td>
<td></td>
<td>.70</td>
</tr>
<tr>
<td>Parental (Protective)</td>
<td></td>
<td></td>
<td></td>
<td>.85</td>
</tr>
</tbody>
</table>

Table 1 reveals that four factors could be reliably identified. Based on the literature regarding children’s perceptions of parents and the similarities in the content of the categories, they were aggregated into four composites by commuting means. However factor 4 was found to have a low internal consistency (Cronbach’s alpha = .41), and Factor 3 lacks the high level of internal consistency observed for factors 1 and 2. Notably, there are only two items or scales comprising factors 3 and 4 as compared to three and four items contributing to factors 1 and 2 respectively. It was therefore decided to use the two items, parental representation (protective), and affiliation as separate variables in further analysis. Also, while retaining factor 3, it must be noted that this factor is not as robust as the first two. The three factors to be relied on in subsequent analyses accounted for 64%
of the variance. Labels for these 3 factors are suggested below in Table 2.1. Table 2.1 shows the labels assigned and the internal consistency coefficients of these composites. As can be seen from Table 2.1 that the two most internally consistent narrative representations are 'destructive/aggressive' and 'prosocial'.

### TABLE 2.1
Construction of the Aggregated Composites Story Stem Codes and their Internal Consistency

<table>
<thead>
<tr>
<th>Negative Parent</th>
<th>Prosocial</th>
<th>Disciplinary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental (Bizarre/Atypical) +</td>
<td>Parental (Affection) + Empathy/Helping + Affection + Reparation/Guilt</td>
<td>Parental (Discipline/Control) + Blame(Self/Other)</td>
</tr>
<tr>
<td>Parental (Harsh/Punitive) + Aggression</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

alpha = .85 alpha = .81 alpha = .65

*Intercorrelations between the narrative variables.* The intercorrelations between the narrative variables were examined. Children who constructed more coherent narratives had more positive themes; prosocial (r = .25, p < .05), parental representation (protective/helpful), (r = .30, p < .05) affiliation and inter-personal conflict resolution and fewer antisocial parental themes (r = -.51, p < .01). Children who constructed more affiliation themes also had fewer antisocial themes (r = -.42, p < .01). Children who represented more prosocial themes also represented them as more Disciplinary (r = .28, p < .05). Table 1.3 suggests that story-stem variables appear to be assessing fairly discrete social-emotional styles of response across the Story -Completion Task.
### TABLE 2.2
Intercorrelations of the Story-Stem Variables

<table>
<thead>
<tr>
<th></th>
<th>Disciplinary</th>
<th>Neg. parent</th>
<th>Pro-social</th>
<th>Narrative Coherence</th>
<th>Affiliation (parental)</th>
<th>Positive Parental</th>
<th>Conflict Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disciplinary</td>
<td>.22</td>
<td>.28*</td>
<td>.04</td>
<td>.05</td>
<td>-.05</td>
<td>-.50**</td>
<td></td>
</tr>
<tr>
<td>Negative parent</td>
<td>-.07</td>
<td>-.50**</td>
<td>-.36**</td>
<td>-.27*</td>
<td>-.19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prosocial</td>
<td>\</td>
<td>.25*</td>
<td>.05</td>
<td>.10</td>
<td>-.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Narrative Coherence</td>
<td>.34*</td>
<td>.30*</td>
<td>.20*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affiliation</td>
<td></td>
<td></td>
<td></td>
<td>.39**</td>
<td>.24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Parental</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conflict Resolution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: * p < .05; ** p < .01

**Self-Perception Profile For Children (Harter, 1985).** This scale assesses perceived competence in five domains of functioning, including scholastic competence, social acceptance, athletic competence, physical appearance, and behavioural conduct. One item states: "some kids find it hard to make friends, but other kids find it's pretty easy to make friends." Children chose which situation is really true, or sort of true, for them. The scale also includes a global self-worth sub-scale. The items for the self-worth scale are more general: "some kids like the kind of person they are, but others kids often wish they were someone else". In parallel with self-perception profile is the teacher rating scale of the child's actual behaviour, which covers the same competence domains except self-worth.
In this investigation, the child’s self-reports that were examined were social acceptance, behavioural conduct and global self-worth. Teacher ratings covered all the competence domains.

*Child Behaviour Checklist - Teacher’s Report Form (Achenbach & Edelbrock, 1986).* Children’s behavioural and emotional regulation was assessed by classroom teachers using the Child Behaviour Checklist - Teacher’s Report Form. Scores reflect total behaviour problems as well as internalizing problems (e.g., social withdrawal, somatic complaints, depression) and externalizing problems (e.g. aggression, inattentiveness, delinquency). All scores were standardized (T scores). Teachers also completed the report of adaptive school functioning, yielding scores for academic performance, work effort, behaviour appropriateness, extent of learning, happiness, and a summary measure of school adaptation.

*Peabody Picture Vocabulary Test-Revised (PPVT-R; Dunn & Dunn, 1981).* This measure of receptive vocabulary correlates very highly with full-scale standard intelligence tests (.70 with the Standard Binet) and was used as an estimate of cognitive functioning.

**3.0 RESULTS**

Results are divided into five sections. The first explores the demographic comparisons between EBD’S children and the control group. The second section presents results on associations between vocabulary and children’s responses on the story-stem completions. The third section examines the relation between children’s scores on self-worth scales (HSPPFC) and teachers reports (TRF) and MSSB variables. The forth section, compares the results of the narrative content themes and parental representations from the MSSB story-stems with respect to the predicted differences between the samples. The final section explores teacher reports (TRF) of children’s behaviour and their associations to the results from the MSSB story-stems. Discriminate analyses are presented of the story-stem
self-worth and TRF score variables.

Preliminary analyses. As can be seen from Table 3 there are various differences between the EBD children and the control group that would be expected. In line with literature on children with aggressive behaviours (Whitehead, 1979) the EBD children parents as reported by teachers were found to significantly be more engaged in parental conflict $T(3.36)p < .002$. Significantly more of the EBD children were living with mother $T(3.80)p < .01$. It was also found that fathers of the control group were employed more than the fathers in EBD group $T(-3.42)p < .001$. 
### TABLE 3. Demographics comparisons between EBD children and control group

<table>
<thead>
<tr>
<th>Variables</th>
<th>EBDs (n=39)</th>
<th>Control group (n=20)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean (and SD) child’s age, in years &amp; months</td>
<td>9.6</td>
<td>8.8</td>
</tr>
<tr>
<td><strong>Family status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% married</td>
<td>21</td>
<td>76</td>
</tr>
<tr>
<td>% divorced</td>
<td>39</td>
<td>18</td>
</tr>
<tr>
<td>% separated</td>
<td>36</td>
<td>0</td>
</tr>
<tr>
<td><strong>Mean (and SD) no. of children in the home</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% first born</td>
<td>35</td>
<td>57</td>
</tr>
<tr>
<td>% middle child</td>
<td>35</td>
<td>0</td>
</tr>
<tr>
<td>% youngest child</td>
<td>30</td>
<td>43</td>
</tr>
<tr>
<td><strong>Fathers work</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% not employed</td>
<td>17</td>
<td>52</td>
</tr>
<tr>
<td>% employed</td>
<td>11</td>
<td>30</td>
</tr>
<tr>
<td><strong>Mothers work</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% not employed</td>
<td>44</td>
<td>58</td>
</tr>
<tr>
<td>% employed</td>
<td>20</td>
<td>29</td>
</tr>
<tr>
<td><strong>Where the child is living</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% natural parents</td>
<td>18</td>
<td>76</td>
</tr>
<tr>
<td>% father</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>% mother</td>
<td>63</td>
<td>23</td>
</tr>
<tr>
<td><strong>Psychiatric diagnoses %</strong></td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td><strong>Social register for maltreatment</strong></td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>Mean (and SD) of conflict between parents(CBP)</td>
<td>1.34 (1.2)</td>
<td>0.29 (0.6)</td>
</tr>
<tr>
<td>Mean (and SD) PPVT age equivalent</td>
<td>8.18 (2.7)</td>
<td>8.06 (1.90)</td>
</tr>
<tr>
<td>Mean (and SD) Teacher report (T scores) Internalizing</td>
<td>58.4</td>
<td>41.3</td>
</tr>
<tr>
<td>Mean (and SD) Teacher report (T scores) Externalizing</td>
<td>63.1 (8.9)</td>
<td>46.8 (5.6)</td>
</tr>
<tr>
<td>Mean (and SD) Teacher report (T scores)Total behaviour problems</td>
<td>63.2 (8.4)</td>
<td>42 (7.9)</td>
</tr>
<tr>
<td>Mean (and SD) School adaptation (T score)</td>
<td>39 (6.1)</td>
<td>51 (5.5)</td>
</tr>
<tr>
<td>Mean (and SD) Academic performance</td>
<td>38 (5.4)</td>
<td>49 (5.5)</td>
</tr>
</tbody>
</table>

Note. PPVT= Peabody Picture Vocabulary Test. CBP was assessed on a scale from 0(none) to 3(severe). T scores for Teacher Report 63 and over is within the clinical range. T scores for Academic performance and school adaptation under 40. is within the clinical range.

**Associations between Vocabulary and Children’s representations**

Because children’s representations of emotional themes and parents were derived from their narratives, and may therefore be influenced by their level of vocabulary, the
associations between children's vocabulary scores in the study were examined. Only one significant correlation was found between the PPVT and the representation of the prosocial variables. Children with higher PPVT scores had more prosocial representations ($r = .23$, $p < .05$). The remainder of the correlations were low and not significant. This correlation is not surprising, e.g. prosocial responses are likely to correlate with receptive language, insofar as there are data to suggest that attachment security and literacy are not independent constructs (Matas et al, 1978). Still, for present purposes, these receptive language scores were entered as covariates in many of the analyses reported below in an attempt to isolate the possibly discriminative effect of children's representations in their story-completions on their social-emotional functioning above and beyond the possibly independent contribution of the child's language skills.

**The Results of Ratings on Self-report on the Harter Self-Perception for Children (HSPFC).**

The hypotheses were that EBD children might differ significantly to the control group on areas of perceived competence. It was expected that since EBD children would be more likely to have harsh, punitive parental representations, they would have correspondingly lower perception of self-worth and competence compared to controls. As can be seen from Table 4, Independent T tests (two tailed) indicated that the EBDs differed significantly in their perception of global-self worth and behavioural conduct. Contrary to expectations EBD children not differ on perceived perception of social acceptance and global competence.
TABLE 4.
Means and Standard Deviations Comparisons of EBDs and Control Group on self-report on the Harter Self-Perception Profile for Children

<table>
<thead>
<tr>
<th></th>
<th>EBDs</th>
<th>Control</th>
<th>Independent - $t(\text{df}=56)$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(n=39)</td>
<td>(n=17)</td>
<td></td>
</tr>
<tr>
<td>Child Responses</td>
<td>$M$ (sd)</td>
<td>$M$ (sd)</td>
<td></td>
</tr>
<tr>
<td>Global self worth</td>
<td>2.8 (0.8)</td>
<td>3.3 (0.6)</td>
<td>2.44, $p &lt; .01$</td>
</tr>
<tr>
<td>Global competence</td>
<td>8.1 (1.8)</td>
<td>9.8 (0.9)</td>
<td>&lt; 1 N.S.</td>
</tr>
<tr>
<td>Social acceptance</td>
<td>2.8 (0.5)</td>
<td>2.9 (0.5)</td>
<td>&lt; 1 N.S.</td>
</tr>
<tr>
<td>Behavioral conduct</td>
<td>2.5 (0.9)</td>
<td>2.9 (0.5)</td>
<td>2.07, $p &lt; .05$</td>
</tr>
</tbody>
</table>

Associations among Self Measures and Teacher-Reported behaviour problems (TRF)
The results shown in Table 5 suggest a significant tendency for children with positive self perceptions of competency to be rated by their teachers as having fewer behavioural problems and being better able to adapt to a school environment.
TABLE 5.
Correlations Between Children’s Self-Report of Competence and TRF Scores (N=59)

<table>
<thead>
<tr>
<th>Teacher Report</th>
<th>Competence global</th>
<th>Self worth global</th>
<th>Social Acceptance</th>
<th>Behavioral conduct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Problems</td>
<td>-.37*</td>
<td>-.27*</td>
<td>-.18</td>
<td>-.40*</td>
</tr>
<tr>
<td>Internalizing</td>
<td>-.34*</td>
<td>-.19</td>
<td>-.28*</td>
<td>-.34*</td>
</tr>
<tr>
<td>Externalizing</td>
<td>.41*</td>
<td>-.38**</td>
<td>-.16</td>
<td>-.35*</td>
</tr>
<tr>
<td>Performance</td>
<td>.18</td>
<td>.17</td>
<td>.10</td>
<td>.24</td>
</tr>
<tr>
<td>Work effort</td>
<td>.43</td>
<td>.30</td>
<td>.27</td>
<td>.43**</td>
</tr>
<tr>
<td>Behaviour</td>
<td>.30</td>
<td>.31*</td>
<td>.02</td>
<td>.38*</td>
</tr>
<tr>
<td>Learning</td>
<td>.25</td>
<td>.308</td>
<td>-.07</td>
<td>.34</td>
</tr>
<tr>
<td>Happiness</td>
<td>.31*</td>
<td>.26</td>
<td>.11</td>
<td>.44**</td>
</tr>
<tr>
<td>Summary adaptation</td>
<td>.33</td>
<td>.332*</td>
<td>.03</td>
<td>.47**</td>
</tr>
</tbody>
</table>

Note: p < .05*; p < .01** TRF= teachers report form.

As expected, in relationship to the MSSB story-stems, the prosocial theme was positively associated with Global self-worth (r= .24, p< .04). However contrary to predications there was no significant negative association between negative parents and self-reported competence.

The results on the story-stem responses in EBD children and the control sample

Here the hypotheses was considered that narrative content-code scores assigned to children’s story-completions would differ significantly between EBD children and the control group. In order to explore the association between the children’s story-completions a series of Independent T tests were computed.
**TABLE 6.**

Mean (and Standard Deviations) for comparisons of EBDs and the Controls for Story-Completions Scores

<table>
<thead>
<tr>
<th>Story-Completion</th>
<th>EBDs (n=39)</th>
<th>Control (n=17)</th>
<th>Independent t-test (df=2,61)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale Scores</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Narrative coherence</td>
<td>3.7 (1.7)</td>
<td>4.8 (1.1)</td>
<td>-2.6, p &lt; .01</td>
</tr>
<tr>
<td>Prosocial (1)</td>
<td>5.4 (2.6)</td>
<td>5.1 (1.5)</td>
<td>&lt;1, N.S.</td>
</tr>
<tr>
<td>Affiliation</td>
<td>0.7 (0.6)</td>
<td>1.2 (0.5)</td>
<td>2.5, p &lt; .001</td>
</tr>
<tr>
<td>Conflict-resolution(2)</td>
<td>0.9 (1.4)</td>
<td>0.7 (1.0)</td>
<td>N.S.</td>
</tr>
<tr>
<td>Positive parent</td>
<td>1.0 (1.6)</td>
<td>1.9 (1.8)</td>
<td>&lt; 1, N.S.</td>
</tr>
<tr>
<td>Disciplinary parent</td>
<td>4.5 (2.1)</td>
<td>6.8 (2.1)</td>
<td>-2.51, p&lt;.001</td>
</tr>
<tr>
<td>Negative parent</td>
<td>9.5 (9.4)</td>
<td>1.7 (2.0)</td>
<td>3.34, p&lt;.002</td>
</tr>
</tbody>
</table>

Note: (1) Post hoc comparisons found significant differences between the two EBD schools, with Willows school demonstrating less prosocial responses compared with Vernon house school. (2) Inter-personal conflict was found to be significantly different between EBDs and controls, with the EBDs using less parental help in resolving the conflict (t=3.7, p < 0.02).

The results shown in Table 6 show that story-completions scores assigned for narrative coherence, affiliation, disciplinary parent and negative parent themes could be used to distinguish significant differences between the EBDs and the control group. The EBDs demonstrated the predicted set of oppositions to the control group in their narrative play responses. Thus EBDs responded with a higher frequency of negative parent themes (harsh/punitive, rejection, bizarre and aggression) and incoherent narrative. In contrast the control group showed higher frequency of positive themes; disciplinary parents (limit-setting), affiliation (the family engaging in positive activities together), and narrative coherence.
Contrary to predictions the EBDs did not show significant differences from the control group in positive parents theme (helpful and protective). Furthermore the prediction that greater frequency of prosocial themes would be found in the controls compared to EBD children was not supported. The prediction that EBDs would show less conflict-resolution compared to the comparison group was only partially supported. There was no difference between EBDs and the controls in their use of adult-like strategies in interpersonal conflict solving. However the EBDs did significantly show less use of seeking help from parents when trying to resolve inter-personal conflicts in their story responses.

ANOVA tests was performed so that the child’s receptive language score and age could be entered as covariates to thereby identify if EBD status remained a significant basis for discriminating story-completion scores (after controlling for children’s language and age). With EBDs and controls as the factor and the story-stem variables as the dependents, the receptive language score and age as covariates were entered. Significant group differences were still maintained between EBDs and the controls group after accounting for the covariates, neither of which had a significant effect. Narrative coherence, $F = 9.17 \ (3,19) \ p < .005$; Affiliation, $F = 7.68 \ (3,7.8) \ p <.05$; Disciplinary parent, $F=3.8 \ (3,91) \ p <.03$; Negative parent, $F = 4.88 \ (3,10) \ p < .005$.

**Associations Between the MSSB Narratives ,TRF and Parental Conflict**

As can be seen from Table 7, teachers’ reports of children’s emotional/behavioral problems and school adaptation yielded the expected predications. Thus lending support to the implication from the results of the MSSB that the critical distinction between EBDs socioemotional adaptation and the control group lies in the association of poorly regulated parental representations of distrust and hostility. In order to explore the associations between MSSB variables and teachers’ reports, Bivariate Correlations were used. It was found that Narrative coherence was negatively correlated with children’s concurrent Total problems, Externalizing and Withdrawn behaviour problems, while positively correlated with academic performance. Thus, children who had more Coherent narratives i.e. presented stories where events and emotional themes were organized are seen by their teachers to have less behavioral
problems and to be performing well academically. Correlations between Disciplinary representations and Total behaviour, Externalizing, Internalizing behaviour problems were negative. Thus, children who had more Disciplinary representations were reported by their teachers as having fewer behaviour problems. Positive correlations were found between Disciplinary representations and adaptive school functioning and academic performance. Thus, children who had more Disciplinary representations were seen by their teachers as adjusting well to the school environment. Correlations between Positive representations of parents and Total problems, Internalizing and withdrawal were negative. Also positive correlations were found between Academic performance. Thus children who had more Positive representation of parents in their narratives were rated by their teachers as having fewer behaviour problems and as being academically more proficient. Affiliation themes were also negatively correlated with children’s concurrent Total problems, Internalized and Withdrawal behaviour problems, while being positively correlated with Academic performance.

Correlations between Negative parental representations and Total behaviour problems, Internalized, Externalized and withdrawal problems and academic performance were negative. Thus, children who had more Negative parental representations i.e. children’s stories presented parents as hostile-aggressive and disorganized were rated as having more Total behaviour, withdrawal problems and as not doing so well academically. Finally counter to prediction Conflict resolution was negatively correlated with school adaptation.

Associations between the MSSB story-stems and parental conflict was explored. It was found that negative parent was positively associated with parental conflict as reported by teachers, \( r = .30, p < 0.5 \). In contrast narrative coherence was negatively associated with parental conflict, \( r = -.39, p < .001 \).
TABLE 7.
Correlations between Children’s Representations and Teachers’ Report Form Scores

<table>
<thead>
<tr>
<th>Story-completion Scores</th>
<th>Teachers’ Report Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total problems</td>
</tr>
<tr>
<td>Prosocial</td>
<td>-.27*</td>
</tr>
<tr>
<td>Positive Parent</td>
<td>-.34***</td>
</tr>
<tr>
<td>Affiliation</td>
<td>-.24*</td>
</tr>
<tr>
<td>Disciplinary</td>
<td>-.37**</td>
</tr>
<tr>
<td>Conflict Resolution</td>
<td>[-.26*]</td>
</tr>
<tr>
<td>Negative Parent</td>
<td>.24*</td>
</tr>
<tr>
<td>Narrative Coherence</td>
<td>-.29***</td>
</tr>
</tbody>
</table>

p < .05*, p < .01**, p < .001*** (one-tailed); [] results counter to those predicted; (a) significant correlation found in the parent conflict story stem; (1) Summary of the total score of the child’s school adaptation

Regression Analyses Involving MSSB Story-Stem Responses and the HSPPFC variables and their links with the Child TRF Scores

Given the significant bivariate correlations between MSSB story-stem responses and the HSPPFC and the teachers report on the children’s behaviour two stepwise multiple regressions were performed, controlling for verbal IQ and school status, to assess the unique contribution of independent variable on the children’s global functioning as assessed by the TRF.

First school status was entered as an independent variable, in order to assess its contribution to Internalized behaviour problems. At the first step school status accounted for a significant proportion of the variance (R² = 0.31, F (1,11) = 13.6 p<0001). In step two Positive parents was entered, and significantly increased the variance (R²= 0.41, F (2,15) = 9.84 p < .04). On the third step Negative parents significantly increased the variance (R²= 0.49, F (3,18) = 8.76 p < .04). None of the other variables accounted for the explained variance and were none.
significant: Verbal IQ, Global competence and Affiliation. Thus both Positive, Negative parent and school status predict for 49% of the variance of children's internalized behaviour problems.

A second stepwise regression was carried out. This analysis revealed that both Negative parents (Fine (1,23)= 37.8, p< 01) and Narrative coherence (Fine (1,55) = 24.8, < 01) accounted for a significant proportion of variance on the children's Externalized behaviour score. With all the variables in the regression equation, Negative parents was the only significant predictor of Externalized behaviour problems ($R^2 = 0.10$, F (2,24) = 22.5, p < .01).

**Discriminant Analyses of MSSB Story-Stem responses, HSPFPC and TRF**

A discriminant function analysis was performed in order to consider how successfully the story-stem completion task might distinguish between EBDs and the control sample. When the 7 story stem variables were entered all at once, the resulting canonical correlation was 0.62, the Wilks lambda = .61, p <.005. Thus the story-stem ratings used as a composite predictor correctly identified 90.6% of the EBD-school children, and 75% of the control sample. (see Table 8). However, when the discriminant function analysis was carried out in a stepwise fashion, only two of the 7 story-stem variables reached significance and were permitted into the function. These were Negative parent and Disciplinary parent, canonical correlation .44, Wilks lambda .81, p <.01. This function correctly classified 88% of the EBD school children, and 68% of the control sample.

A further stepwise discriminant analysis was carried out in order to consider how successful the Teachers ratings (TRF) of the EBD children and the control sample was in distinguishing the groups. Only two of the TRF ratings reached significance and were permitted into the function. These were Total behaviour problems and Summary of school adaptation, canonical correlation .80, Wilks lambda .35, p < .0000. This function correctly classified the 84.4% of the EBD children and 87.5% of the control sample. To see if the discrimination of the two groups could be improved a final stepwise analysis was carried out. In this analysis the story-stem variables were added along with the TRF ratings and HSPFPC scores. Only three of
variables reached significance and were permitted into the function. These were Negative parenting, Total problems behaviours and Summary of school adaptation, canonical correlation .85, Wilks lambda .27, p < .0000. This function did in fact improve discrimination, with the EBD children correctly classified 93.1% and the control sample 100%. Therefore teachers ratings and story-stem Negative parent misclassify only 2%, while teachers ratings on their own misclassify 15% of children.

**TABLE 8.**
Classification Results of canonical Discriminant Function Analysis of Story-Stem Responses.

<table>
<thead>
<tr>
<th>GROUP</th>
<th>No. of Cases</th>
<th>PREDICTED GROUP MEMBERSHIP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Group 1 (EBD)</td>
</tr>
<tr>
<td>1. EBD</td>
<td>32</td>
<td>29 (90.6%)</td>
</tr>
<tr>
<td>2. Controls</td>
<td>17</td>
<td>4 (25.0%)</td>
</tr>
</tbody>
</table>

85% of original grouped cases correctly classified.
The results of this study demonstrate that EBD children can be discriminated from children without reported disorders based on unique features in their symbolic representations of attachment-related processes. Furthermore that their story-completions responses are associated with, and predictive of, their emotional and behavioural regulation as reported by their teachers.

The results also suggest that when compared with children without reported problems, EBD children exhibit lower perceived self-worth and competence (behavioural conduct). Further, that the children's perception of self-worth and competence were associated with presenting with less emotional and behavioural difficulties as reported by their teachers. This result suggests that the child's perception of a positive sense of self may act as a buffer in developing psychopathology (Rutter, 1989).

The results reported from the MSSB were derived from reducing some of the MacArthur Narrative Coding categories by factor analysis into three usable factors. Factors 1 (negative parent) and Factor 2 (prosocial) yielded internally consistent scales, whilst Factor 3 (disciplinary) was moderately consistent. These scales prosocial, disciplinary and negative parents appear to present the children's global responses to the emotional challenges conveyed in the story-stems. Even though this was a data-driven process, the three aggregated composites are similar to the major conclusions of past and current theory and research concerning children's perceptions of the parent-child relationships (Goldin, 1969; Oppenheim et al., 1977; Steele, in preparation) and parenting attitudes and behaviour (Baumrind, 1971; Maccoby & Martin, 1983). The disciplinary parent and prosocial scales, which were significantly correlated with one another, suggest a view of parents as authoritative and affectionate. In contrast, the negative parenting scale suggests a perception of parents as harsh, hostile-aggressive and frightening. The other MSSB categories further helped in delineating the above mentioned scales; i.e., the positive parent (protective and helpful) was negatively correlated with the negative parent, like wise was narrative coherence,
affiliation and conflict resolution.

The role of relationship history in buffering or exacerbating the emergence of socioemotional maladaptation was examined more elaborately by using the MSSB narrative technique to explore representations of family life. As predicted, it was found that the EBD children represented family relationships using more negative parents (harsh/punitive, disorganized and aggressive), less disciplinary parents (limit-setting), less affiliative behaviour (positive activities between parent and child), and produced less emotionally coherent narratives. These narratives were found to be significantly correlated with the teacher’s reports of the children’s emotional and behavioral difficulties. In contrast children with no reported disorders represented their family life in their play narratives as more disciplinary, affiliative, more emotionally coherent and showed less negative parents. Further support for the findings come from the fact that associations between representations of family life and behaviour problems were not mediated by children’s receptive vocabulary.

When the nature of the link between representations of family life and socioemotional adaptation was investigated further, regression analyses found negative parents as the most significant variable that accounted for the variance of externalized behaviour problems (aggression, delinquency and attention problems). Furthermore in relationship to internalized child problems (depression, anxiety and withdrawal) it was found that positive and negative parents were the most predictive.

The associations between EBD children’s representations of parental behaviour and their teachers report of their behaviour problems are also similar to the findings from the earlier parent perception studies. The aggregated scale of negative parents may parallel the construct punishment parenting (punitive treatment, aggression, hostility) reviewed by Goldin (1969). In the earlier studies it was found that “maladjusted” children perceived parents as less accepting, excessively disciplining and dominant, and, in some studies, more punitive than controls. The present results also coheres with the findings from the recent and past reviews of parenting styles of control and child externalizing behaviour (Rothbaum & Weisz, 1994;
Baumrind, 1971; Maccoby & Martin, 1983). These studies report parenting that involves rejection and coercive parenting is associated with aggressive behaviour in children. The well documented finding in developmental psychopathology (e.g. Patterson, Reid, & Dishion, 1992; Weiss et al., 1992) that a history of overly punitive and inadequate parenting is common to many aggressive children is also supported in this study when taking into consideration the child’s perception of parenting in their play narratives.

The results of this study serve as an important step in beginning to elucidate the role of mental representations of self and parents in the emergence of psychopathology in EBD children. The results of this investigation lend partial support to the claims of object relations and attachment theorists that some forms of child psychopathology may have roots in untrustworthy or insecure representations of self and parent that prevent a child from feeling trust and security in themselves, and their parents, and in other people in the social world.

As expected, the majority of EBD children depicted the self and caregivers as both frightening/ hostile and unpredictable. This is consistent with inferences regarding the subjective experience of insecure-disorganized infants (Main & Hesse, 1990; Solomon & George, 1991). Furthermore this links with recent studies on parents of disorganized infant attachment being in the context of family violence or abuse and showing greater hostile interaction with their infants Lyons-Ruth and Block, 1993; Hann et al., 1991).

EBD children responses to the story-stem task differed significantly from the control group in creating narratives of hostile and bizarre parental behaviour that was often destructive, or markedly incoherent in emotional structure. These findings are very similar to those of Main et al., (1985) in which disorganized children gave frightened responses to the Separation Anxiety Test. This tendency to catastrophic fantasies has been found in other disorganized children (see Main, 1995; Bretherton, Ridgeway & Cassidy, 1990). These response patterns appear to parallel those of abused children and adult victims of trauma during projective tests or in symbolic play (Herman & van der Kolk, 1987; McCrone, Egeland, Kalkoske, & Carlson, 1994; Buchsbaum et al., 1992). The examination of the EBD children’s school records
suggests that it is very likely that these children have experienced or at least witnessed aggressive displays from parents to a far greater extent than the control sample. For example, one child witnessed the violent murder of his mother at the hands of his father. Further, approximately a quarter of the EBD children were listed in the child protection register for various categories of abuse. To illustrate some of the above points a few narrative examples from EBD children will be provided.

In the “lost keys” story-stem the parents are in dispute regarding the lost of the front door keys (Mum is blaming Dad for losing them) The child is asked “Tell me and show me what happens?”:

“Bob (child doll) came, “I lost your keys.” And the mom was cross and then “give me those keys.” And give him a smack and then puts him to bed. And then they kiss each other because they do that and then they make friends again. But, then was dancing and hit mummy and dad, and she was very??... So??... Knocked her down. He was cross and smacked up Bob “Oooh”...... he pulled his trousers down and his pants and he put his bum near their face and he’s going to blow off on their face, and poo and a wee. They were sick, had to go to hospital and he was all alone......blowed off in their face and pooped. And but then, the mom and dad never came back again, they were all lost.”

For further illustration, a story by an EBD child that had been on the child protection register for suspected sexual abuse is provided. The context of the story-stem involves the child (doll) accidentally spilling his juice at tea time:

“The child “he gets a beating, he gets beat....by the belt psssh,ppssh [beating sounds]. Mom says “get to bed.” The passage then becomes incoherent by introducing another theme, “Sorry, son”. And then they’re friendly again and then, and then they have to travel all the way and then they, and then and then, this man wants the boy because he knows there’s a secret and he hasn’t told his mom yet.” Further on in the story the aggression becomes more sadistic, with the father saying to his sons “come on roll in the soot. Roll in the soot.” One of the son’s reply “Yooohoo. This is going to be fun. I always wanted to get good and dirty.”
According to object relations and attachment theorists (Greenberg & Mitchell, 1983; Bowlby, 1969) internal representations do not simply copy experience, they also reveal the child’s strategies for processing attachment-related information. The children without reported problems appeared to show their anxieties about separation by having the parents delayed in starting their trip, or perhaps mishaps would happen or the child doll would run after the parents. However the stories would often end with resolved endings and themes of affiliation, the family going out together for dinner or the parents providing gifts for their children. Furthermore the narratives of these children were found to be generally more coherent in narrative structure, showing less unexplained emotional shifts or story elements that were tangential to the main theme in the story stem. In asking the children how they thought the doll children felt when their parents went away, the response was typically that they felt sad and upset and were happy to see them on return. It is argued that these responses show the use of fairly sophisticated cognitive/emotional strategies that allowed them to integrate their fears and feelings of loss with a successful conflict resolution. It may be interesting to consider why narrative coherence, a cognitive and linguistic aspect of narratives, should be related to emotion regulation? It is argued by Oppenheim et al (1997) that the MSSB story-stems involve difficult, complex, and conflictual relationship themes. In the context of the task emotionally engaging the child, producing a coherent narrative requires more than having the cognitive skills to present an ordered sequence of events. Children also need to maintain their emotional organization as they actively trying to cope with the emotional challenges presented by the story-stems. Integration and coherence of attachment-related information has been seen as the strongest indictor of secure attachment in children and adults (Main et al., 1985; Main 1990). Therefore the organization of the narrative responses in these children may be a reflection of a mobilization of internal working models of a secure self and caregiver which promotes optimal emotion regulation. In support of this interpretation these children presented more disciplinary parental representations, which suggests at least theoretically that these children were parented in a way that promoted competence at interpersonal problem-solving (Crowell & Feldman, 1988), and probably received care giving typified by high levels
of maternal sensitivity and responsiveness (Grossmann et al., 1988). To illustrate some of the above points a passage of a child without reported problems will be provided. The context of the story-stem passage involves the parents returning from an over night trip.
Examiner: “Okay, and then Mom and Dad come back. Can you tell me and show me what happens next?
Child: Ding dong.-“come in!”- ooh, had a nice trip?”- “Oh yes-where is Sarah and Jane? Oh, here they are, have you been good?”- “They have been good, good as gold “(Grandmother)-Mum, Dad- “Hollo darling give us a hug”- “Mum where did you go?” “Oh, can’t tell you” “Oh please tell us”- “All right, we went to a hotel, and we stayed there to see how it was. You might go there next week.”- Oh goodie”- “But first you must behave well.” (The story ends with the children giving the parents flowers).

In contrast the EBD children seemed unable to resolve or defend against anxieties in an adaptive way (Fraiberg, 1982; Fonagy et al, 1993) when confronted with conflictual relationship themes in the MSSB. Rather, their portrayal of negative parental representations and incoherence in their doll play dominated the content in a chaotic and primitive way, and themes of danger often escalated to chaos and the disintegration of the self and/or the family. For example dolls were thrown around the room, in one situation the child said about the father(doll) “he’s dying again”, or in the separation story when father and mother return the car goes over the cliff and the “mother and father died”. It could be said the EBD children are presenting disorganized or dysregulated (Horowitz et al., 1990) narratives at the level of representation.

When EBD children do present prosocial themes and positive parental themes, they often appear unintegrated with other story elements and tangential to the experiences of their story stem characters. This would suggest the operation of incompatible models (Bowlby, 1980; Main; 1991), possibly at different levels of memory or consciousness. The notion of disorganization at the representational level is consistent with psycho-analytic models of defenses e.g. splitting, displacement and projection.
In both object relations and attachment theory the development of these defensive processes are thought to occur in situations of parenting that is inconsistent and hostile. It would appear that the emotional challenge of story-stem evokes disinhibition of mental processes in the EBD children. This may explain why fantastic disasters frequently arose without warning i.e. "the ghost car blows up.. fell into the water" (evoked from the reunion story-stem). One could speculate that the forms of disorganized symbolic play that the EBD children presented in their story-stems might have roots in a disorganized attachment pattern that have developed from infancy. This hypothesis is supported indirectly by attachment studies that have shown links between disorganized infant attachment and maltreatment and maternal depression (Carlson et al., 1989; Lyons-Ruth et al., 1990).

(4.1) ASSESSMENT AND CLINICAL IMPLICATIONS

The results of the discriminate analysis provides support for the use of MSSB narrative technique for assessment. The battery covers a range of domains in a systematic way. Others studies have also demonstrated the discriminate and construct validity of the MSSB in its ability to elucidate family themes, relationships, and defenses (Buchsbaum et al., 1992; Oppenheim, Emde & Warren, 1997; Steele et al., in preparation, 1997). As has been found in this study, the MSSB appears to reliably discriminate children with behavioural disturbance from those children reported to have no problems. With further research, clinicians may find play narratives to be a useful assessment tool. This study lends support to the notion that narratives may provide information about children's views of themselves and their world which are useful in diagnosis and treatment planning. It has been the tendency to approach assessment and psychiatric classification of disorders by indices of the child's behaviour. This has tended to eclipse the inner world of the child. The results of this study tentatively point to the notion that MSSB play narratives provide an opportunity for the child to communicate inner representations of real past and present life themes. Although it can be argued that the narratives contain fantasies, projection and wish fulfillment (Buchsbaum et al., 1992), preliminary evidence from this current study suggests that the narratives are indeed a
Reflection of the child's dynamics and the family situation.

Research addressing mental representations in EBD children is important because internal working models acquired in the context of negative parenting are proposed to mediate intergenerational cycles of coercive parenting (Huesman et al., 1984; Bowlby, 1982; Cicchetti, 1990). Bretherton (1987) suggests that having expressions of distress continually ignored or reinterpreted would not only lead to constrictions and distortions in the transfer of information between internal working models, but also communication between partners. The findings of Fraiberg (1975) that mothers who had malignant experiences in childhood tended to repeat them with their own children until these mothers were able representationally to integrate memories and distress that became dissociated during their own traumatic experiences. The results of this investigation found that EBD children have internal working models of themselves as unworthy and of parents as rejecting and punitive. Further, these representational models are liable to fragmentation when the child is faced with interpersonal family conflicts. The risk that these children potentially carry is that such models become solidly organized around negative feelings and expectations about relationships and defended against potentially disconfirming information and, thus, promote the perpetuation of intergenerational coercive child-parent interaction.

In this way, the EBD child's representations of relationships are integral to current and future adaptation. If middle childhood constitutes a sensitive period for the crystallization of representational defense (A. Freud, 1966), providing relationships at the time which are emotionally corrective, the opposite to models based on coercive or disorganized parenting, might be an effective preventative strategy. The narrative technique could provide the arena for enabling a therapist to aid the process of helping a child acknowledge painful feelings and experiences. The experiences and affects expressed through a child's narrative allow the child to represent traumatic experience in a safe way. As the therapy progresses gradual links between the fictional characters and the child's own perceptions could be made.

An additional important aspect of this study involved the associations found between
children's representations of negative parents and coherence and the teachers reports of parental conflict. A typical critique of the MSSB approach suggests that children's play narratives involve a combination of fantasies and projection (Buchsbaum et al., 1992), and representations of actual experience, resulting in decreased correspondence between such narratives and external measures. The results of this study, however, tentatively show otherwise: Teachers' reported information of the children's parents conflict corresponded with children's representations of negative parents as less positive, and more negative in the children's overall stories responses and highly significantly in the parental conflict story. However two reservations about these results must be mentioned. First, the play narratives assessed in the present study were encouraged using a relatively structured story completion method. It is unclear whether this correspondence would be found if children's spontaneous and open-ended play narratives, were encouraged which are likely to include more fantasy material. Secondly, the correspondence was derived from teachers reporting on parental behaviour not from the parents themselves, leaving open the question about how faithfully the reports reflect parental behaviour. Nevertheless, the results are intriguing and need further research to establish whether valid links can be made between actual parent behaviour and children's play narratives.

(4.2)NEGATIVE FINDINGS AND LIMITATIONS

Contrary to expectations EBD children showed as much prosocial behaviour compared to the control group in their story-stem completions implying that EBD children do not lack empathy or are deficient in prosocial skills. The strong presence or absence of moral emotions such as empathy and guilt have been seen as protective or risk factors for antisocial behaviour patterns (Miller & Eisenberg). This result can be seen as positive. Studies have demonstrated that the present of prosocial behaviour provides the aggressive child with a better prognosis in using psychological treatment (Miller & Eisenberg, 1988).

As has already been pointed out the controls were able to maintain prosocial resolutions to
their story stems that were constructive and coherent. This suggests that these children have
been able to internalize an authoritative figure, that promotes adherence to moral standards
(Baumrind, 1971). Although the EBD children demonstrated prosocial behaviour in their
narratives, their constructive attempts would diminish or become disorganized with the
activation of negative parental representations in their narratives constructions. It would
appear that the motivation to be prosocial arises less from being able to internalize a moral
standard, than needing to prevent further parental violence. Other studies have found that
insecure children are not invariably noncompliant and non prosocial. Indeed, Crittenden and
Dilalla (1983) report that maltreated children are sometimes extremely prosocial, but their
hyper vigilant and fearful prosocial behaviour differs greatly from the willing acts of empathy
and guilt found in nonmaltreated children.

The small sample size may limit the general applicability of the results of this study to other
EBD school children and therefore they remain speculative. In addition, several other
limitations are noteworthy as well. No information was directly available about parenting
behaviours, so that direct associations between children’s representations of parents and
actual parental behaviour could not be examined. Another limitation involved determining
the direction of the links between EBD children’s representations of parental behaviour and
their socioemotional functioning. Did children’s behaviour problems elicit more negative
(e.g. harsh, hostile) and fewer disciplinary (limit-setting) responses from parents, which were
later reflected in their narrative representations? Or did more negative and fewer disciplinary
representations lead to more behaviour and emotional problems in children? Both
explanations are credible, and more work is needed to clarify this issue.

It is important to note that this study involves concurrent as opposed to longitudinal data.
The measure MSSB used in this investigation cannot be equated with earlier attachment
history or with attachment itself; rather, it is a concurrent measure of the child’s report of
perceptions and fantasies of family relationships. There is no direct evidence that the EBD
children had disorganized attachments in infancy or that disorganized infant attachments
predict maladaptation in middle age children. Finally, the assessment of children’s linguistic
competence was limited to receptive vocabulary, and other aspects of language particularly relevant to narratives, such as expressive, syntactic competence, turn-taking skills, and other pragmatic skills, were not assessed.

(4.3) FUTURE STUDIES

Given that many correlates of later childhood aggression are already evident in infancy, more research is needed to delineate the infant and preschool developmental trajectories of children at high risk for early onset aggressive behaviour disorders. A series of longitudinal studies from infancy through primary school to middle school is now needed. The MSSB may prove to be very useful in conjunction with other assessments procedures to evaluate critical developmental tasks and their role in childhood aggression.

For further validity of the MSSB narrative technique as a tool for elucidating family relationships, further studies are needed that include a more comprehensive view of parental behaviour toward the child; increased information about parental relationship histories and their derived representational models of attachment. Finally, the influence of family adversity and processes will need to be understood in relation to how these dimensions affect the representational processes developed in the narrative constructions of aggressive children.

The results from the administration of the Harter Self-Perception Profile for Children (HSPPFC) indirectly support the distinctions between the EBD and control samples that are suggested by their narratives. Despite the fact that ratings for global self-worth, social acceptance and behavioural conduct do not exhibit the expected correlations with the categories of the negative parental representations on the MSSD, they nevertheless underscore the sense of the responses to untrustworthy or insecure mental representations suggested by the narrative completions of the EBD samples as compared to the controls.
As expected the HSPPFC ratings for the EBD children were lower than those of the control sample. This result converges with other studies on the relationship between lower perceived competence and aggressive behaviour (Lochman & Lampron, 1986). Further it was shown that perceived competence is negatively correlated with emotional and behavioural difficulties. This suggests that self-worth and competence may act as a protective factor in the development of psychopathology as suggested by Rutter (1990). In relationship to the MSSB it was found that the only variable positively correlated with child perceived competence was the prosocial scale. This result is also similar to early studies that found positive correlations of self-esteem and perceived parental behaviours of affection and support (Peterson, Southworth, & Peters, 1983). It is interesting to note that the EBD children from the Willows school were lower on self-worth and the prosocial scale as compared to the EBD school children at Vernon House and the controls. How might one explain the fact that there was not a significant negative association between negative parental representations and self perceived competence? The answer may lie in the fact that the children who represented negative hostile representations of parents do in fact have a weak or threatened self-system, but to compensate for this present with idealized self-views and deny negative characteristics. In support of this claim there are studies that demonstrate aggressive children often show overestimated levels of competence and social acceptance (Patterson et al., 1990). When looking descriptively at the relationship between children who scored high on presenting negative parents, it was indeed found that they also were scoring high on the HSPPFC. Further studies should address this issues systematically and statistically. Therefore the results imply that the MSSB and the HSPPFC are not providing equally valid measures of the children’s affective state. This suggests that each measure may independently offer similar insight into the general differences between the EBD Samples, but from opposing perspectives which do not correlate at the level of the individual child. The incongruence of the content validity of the measures, in turn, may be related to the fact that each attempts to access aspects of a child’s representational world from a different angle: the MSSB from script-based processing or internal working models, material which has stronger links to a child’s unconscious mental processes; and the HSPPFC from the child’s (perhaps more guarded) conscious self-reports on their conduct and emotional life.
In conclusion, this study brings back to current research on parent-child relationships an important perspective, the child's perception. Furthermore it presents a narrative method, the MSSB, as useful in differentiating between children with emotional and behaviours and those without reported disorders. This was found to be on the basis of qualities of representations of parental behaviour and family life. As hypothesized, EBD children's representations of parents were associated with their socioemotional adaptation, as reported by their school teachers. In addition, convergence was found between the results of this study and earlier research, both in terms of the central dimensions of parenting that emerged and in terms of the associations between these dimensions and children's behavioural and emotional adaptation.
REFERENCES


68


Clinical Psychology, 9, 418-438.


Freud, S (1920) Beyond the Pleasure Principle. S.E. XVIII.


Mina, M & Goldwyn, R. (1984) predicting rejection of her infant from Mother's representation of her own experience; Implications for the abused/abusing intergenerational cycle. *Child Abuse and neglect*, 8, 203-217

Main, M., Hesse, E. (1990) Parents' unresolved traumatic experiences are related to infant disorganised attachment status. *chapter 5: Attachment in the preschool years.*


Attachment, gender, and MacArthur Story Stem Battery. In longitudinal perspective. Unpublished paper


APPENDIX ON THE STORY STEM METHOD

AS IT WAS EMPLOYED IN THIS STUDY

6 stories drawn from the Attachment Story Completion Protocol (Bretherton et al., 1990; Buschbaum & Emde (1990)) were used. These are briefly summarized below, together with the props and characters used in each of the stories, as well as an indication as to the central issue posed by the story stem:

SPILT JUICE: While the family is seated at the dinner table, the older child accidentally spills juice on the floor. (Issue: an attachment figure in authority relation to the child).
PROPS: Table, jug, small glasses.
CHARACTERS: Mother, father, child and younger sibling.

MOTHER'S HEADACHE: Mother and child are sitting and watching T.V. Mother announces that she has a headache and turns the T.V. off asking the child to do something quietly on his/her own. A friend of the child's arrives and asks if they can watch the TV together. (Issue: How will the child resolve the conflict between mother and friend's request?)
PROPS: Couch, T.V., armchair.
CHARACTERS: Mother, child, child's friend.

BURNT HAND: Mother is cooking a meal in the kitchen and warns the child not to come close to the stove. The child cannot wait for the food, and knocks the pan off the stove, burning his/her hand in the process. (Issue: Direct disobedience in relation to the attachment figure resulting in injury to the child).
PROPS: Pan, stove, table and chairs.
CHARACTERS: Mother, father, child, sibling.

LOST KEYS: Parents are involved in a heated argument involving the loss of a set of keys. (Issue: How will the child cope with parental conflict?)
PROPS: None.
CHARACTERS: Mother, father and child.

SEPARATION-REUNION: The parents leave for an overnight trip, with grandmother remaining behind to look after the two children. (Issue: Separation anxiety and coping ability). Grandmother looks out of the window the next morning and tells the children the parents are coming back. (Issue: Can the child depict a reunion in which thoughts and feelings are shared openly?).
PROPS: Car.
CHARACTERS: Mother, father, child, sibling and grandmother.
The child's spontaneous verbal and behavioral responses were followed up by prompts, similar to the techniques used in a clinical interview. For example, the interviewer would articulate what was enacted behaviourally. This often led to further enactments and or verbalizations. The interviewer typically repeated the child's verbalizations for reasons of clarification and to facilitate elaboration.
CONTENT THEMES. Coding will be based on the presence or absence of the following themes through-out the story narrative.

EMPATHY/HELPING (E/H)- a character or the subject either identifies with or demonstrates an understanding of the thoughts or feelings of another. Also, the character or subject seeking reassurance from the victim, attempts to divert the victims attention, sharing something with the victim, or helping the victim by performing an act to relieve stress.

Helping behaviors would include one doll helping another to perform a task or providing assistance so that a job gets done correctly or faster. This does not include one doll doing an act independently for another such as Mom cleaning up the juice or the subject cleaning up the room.

Ex:- one doll offers a toy to the injured party
   -One doll talking about the injured party to another doll, describing the owie or the hurt
   -subject saying “I hurt my knee once too”
   -mom doll assisting child doll in whipping up the juice
   -“3’s Crowd” big sister stick up for little sister

AFFECTION (AFC)- any display of hugs, kisses, compliments, warm or caring touch, or praise.

Ex: - Mom telling child they did a good job
   - “Thank you”

AFFILIATION (AFL)- refers to situation in which all the dolls are participating in an activity together. This code made be used for 2 or more dolls if there is a clear sense of affiliation or inclusion. There is a sense of inclusion or belonging.

Ex: - everyone gets a turn on the bike
   -very one goes to the park.

REPARATION/GUILT (R/G)- the act or process of a character making amends or displaying guilt feelings following some disharmony between the child and/or adult characters. This may be verbal or nonverbal. Also include in this category instances of the subject or doll making things right again.

Ex:- mom saying she’s sorry and she’s not mad anymore to the child
   -fixing or righting the wrong, finding the keys.
INTERPERSONAL CONFLICT RESOLUTION (ICR) - describes situations in which the subject has set up or identified an interpersonal conflict between the dolls, and uses various means in which to successfully resolve the conflict. This may be through sharing, seeking out a third party to act as a mediator or as the final decision maker.

1. =Seeks help in conflict resolution from 3rd party for self gain not just to get another doll in trouble or to make self look better. Ex:- one child wants to ride the other child’s bike, the one in possession of the bike does not want to share so the child goes to mother and tells her the problem, mother says they have to take turns, and both children comply.

2. =Child uses an “adult” like strategy to resolve conflict. Ex:- “Crowd story”- children negotiate a time limit between each other so that everyone gets a turn.

=Threats are used to resolve conflict, also include threats to tattle. Ex: » “3’s crowd story”- “If you don’t let my brother play I won’t give you the ball”- “If I can’t have it I’ll ruin it”.

AGGRESSION (AG)

1= Physical- aggression directed by the subject or characters towards another character, prop, or object. These interactions have a negative quality to them and include hostile, destructive gestures and forms of physical aggression such as an object being thrown at another character with the intent to cause pain. This category does not include angry yelling or physical acts that are intended as punishment or discipline.

Ex:- subject has one doll hit or punch another doll
- one doll pushes another off the horse or bike.

2= Verbal- aggressive comments, excluding shaming, blaming comments.
Ex:- “I hate you”

3= Both

ADDITIONAL CLASSIFICATIONS

Blame: Rated for two categories of blame: Self-blame, when a doll blamed itself, rightly or wrongly for an act it claimed to have committed; and, other-blame, when one doll blamed another for an act that it may or may not have committed. Blaming another was distinguished from tattling—when one doll blamed another, but with the sole purpose of making itself look better than the other or getting it in trouble.

Narrative Coherence: Referred to verbal style rather than to content of theme of story—e.g., it was possible for a story narrative to have a conflict resolution but to have an overall impression of incoherence. Narratives were considered coherent if each component followed or referred to a previous component in a logical and sequential way. An incoherent narrative felt like a series of vignettes, where events/emotions were unrelated or there were contextual/emotional shifts occurring out of the blue.